

AIR QUALITY ASSESSMENT

**Idaho Estates
PDS2020-TM-5639; PDS2020-AD-20-007
Residential Development
County of San Diego CA**

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LIST OF COMMON ACRONYMS

Air Quality Impact Assessments (AQIA)
California Air Resource Board (CARB)
California Ambient Air Quality Standards (CAAQS)
California Environmental Quality Act (CEQA)
Carbon Dioxide (CO₂)
Diesel Particulate Matter (DPM)
Environmental Protection Agency (EPA)
EPA Office of Air Quality Planning and Standards (OAQPS)
Hazardous Air Pollutants (HAPs)
Hydrogen Sulfide (H₂S)
Level of Service (LOS)
Methane (CH₄)
National ambient air quality standards (NAAQS)
Nitrous Oxide (N₂O)
Project Design Features (PDF)
Reactive Organic Gas (ROG)
Regional Air Quality Strategy (RAQS)
San Diego Air Basin (SDAB)
San Diego County Air Pollution Control District (SDAPCD)
San Diego Association of Governments (SANDAG)
South Coast Air Quality Management District (SCAQMD)
Square Foot (SF)
State Implementation Plan (SIP)
Toxic Air Contaminants (TACs)
Vehicle Miles Traveled (VMT)
Volatile Organic Compounds (VOC)

EXECUTIVE SUMMARY

This air quality impact study has been completed to determine the air quality impacts associated with the construction of the proposed Project. The Project known as "Idaho Estates" envisions providing a total of 20 single family residential lots on approximately 10.3 acres. The project site is located on 1125 Idaho Avenue in the San Pasqual area within the County of San Diego.

Construction is anticipated to start in early 2022 be completed later in 2022. The first full year of operations is expected in 2023. Based upon the analysis of construction activities for the proposed Project, a less than significant direct construction impact would be expected. A review of nearby cumulative projects showed that there are no nearby cumulative construction projects within a ½ mile radius. Given this, a less than significant cumulative construction impact is expected.

The only source of odors during construction would be from construction equipment or paving activities. Since odors generated during construction would-be short-term events, a less than significant odor impact is expected during construction.

Finally, a health risk assessment was conducted, and cancer risks were found to exceed 1 per million exposed which would be a significant impact. These impacts were found to be reduced below significance by utilizing Tier 4 construction equipment which is considered T-BACT. After the application of T-BACT, it is reanalyzed against a 10 per one million exposed threshold. The following mitigation measure is therefore required for the construction of this project.

AQ-1 - Project-related construction equipment shall use Tier 4 construction equipment with Diesel Particulate Filters (DPF) or equivalent, as defined by United States Environmental Protection Agency (EPA) / California Air Resources Board (CARB) standards.

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 from the proposed Project. Should impacts be determined, the intent of this study would be to recommend suitable mitigation measures to reduce impacts to the extent feasible.

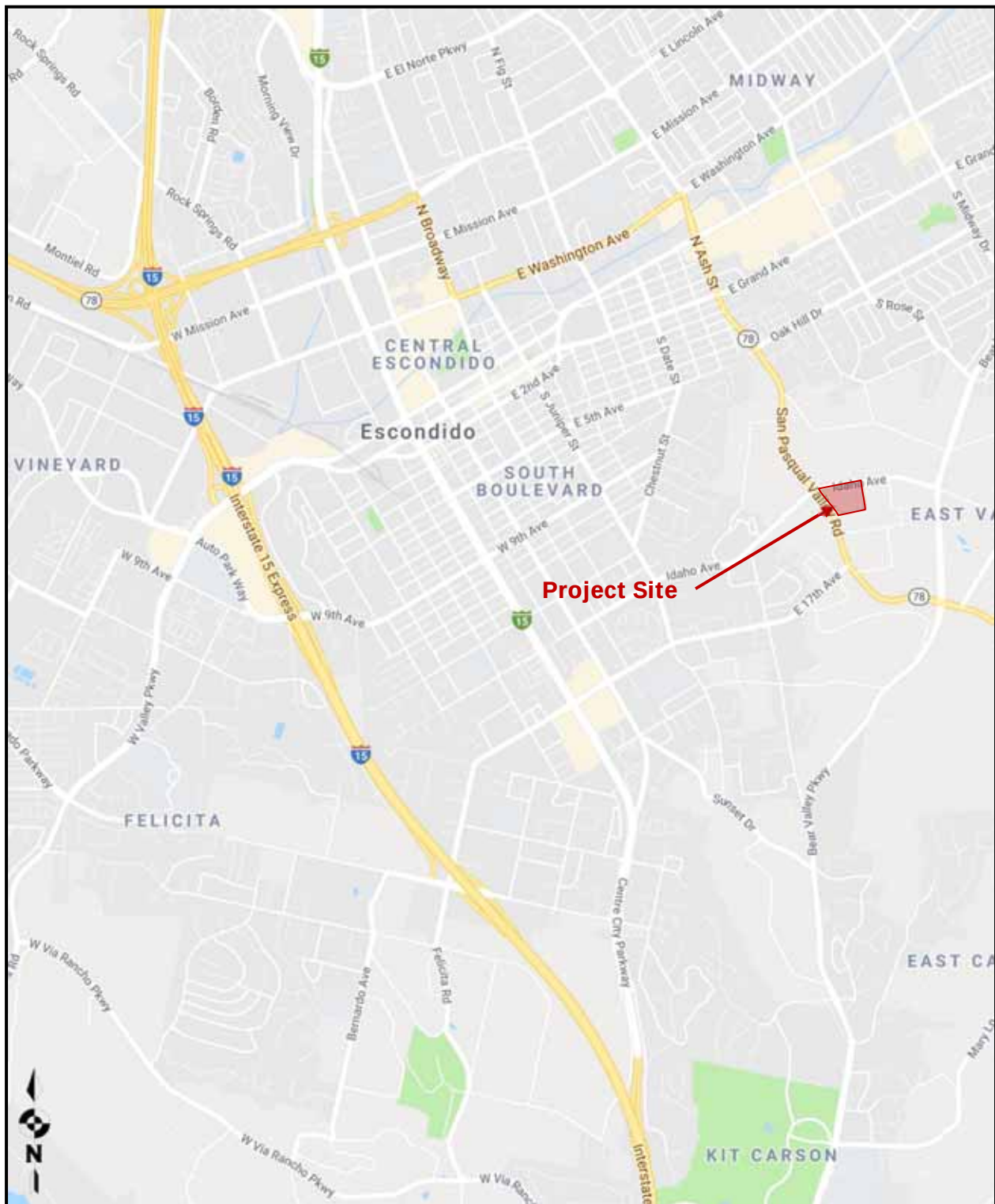
1.2 Project Location

The Project is located at 33° 06' 55" N and 117° 03' 24" W, east of San Pasqual Valley Road (SR-78) and south of Idaho Avenue in the unincorporated area of the North County Metro Community Planning Area in San Diego County. The general location of the Project is shown on the Vicinity Map, Figure 1-A.

1.3 Project Description

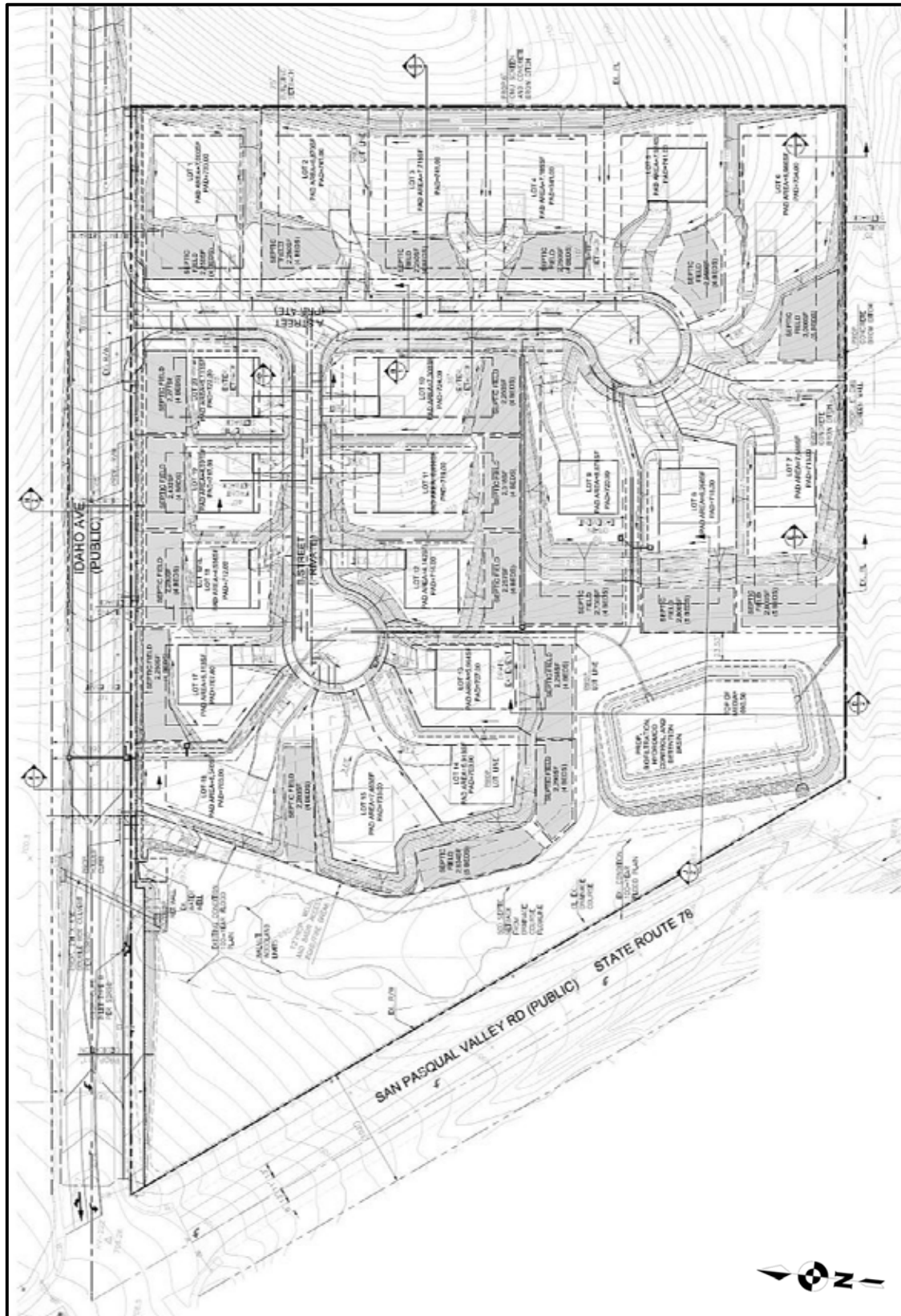
The proposed project is approximately 10.3 acres. The recently adopted County of San Diego General Plan Update Land Use designation for this site is VR-2 (Village Residential: 2 dwelling units [DU]/acre) or 20 single family DU (10.3 acres x 2 DU/acre). The project proposes to build 20 single-family residential DU with one additional lot will be non-buildable and non-residential and would include area for water quality. The site plan for the proposed project used for this analysis is shown on Figure 1-B. Construction of the Project is expected to begin early 2022 and be completed in 2023. The first year of full operations would be expected in 2024.

Figure 1-A: Project Vicinity Map



Source: (Google, 2020)

Figure 1-B: Proposed Project Site Layout



Source: (X Engineering & Consulting, Inc., 2021)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The site currently has a land use designator as Village Residential. Land uses surrounding the Project mostly include single family residential to the east and south with adjacent shared property lines with structures located within 50 feet of the property line. Across San Pasqual Valley Road to the west is a church and school development. To the north, the Project is adjacent to a plant nursery. Elevations at the northern area of the Project are around 705 feet above mean sea level (MSL) and at the western site boundaries are closer to 755 feet above MSL on the eastern boundaries.

2.2 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heat up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north. It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Meteorological trends within the area generally show daytime highs ranging between 70 degrees Fahrenheit (°F) in the winter to approximately 92°F in the summer with August usually being the hottest month. Daytime Low temperatures range from approximately 40°F in the winter to approximately 60°F in the summer. Precipitation is generally about 13.80 inches per year (WRCC, 2020). 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

Regulatory Standards, which are made up of federal, state and local air quality standards are set with the intention to reduce human health impacts from exposure to pollutants. Based on these air quality standards, regional and local impact determinations under the California Environmental Quality Act (CEQA) would also be assumed to reduce potential health impacts because they are tied to the higher regulations.

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

CARB sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) is similar to the NAAQS and also restricts 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/m3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.070 ppm (137 µg/m3)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3		-		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		-		
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3) ⁸	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m3)		0.100 ppm ⁸ (188/ µg/m3)	-	
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/m3)		0.14 ppm ¹⁰ (for Certain Areas) (See Footnote 9)	-	
	3 Hour	-		-	0.5 ppm (1300 µg/m3)	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m3)	-	
Lead ^{12,13}	30 Day Average	1.5 µg/m3	Atomic Absorption	-	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m3		
	Rolling 3-Month Average	-		0.15 µg/m3		
Visibility Reducing Particles	8 Hour	See footnote 14				
Sulfates	24 Hour	25 µg/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m3)	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, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

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

4. Any equivalent 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 PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24- hour PM2.5 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. 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. California therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed 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 the county. Therefore, the SDAPCD developed a 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 (NO_x). Currently, San Diego is in “non-attainment” status for federal and state O₃ and state PM₁₀ and PM_{2.5}. An attainment plan is 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 NO_x and VOCs emissions which reduces ozone and clarifies and enhances emission reductions by introducing for discussion three new VOC and four new NO_x reduction measures. NO_x and VOCs are precursors to the formation of ozone in the atmosphere. 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 for criteria pollutants with respect to both federal and state nonattainment status by pollutants for County is shown in Table 2.2 on the following page (SDAPCD, 2019).

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

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment *	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM10	Unclassifiable **	Nonattainment
PM2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified
* The federal 1-hour standard of 12 pphm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans. ** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable. (SDAPCD, 2019)		

2.4 California Environmental Quality Act Significance Thresholds

The California Environmental Quality Act (CEQA) 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 district 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 applicable air quality plan?
- B:* 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?
- C:* Expose sensitive receptors to substantial pollutant concentrations?
- D:* Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

2.5 SDAPCD Rules 20.2 and 20.3 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established recommended trigger levels in Rule 20.2 for new or modified stationary sources. Through the County's Guidelines for Determining Significance and Report Format and Content Requirements, the County has adopted these trigger levels as Screening

Level Thresholds¹ (SLTs) for use in determining CEQA air quality impacts (County of San Diego, 2007). These SLTs can be used to demonstrate that a project's total emissions would not result in a significant impact as defined by CEQA. However, since SDAPCD does not have recommended trigger level for VOCs, the County has adopted the South Coast Air Quality Management District's (SCAQMD's) VOC threshold for the Coachella Valley which generally has stricter emissions thresholds than SDAPCD. For PM_{2.5}, the EPA "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005, which quantifies significant emissions as 10 tons per year is used (County of San Diego, 2007). Should emissions be found to exceed these County adopted SLTs, 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 SLTs for construction and operational activities are shown in Table 2.3.

Table 2.3: Construction Screening Level Thresholds for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
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

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 in 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 greater than 1 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 a 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. EPA uses the term VOC and the CARB's Emission Inventory Branch (EIB) uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor

¹ County SLTs are tied to achieving or maintaining attainment designations with the NAAQS and CAAQS. The federal and State ambient air quality standards, in turn, are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health.

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.

2.6 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 (SDAPCD, 2018). The District operates monitoring sites, which collect data on criteria pollutants. The closest monitoring location to the Project site is the Escondido monitoring location roughly 2.8 miles to the south-southeast. The next closest monitoring station is Camp Pendleton rough 22 miles to the northwest. Table 2.4 identifies the criteria pollutants monitored at the aforementioned station.

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	2018	Days Exceeded over 4 years
O ₃ (ppm)	Camp Pendleton or Escondido Monitoring Station (Escondido Location Identified with an *)	1 Hour	0.09 ppm	No Standard	0.09	0.08	0.09	0.08	0
		8 Hour	0.070 ppm	0.070 ppm	0.08	0.07	0.08	0.07	10
* PM ₁₀ (µg/m ³)		24 Hour	50 µg/m3	150 µg/m3	30	-	-	-	N/A
		Annual Arithmetic Mean	20 µg/m3	No Standard	19.4	-	-	-	N/A
* PM _{2.5} (µg/m ³)		24 Hour	No standard -	35 µg/m3	29.4	-	-	-	N/A
		Annual Arithmetic Mean	12 µg/m3	15 µg/m3	8.6	-	-	-	N/A
NO ₂ (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.006	0.006	0.006	0.005	N/A
		1 Hour	0.18 ppm	0.100 ppm	0.060	0.072	0.063	0.048	N/A
* CO (ppm)		1 Hour	20 ppm	35 ppm	3.1	-	-	-	N/A
		8 Hour	9 ppm	9 ppm	2.0	-	-	-	N/A

Notes:

1. Yearly maximums marked with "-" indicated data was not available for either monitoring station.
2. Days exceeded marked with "N/A" indicate no data available
3. * Data was selected from the Escondido Monitoring Station. All other data presented was collected at the Camp Pendleton Monitoring Station.
4. SO₂ is only monitored at the El Cajon Monitoring Station. Within the entire County of San Diego, SO₂ emissions within the County are essentially Zero for all metrics including the Average, Maximum 24 hour and 1- hour standards. The Highest 1-hr measurement identified is 0.004 ppm and the most restrictive standard (CAAQS for SO₂) is 0.25 ppm.

3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction 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) in 2017. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the Project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in **Attachment A** to this report.

The AERMOD 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 notable toxic air contaminant from construction is diesel exhaust, since exposure to diesel exhaust is known to cause cancer and acute and chronic health effects. Diesel exhaust emissions can be estimated using the annual PM₁₀ exhaust emissions, referred to as diesel particulate matter (DPM), from onsite construction operations obtained from the annual CalEEMod model output by summing each onsite source for the construction duration. The AERMOD input/output file for the proposed Project is provided in **Attachment B** and includes sensitive residential receptors.

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	=	Milligrams to micrograms conversion (10 ⁻³ mg/ µg), cubic meters to liters 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, 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)

The California Office of Environmental Health Hazard Assessment (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. Health risk calculations are shown in **Attachment C** to this report.

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, 2015). Diesel Exhaust has a REL of 5 µg/m³ and targets the respiratory system.

A graphical representation of the modeling locations is shown on a site aerial below in Figure 3-A. The red points (1-6) represent the sensitive receptor locations where air quality emissions are calculated by AERMOD. The green polygon represents the grading area. For purposes of analysis an unmitigated and mitigated model was created.

Figure 3-A: Construction Health Risk Receptor Locations



Source: (Google Earth Pro, 2020)

3.2 Construction Assumptions

CalEEMod Version 2016.3.2 was utilized for all construction emissions calculations for the proposed 20 unit subdivision and would require 16,200 cubic yards (CY) of soil import which was manually updated in the model. The remaining inputs are default settings within the model. The Project construction dates assumed default settings within the software and are shown in Table 3.1 below. It should be noted that the project will be required to incorporate requirements by default from the County's grading ordinance though are not specifically identified within this analysis.

Table 3.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Site Preparation	01/01/2022	01/14/2022	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	01/15/2022	02/25/2022	
Excavators			2
Graders			1
Rubber Tired Dozers			1
Scrapers			2
Tractors/Loaders/Backhoes			2
Building Construction	02/26/2022	04/21/2023	
Cranes			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Paving	04/22/2023	5/19/2023	
Pavers			2
Paving Equipment			2
Rollers			2
Architectural Coating	4/22/2023	5/19/2023	
Air Compressors			1
This equipment and durations were selected based on CalEEMod defaults			

3.3 Odor Impacts (Construction)

Potential onsite odor generators would include short-term construction odors from activities such as paving, painting activities would most likely will be from bitumen and solvents from the placement of hot asphalt and architectural coating. Exhaust from construction equipment may also generate odors. Due to the dispersive nature of odors, these short term impacts would be fairly quick and would cause less than significant impacts.

4.0 FINDINGS

4.1 Construction Findings

Emissions from construction activities and equipment use, identified in Section 3.2, are presented in pounds per day and are shown in Table 4.1 below. Given these findings, the Project construction would not exceed SDAPCD air quality standards. A project with emissions rates below these thresholds is considered to have a less than significant impact on regional and local air quality and would have a low potential for resulting in impacts to human health due to the nexus between SLTs, ambient air quality standards, and public health and would not be required to incorporate mitigation measures to comply.

Table 4.1: Expected Construction Emissions Summary – Pounds per Day (lb/day)

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)
2022	4.16	54.72	33.74	0.11	18.21	1.68	19.83	9.97	1.55	11.45
2023	57.59	14.55	16.76	0.03	0.13	0.70	0.77	0.03	0.66	0.68
Screening Level Threshold (lb/day)	75	250	550	250	-	-	100	-	-	55
Exceeds Threshold?	No	No	No	No	-	-	No	-	-	No

4.2 Health Risk

The nearest sensitive receptors to the Project site adjacent to the Project site as shown in Figure 3-A above. Based upon the annual air quality modeling outputs, worst-case PM₁₀ generated from onsite construction exhaust would cumulatively produce 0.155 tons over the construction duration (503-calendar days) or an average of 0.0032 grams/second. The average emission rate over the grading area is 7.77×10^{-8} g/m²/s, which was calculated as follows:

$$\frac{0.0032 \frac{\text{grams}}{\text{second}}}{10.3 \text{ acres} * 4,046 \frac{\text{meters}^2}{\text{acre}}} = 7.77 * 10^{-8} \frac{\text{grams}}{\text{meters}^2 \text{ second}}$$

Utilizing the AERMOD dispersion model, we find that the peak maximum annual concentration is 0.99 µg/m³ during the worst-case construction period. Utilizing the risk equation identified

above in Section 3.1, the inhalation cancer risk for the worst-case residential receptor is roughly 240 per one million exposed which is greater than the one per one million exposed thresholds and would be a significant impact without mitigation and would require the application of T-BACT diesel equipment to comply.

It was found that these impacts can be reduced to less than significant through the utilization of all Tier 4 equipment with DPF or equivalent. This equipment would cumulatively produce a total of 0.00126 tons of PM₁₀ over the construction duration above which equates to 0.000026 grams/second. Based on this the mitigated average emission rate over the grading area is 6.30×10^{-10} g/m²/s. Utilizing the AERMOD dispersion model, we find that the annual concentration is 0.008 µg/m³ during construction. Given this, the inhalation cancer risk for the worst-case receptor was found to be 1.94 per one million exposed which would be considered a less than significant impact under CEQA with T-BACT applied. Additionally, as noted earlier in this report, detailed calculations for both the unmitigated and mitigated scenarios are shown in **Attachment B** of this report. Finally, it should be noted that the applicant is fully committed to the utilization of Tier 4 equipment with DPF installed or equivalent for all diesel powered equipment used onsite during construction.

Finally, there are known 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 0.008 µg/m³ divided by the REL of 5 µg/m³ yields a Health Hazard Index of 0.002, which is less than one. Therefore, no chronic health risks are expected and all health risks are considered less than significant.

It should be noted that the mitigation measure to utilize Tier 4 equipment with DPF or equivalent would further reduce Air Quality emissions identified in Section 4.1 above. Since unmitigated emissions do not exceed Rule 20.2, by default mitigated emissions would also be considered less than significant. Mitigated construction emissions are shown in Table 4.2 below:

Table 4.2: Mitigated Construction Emissions (lb/day) - Tier 4 with DPF

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)
2022	1.30	19.17	37.70	0.11	18.21	0.06	18.22	9.97	0.06	9.98
2023	56.68	2.40	19.49	0.03	0.13	0.01	0.14	0.03	0.01	0.04
Screening Threshold (lb/day)	75	250	550	250	-	-	100	-	-	55
Exceeds Threshold?	No	No	No	No	-	-	No	-	-	No

4.3 Odor Impact Findings

Potential onsite odor generators would include short-term construction odors from activities such as paving, painting activities would most likely will be from bitumen and solvents from the placement of hot asphalt and architectural coating. Exhaust from construction equipment may also generate odors. Due to the dispersive nature of odors, these short term impacts would be fairly quick and would cause less than significant impacts.

4.4 Cumulative Impact Findings

Cumulative impacts would exist when either there are direct air quality impacts or when multiple construction projects occur within the same area simultaneously. To illustrate this, if a Project were to produce air quality emissions simultaneous to a nearby construction project the addition of both project emissions to the environment could exceed significance thresholds. If a nearby Project was to be under construction at the same time, that Project would need to produce an additive amount of emissions close to the Project site such that emissions would exceed thresholds. A review of nearby projects showed that there are zero cumulatively considerable projects exist within a ½ mile radius from the Project site. Based on this a cumulative construction impact would be less than significant. The County has verified that this is accurate around the Project area.

4.5 Conclusion of Findings

Based upon the analysis of construction and operation activities for the proposed Project would generate less than significant direct operational and direct construction impacts related to fugitive dust.

It was found that significant cancer health risks could be tied to construction and therefore would require mitigation to comply. Using Tier 4 construction equipment would reduce cancer risks to less than significant at all receptors surrounding the Project site.

Finally, the Project would generate short-term construction odors, but these impacts would not be considered significant. Based on this, no significant odor impacts are expected.

Based on this analysis, the Project would be required to implement one mitigation measure identified below:

AQ-1 - Project-related construction equipment shall use Tier 4 construction equipment with DPF or equivalent, as defined by United States Environmental Protection Agency (EPA) / California Air Resources Board (CARB) standards.

5.0 REFERENCES

- California Air Resources Board. (5/4/2016). *www.arb.ca.gov*. Retrieved from Ambient Air Quality Standards: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>
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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 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 May 26, 2021

ATTACHMENT A

CalEEMod

Idaho Estates - San Diego County, Summer

Idaho Estates

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	20.00	Dwelling Unit	10.30	36,000.00	57

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 10.3 acres

Construction Phase -

Trips and VMT -

Grading -

Vehicle Trips - CalEEMod error for percentage adjusted

Area Coating -

Construction Off-road Equipment Mitigation - Tier 4

Idaho Estates - San Diego County, Summer

Table Name	Column Name	Default Value	New Value
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	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
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Idaho Estates - San Diego County, Summer

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
tblGrading	MaterialImported	0.00	16,200.00
tblLandUse	LotAcreage	6.49	10.30

2.0 Emissions Summary

Idaho Estates - 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					
2022	4.1607	54.7178	33.7417	0.1149	18.2141	1.6807	19.8277	9.9699	1.5479	11.4544	0.0000	11,802.1974	11,802.1974	2.4478	0.0000	11,863.3912
2023	57.5892	14.5495	16.7619	0.0280	0.1314	0.7003	0.7713	0.0349	0.6590	0.6781	0.0000	2,664.2930	2,664.2930	0.7340	0.0000	2,679.6157
Maximum	57.5892	54.7178	33.7417	0.1149	18.2141	1.6807	19.8277	9.9699	1.5479	11.4544	0.0000	11,802.1974	11,802.1974	2.4478	0.0000	11,863.3912

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					
2022	1.2974	19.1744	37.6993	0.1149	18.2141	0.0611	18.2244	9.9699	0.0590	9.9801	0.0000	11,802.1974	11,802.1974	2.4478	0.0000	11,863.3912
2023	56.6750	2.3993	19.4947	0.0280	0.1314	7.0700e-003	0.1385	0.0349	7.0100e-003	0.0419	0.0000	2,664.2930	2,664.2930	0.7340	0.0000	2,679.6157
Maximum	56.6750	19.1744	37.6993	0.1149	18.2141	0.0611	18.2244	9.9699	0.0590	9.9801	0.0000	11,802.1974	11,802.1974	2.4478	0.0000	11,863.3912

	ROG	NOx	CO	SO2	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	6.12	68.85	-13.25	0.00	0.00	97.14	10.86	0.00	97.01	17.40	0.00	0.00	0.00	0.00	0.00	0.00

Idaho Estates - 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	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518
Energy	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Mobile	0.2871	1.0733	3.4151	0.0129	1.1998	9.5700e-003	1.2093	0.3206	8.9000e-003	0.3295		1,309.8206	1,309.8206	0.0625		1,311.3837
Total	32.0374	1.8081	42.8968	0.0822	1.1998	5.3257	6.5255	0.3206	5.3250	5.6456	555.4346	1,696.4946	2,251.9292	0.5808	0.0465	2,280.2932

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518
Energy	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Mobile	0.2871	1.0733	3.4151	0.0129	1.1998	9.5700e-003	1.2093	0.3206	8.9000e-003	0.3295		1,309.8206	1,309.8206	0.0625		1,311.3837
Total	32.0374	1.8081	42.8968	0.0822	1.1998	5.3257	6.5255	0.3206	5.3250	5.6456	555.4346	1,696.4946	2,251.9292	0.5808	0.0465	2,280.2932

Idaho Estates - 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	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	4/21/2023	5	300	
4	Paving	Paving	4/22/2023	5/19/2023	5	20	
5	Architectural Coating	Architectural Coating	4/22/2023	5/19/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 72,900; Residential Outdoor: 24,300; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Idaho Estates - 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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,025.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Idaho Estates - San Diego County, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143		3,686.0619	3,686.0619	1.1922		3,715.8655

Idaho Estates - San Diego County, Summer

3.2 Site Preparation - 2022**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	0.0589	0.0369	0.4440	1.4200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		141.2208	141.2208	3.8400e-003		141.3166
Total	0.0589	0.0369	0.4440	1.4200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		141.2208	141.2208	3.8400e-003		141.3166

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			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	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	0.4656	2.0175	20.8690	0.0380	18.0663	9.3100e-003	18.0756	9.9307	9.3100e-003	9.9400	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Idaho Estates - San Diego County, Summer

3.2 Site Preparation - 2022**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	0.0589	0.0369	0.4440	1.4200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		141.2208	141.2208	3.8400e-003		141.3166
Total	0.0589	0.0369	0.4440	1.4200e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		141.2208	141.2208	3.8400e-003		141.3166

3.3 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7492	0.0000	8.7492	3.6080	0.0000	3.6080			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.7492	1.6349	10.3841	3.6080	1.5041	5.1121		6,011.4105	6,011.4105	1.9442		6,060.0158

Idaho Estates - San Diego County, Summer

3.3 Grading - 2022**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	0.4705	15.8334	4.2069	0.0512	1.1795	0.0447	1.2242	0.3232	0.0428	0.3660		5,633.874 9	5,633.874 9	0.4993		5,646.356 8
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	0.0654	0.0410	0.4933	1.5700e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		156.9120	156.9120	4.2600e-003		157.0185
Total	0.5359	15.8744	4.7002	0.0528	1.3438	0.0458	1.3896	0.3668	0.0438	0.4106		5,790.786 8	5,790.786 8	0.5035		5,803.375 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7492	0.0000	8.7492	3.6080	0.0000	3.6080			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.0152	0.0152		0.0152	0.0152	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	0.7616	3.3000	32.9991	0.0621	8.7492	0.0152	8.7645	3.6080	0.0152	3.6232	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

Idaho Estates - San Diego County, Summer

3.3 Grading - 2022**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	0.4705	15.8334	4.2069	0.0512	1.1795	0.0447	1.2242	0.3232	0.0428	0.3660		5,633.874 9	5,633.874 9	0.4993		5,646.356 8
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	0.0654	0.0410	0.4933	1.5700e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		156.9120	156.9120	4.2600e-003		157.0185
Total	0.5359	15.8744	4.7002	0.0528	1.3438	0.0458	1.3896	0.3668	0.0438	0.4106		5,790.786 8	5,790.786 8	0.5035		5,803.375 3

3.4 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Idaho Estates - San Diego County, Summer

3.4 Building Construction - 2022**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	5.6200e-003	0.1925	0.0492	5.4000e-004	0.0135	3.7000e-004	0.0139	3.9000e-003	3.5000e-004	4.2500e-003		57.7228	57.7228	4.0400e-003		57.8237
Worker	0.0229	0.0143	0.1727	5.5000e-004	0.0575	3.9000e-004	0.0579	0.0153	3.6000e-004	0.0156		54.9192	54.9192	1.4900e-003		54.9565
Total	0.0285	0.2068	0.2218	1.0900e-003	0.0710	7.6000e-004	0.0718	0.0192	7.1000e-004	0.0199		112.6419	112.6419	5.5300e-003		112.7801

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	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Idaho Estates - San Diego County, Summer

3.4 Building Construction - 2022**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	5.6200e-003	0.1925	0.0492	5.4000e-004	0.0135	3.7000e-004	0.0139	3.9000e-003	3.5000e-004	4.2500e-003		57.7228	57.7228	4.0400e-003		57.8237
Worker	0.0229	0.0143	0.1727	5.5000e-004	0.0575	3.9000e-004	0.0579	0.0153	3.6000e-004	0.0156		54.9192	54.9192	1.4900e-003		54.9565
Total	0.0285	0.2068	0.2218	1.0900e-003	0.0710	7.6000e-004	0.0718	0.0192	7.1000e-004	0.0199		112.6419	112.6419	5.5300e-003		112.7801

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Idaho Estates - San Diego County, Summer

3.4 Building Construction - 2023**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	4.3400e-003	0.1515	0.0450	5.2000e-004	0.0135	1.8000e-004	0.0137	3.9000e-003	1.7000e-004	4.0700e-003		56.2634	56.2634	3.7000e-003		56.3558
Worker	0.0217	0.0131	0.1604	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		52.8197	52.8197	1.3700e-003		52.8538
Total	0.0260	0.1646	0.2054	1.0500e-003	0.0710	5.6000e-004	0.0716	0.0192	5.2000e-004	0.0197		109.0831	109.0831	5.0700e-003		109.2096

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	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Idaho Estates - San Diego County, Summer

3.4 Building Construction - 2023**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	4.3400e-003	0.1515	0.0450	5.2000e-004	0.0135	1.8000e-004	0.0137	3.9000e-003	1.7000e-004	4.0700e-003		56.2634	56.2634	3.7000e-003		56.3558
Worker	0.0217	0.0131	0.1604	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		52.8197	52.8197	1.3700e-003		52.8538
Total	0.0260	0.1646	0.2054	1.0500e-003	0.0710	5.6000e-004	0.0716	0.0192	5.2000e-004	0.0197		109.0831	109.0831	5.0700e-003		109.2096

3.5 Paving - 2023**Unmitigated Construction On-Site**

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

Idaho Estates - San Diego County, Summer

3.5 Paving - 2023**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	0.0464	0.0281	0.3437	1.1400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		113.1851	113.1851	2.9300e-003		113.2582
Total	0.0464	0.0281	0.3437	1.1400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		113.1851	113.1851	2.9300e-003		113.2582

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	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Idaho Estates - San Diego County, Summer

3.5 Paving - 2023**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	0.0464	0.0281	0.3437	1.1400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		113.1851	113.1851	2.9300e-003		113.2582
Total	0.0464	0.0281	0.3437	1.1400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		113.1851	113.1851	2.9300e-003		113.2582

3.6 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.3153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	56.5069	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Idaho Estates - San Diego County, Summer

3.6 Architectural Coating - 2023**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	3.1000e-003	1.8700e-003	0.0229	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5457	7.5457	2.0000e-004		7.5506
Total	3.1000e-003	1.8700e-003	0.0229	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5457	7.5457	2.0000e-004		7.5506

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	56.3153					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	0.0168		281.8690
Total	56.3450	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	0.0168		281.8690

Idaho Estates - San Diego County, Summer

3.6 Architectural Coating - 2023**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	3.1000e-003	1.8700e-003	0.0229	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5457	7.5457	2.0000e-004		7.5506
Total	3.1000e-003	1.8700e-003	0.0229	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5457	7.5457	2.0000e-004		7.5506

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

Idaho Estates - 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	0.2871	1.0733	3.4151	0.0129	1.1998	9.5700e-003	1.2093	0.3206	8.9000e-003	0.3295		1,309.8206	1,309.8206	0.0625		1,311.3837
Unmitigated	0.2871	1.0733	3.4151	0.0129	1.1998	9.5700e-003	1.2093	0.3206	8.9000e-003	0.3295		1,309.8206	1,309.8206	0.0625		1,311.3837

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	190.40	198.20	172.40	539,489	539,489
Total	190.40	198.20	172.40	539,489	539,489

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

Idaho Estates - San Diego County, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
NaturalGas Unmitigated	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577

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					
Single Family Housing	1281.48	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Total		0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577

Idaho Estates - 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					
Single Family Housing	1.28148	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Total		0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518
Unmitigated	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518

Idaho Estates - San Diego County, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7704					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.6079	0.5977	37.7821	0.0685		5.2974	5.2974		5.2974	5.2974	555.4346	232.9412	788.3758	0.5126	0.0437	814.2095
Landscaping	0.0496	0.0190	1.6493	9.0000e-005		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003		2.9711	2.9711	2.8500e-003		3.0423
Total	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518

Idaho Estates - 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	0.3086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7704					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.6079	0.5977	37.7821	0.0685		5.2974	5.2974		5.2974	5.2974	555.4346	232.9412	788.3758	0.5126	0.0437	814.2095
Landscaping	0.0496	0.0190	1.6493	9.0000e-005		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003		2.9711	2.9711	2.8500e-003		3.0423
Total	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Idaho Estates - San Diego County, Summer

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Idaho Estates - San Diego County, Winter

Idaho Estates
San Diego County, Winter**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	20.00	Dwelling Unit	10.30	36,000.00	57

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 10.3 acres

Construction Phase -

Trips and VMT -

Grading -

Vehicle Trips - CalEEMod error for percentage adjusted

Area Coating -

Construction Off-road Equipment Mitigation - Tier 4

Idaho Estates - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
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	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
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Idaho Estates - San Diego County, Winter

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
tblGrading	MaterialImported	0.00	16,200.00
tblLandUse	LotAcreage	6.49	10.30

2.0 Emissions Summary

Idaho Estates - 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					
2022	4.1828	54.8416	33.9643	0.1139	18.2141	1.6817	19.8277	9.9699	1.5489	11.4544	0.0000	11,694.27 45	11,694.27 45	2.4632	0.0000	11,755.85 44
2023	57.5961	14.5504	16.7384	0.0280	0.1314	0.7003	0.7713	0.0349	0.6590	0.6781	0.0000	2,659.611 5	2,659.611 5	0.7338	0.0000	2,674.937 2
Maximum	57.5961	54.8416	33.9643	0.1139	18.2141	1.6817	19.8277	9.9699	1.5489	11.4544	0.0000	11,694.27 45	11,694.27 45	2.4632	0.0000	11,755.85 44

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					
2022	1.3195	19.2981	37.9219	0.1139	18.2141	0.0621	18.2244	9.9699	0.0600	9.9801	0.0000	11,694.27 45	11,694.27 45	2.4632	0.0000	11,755.85 44
2023	56.6819	2.4003	19.4712	0.0280	0.1314	7.0700e-003	0.1385	0.0349	7.0100e-003	0.0419	0.0000	2,659.611 5	2,659.611 5	0.7338	0.0000	2,674.937 2
Maximum	56.6819	19.2981	37.9219	0.1139	18.2141	0.0621	18.2244	9.9699	0.0600	9.9801	0.0000	11,694.27 45	11,694.27 45	2.4632	0.0000	11,755.85 44

	ROG	NOx	CO	SO2	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	6.11	68.73	-13.20	0.00	0.00	97.10	10.86	0.00	96.96	17.40	0.00	0.00	0.00	0.00	0.00	0.00

Idaho Estates - 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	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518
Energy	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Mobile	0.2778	1.1035	3.3352	0.0122	1.1998	9.6100e-003	1.2094	0.3206	8.9500e-003	0.3296		1,243.304 4	1,243.304 4	0.0627		1,244.871 1
Total	32.0280	1.8384	42.8169	0.0815	1.1998	5.3257	6.5255	0.3206	5.3251	5.6457	555.4346	1,629.978 3	2,185.413 0	0.5810	0.0465	2,213.780 6

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518
Energy	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Mobile	0.2778	1.1035	3.3352	0.0122	1.1998	9.6100e-003	1.2094	0.3206	8.9500e-003	0.3296		1,243.304 4	1,243.304 4	0.0627		1,244.871 1
Total	32.0280	1.8384	42.8169	0.0815	1.1998	5.3257	6.5255	0.3206	5.3251	5.6457	555.4346	1,629.978 3	2,185.413 0	0.5810	0.0465	2,213.780 6

Idaho Estates - 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	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	4/21/2023	5	300	
4	Paving	Paving	4/22/2023	5/19/2023	5	20	
5	Architectural Coating	Architectural Coating	4/22/2023	5/19/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 72,900; Residential Outdoor: 24,300; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Idaho Estates - 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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,025.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Idaho Estates - San Diego County, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143		3,686.0619	3,686.0619	1.1922		3,715.8655

Idaho Estates - San Diego County, Winter

3.2 Site Preparation - 2022**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	0.0669	0.0414	0.4164	1.3300e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		132.5746	132.5746	3.6200e-003		132.6651
Total	0.0669	0.0414	0.4164	1.3300e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		132.5746	132.5746	3.6200e-003		132.6651

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			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	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	0.4656	2.0175	20.8690	0.0380	18.0663	9.3100e-003	18.0756	9.9307	9.3100e-003	9.9400	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Idaho Estates - San Diego County, Winter

3.2 Site Preparation - 2022**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	0.0669	0.0414	0.4164	1.3300e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		132.5746	132.5746	3.6200e-003		132.6651
Total	0.0669	0.0414	0.4164	1.3300e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		132.5746	132.5746	3.6200e-003		132.6651

3.3 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7492	0.0000	8.7492	3.6080	0.0000	3.6080			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.7492	1.6349	10.3841	3.6080	1.5041	5.1121		6,011.4105	6,011.4105	1.9442		6,060.0158

Idaho Estates - San Diego County, Winter

3.3 Grading - 2022**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	0.4836	15.9521	4.4601	0.0504	1.1795	0.0457	1.2252	0.3232	0.0438	0.3670		5,535.5588	5,535.5588	0.5150		5,548.4329
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	0.0743	0.0460	0.4627	1.4800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		147.3051	147.3051	4.0200e-003		147.4057
Total	0.5580	15.9981	4.9228	0.0518	1.3438	0.0468	1.3906	0.3668	0.0448	0.4116		5,682.8639	5,682.8639	0.5190		5,695.8385

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7492	0.0000	8.7492	3.6080	0.0000	3.6080			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.0152	0.0152		0.0152	0.0152	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	0.7616	3.3000	32.9991	0.0621	8.7492	0.0152	8.7645	3.6080	0.0152	3.6232	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Idaho Estates - San Diego County, Winter

3.3 Grading - 2022**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	0.4836	15.9521	4.4601	0.0504	1.1795	0.0457	1.2252	0.3232	0.0438	0.3670		5,535.5588	5,535.5588	0.5150		5,548.4329
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	0.0743	0.0460	0.4627	1.4800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		147.3051	147.3051	4.0200e-003		147.4057
Total	0.5580	15.9981	4.9228	0.0518	1.3438	0.0468	1.3906	0.3668	0.0448	0.4116		5,682.8639	5,682.8639	0.5190		5,695.8385

3.4 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Idaho Estates - San Diego County, Winter

3.4 Building Construction - 2022**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	5.9300e-003	0.1918	0.0547	5.2000e-004	0.0135	3.8000e-004	0.0139	3.9000e-003	3.7000e-004	4.2600e-003		56.2205	56.2205	4.2800e-003		56.3276
Worker	0.0260	0.0161	0.1619	5.2000e-004	0.0575	3.9000e-004	0.0579	0.0153	3.6000e-004	0.0156		51.5568	51.5568	1.4100e-003		51.5920
Total	0.0320	0.2079	0.2167	1.0400e-003	0.0710	7.7000e-004	0.0718	0.0192	7.3000e-004	0.0199		107.7773	107.7773	5.6900e-003		107.9195

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	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Idaho Estates - San Diego County, Winter

3.4 Building Construction - 2022**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	5.9300e-003	0.1918	0.0547	5.2000e-004	0.0135	3.8000e-004	0.0139	3.9000e-003	3.7000e-004	4.2600e-003		56.2205	56.2205	4.2800e-003		56.3276
Worker	0.0260	0.0161	0.1619	5.2000e-004	0.0575	3.9000e-004	0.0579	0.0153	3.6000e-004	0.0156		51.5568	51.5568	1.4100e-003		51.5920
Total	0.0320	0.2079	0.2167	1.0400e-003	0.0710	7.7000e-004	0.0718	0.0192	7.3000e-004	0.0199		107.7773	107.7773	5.6900e-003		107.9195

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Idaho Estates - San Diego County, Winter

3.4 Building Construction - 2023**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	4.5800e-003	0.1508	0.0494	5.1000e-004	0.0135	1.9000e-004	0.0137	3.9000e-003	1.8000e-004	4.0800e-003		54.8139	54.8139	3.9000e-003		54.9113
Worker	0.0247	0.0147	0.1501	5.0000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		49.5877	49.5877	1.2900e-003		49.6199
Total	0.0293	0.1655	0.1995	1.0100e-003	0.0710	5.7000e-004	0.0716	0.0192	5.3000e-004	0.0197		104.4016	104.4016	5.1900e-003		104.5312

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	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	0.3278	2.2347	17.4603	0.0269		6.1200e-003	6.1200e-003		6.1200e-003	6.1200e-003	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Idaho Estates - San Diego County, Winter

3.4 Building Construction - 2023**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	4.5800e-003	0.1508	0.0494	5.1000e-004	0.0135	1.9000e-004	0.0137	3.9000e-003	1.8000e-004	4.0800e-003		54.8139	54.8139	3.9000e-003		54.9113
Worker	0.0247	0.0147	0.1501	5.0000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		49.5877	49.5877	1.2900e-003		49.6199
Total	0.0293	0.1655	0.1995	1.0100e-003	0.0710	5.7000e-004	0.0716	0.0192	5.3000e-004	0.0197		104.4016	104.4016	5.1900e-003		104.5312

3.5 Paving - 2023**Unmitigated Construction On-Site**

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

Idaho Estates - San Diego County, Winter

3.5 Paving - 2023**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	0.0529	0.0315	0.3217	1.0700e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		106.2594	106.2594	2.7600e-003		106.3284
Total	0.0529	0.0315	0.3217	1.0700e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		106.2594	106.2594	2.7600e-003		106.3284

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	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Idaho Estates - San Diego County, Winter

3.5 Paving - 2023**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	0.0529	0.0315	0.3217	1.0700e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		106.2594	106.2594	2.7600e-003		106.3284
Total	0.0529	0.0315	0.3217	1.0700e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		106.2594	106.2594	2.7600e-003		106.3284

3.6 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.3153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	56.5069	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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3.6 Architectural Coating - 2023**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	3.5300e-003	2.1000e-003	0.0214	7.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.0840	7.0840	1.8000e-004		7.0886
Total	3.5300e-003	2.1000e-003	0.0214	7.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.0840	7.0840	1.8000e-004		7.0886

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	56.3153					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	0.0168		281.8690
Total	56.3450	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	0.0168		281.8690

Idaho Estates - San Diego County, Winter

3.6 Architectural Coating - 2023**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	3.5300e-003	2.1000e-003	0.0214	7.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.0840	7.0840	1.8000e-004		7.0886
Total	3.5300e-003	2.1000e-003	0.0214	7.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.0840	7.0840	1.8000e-004		7.0886

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

Idaho Estates - 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	0.2778	1.1035	3.3352	0.0122	1.1998	9.6100e-003	1.2094	0.3206	8.9500e-003	0.3296		1,243.304 4	1,243.304 4	0.0627		1,244.871 1
Unmitigated	0.2778	1.1035	3.3352	0.0122	1.1998	9.6100e-003	1.2094	0.3206	8.9500e-003	0.3296		1,243.304 4	1,243.304 4	0.0627		1,244.871 1

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	190.40	198.20	172.40	539,489	539,489
Total	190.40	198.20	172.40	539,489	539,489

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

Idaho Estates - San Diego County, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
NaturalGas Unmitigated	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577

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					
Single Family Housing	1281.48	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Total		0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577

Idaho Estates - 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					
Single Family Housing	1.28148	0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577
Total		0.0138	0.1181	0.0503	7.5000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003		150.7618	150.7618	2.8900e-003	2.7600e-003	151.6577

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518
Unmitigated	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518

Idaho Estates - San Diego County, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7704					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.6079	0.5977	37.7821	0.0685		5.2974	5.2974		5.2974	5.2974	555.4346	232.9412	788.3758	0.5126	0.0437	814.2095
Landscaping	0.0496	0.0190	1.6493	9.0000e-005		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003		2.9711	2.9711	2.8500e-003		3.0423
Total	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518

Idaho Estates - 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	0.3086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7704					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.6079	0.5977	37.7821	0.0685		5.2974	5.2974		5.2974	5.2974	555.4346	232.9412	788.3758	0.5126	0.0437	814.2095
Landscaping	0.0496	0.0190	1.6493	9.0000e-005		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003		2.9711	2.9711	2.8500e-003		3.0423
Total	31.7365	0.6167	39.4315	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2518

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Idaho Estates - San Diego County, Winter

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Idaho Estates - San Diego County, Annual

Idaho Estates

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	20.00	Dwelling Unit	10.30	36,000.00	57

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 10.3 acres

Construction Phase -

Trips and VMT -

Grading -

Vehicle Trips - CalEEMod error for percentage adjusted

Area Coating -

Construction Off-road Equipment Mitigation - Tier 4

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Table Name	Column Name	Default Value	New Value
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
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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	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
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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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
tblGrading	MaterialImported	0.00	16,200.00
tblLandUse	LotAcreage	6.49	10.30

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					
2022	0.2695	2.7315	2.4315	4.9900e-003	0.2497	0.1224	0.3720	0.1114	0.1145	0.2259	0.0000	443.0473	443.0473	0.1004	0.0000	445.5584
2023	0.6399	0.6974	0.8251	1.3900e-003	4.0600e-003	0.0338	0.0379	1.0900e-003	0.0318	0.0329	0.0000	120.1775	120.1775	0.0289	0.0000	120.8999
Maximum	0.6399	2.7315	2.4315	4.9900e-003	0.2497	0.1224	0.3720	0.1114	0.1145	0.2259	0.0000	443.0473	443.0473	0.1004	0.0000	445.5584

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					
2022	0.0614	0.5711	2.6173	4.9900e-003	0.2497	1.7300e-003	0.2514	0.1114	1.6900e-003	0.1131	0.0000	443.0469	443.0469	0.1004	0.0000	445.5580
2023	0.5809	0.1098	0.9010	1.3900e-003	4.0600e-003	3.4000e-004	4.4000e-003	1.0900e-003	3.4000e-004	1.4300e-003	0.0000	120.1773	120.1773	0.0289	0.0000	120.8998
Maximum	0.5809	0.5711	2.6173	4.9900e-003	0.2497	1.7300e-003	0.2514	0.1114	1.6900e-003	0.1131	0.0000	443.0469	443.0469	0.1004	0.0000	445.5580

	ROG	NOx	CO	SO2	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	29.37	80.14	-8.04	0.00	0.00	98.67	37.60	0.00	98.61	55.73	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	1-1-2022	3-31-2022	1.2804	0.3563
2	4-1-2022	6-30-2022	0.5706	0.0909
3	7-1-2022	9-30-2022	0.5769	0.0919
4	10-1-2022	12-31-2022	0.5770	0.0921
5	1-1-2023	3-31-2023	0.5192	0.0886
6	4-1-2023	6-30-2023	0.8122	0.6011
		Highest	1.2804	0.6011

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4563	0.0262	1.6975	2.8100e-003		0.2180	0.2180		0.2180	0.2180	20.6592	8.9067	29.5659	0.0193	1.6200e-003	30.5326
Energy	2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	77.8764	77.8764	2.6100e-003	9.0000e-004	78.2093
Mobile	0.0471	0.1919	0.5734	2.1400e-003	0.2033	1.6600e-003	0.2049	0.0544	1.5500e-003	0.0560	0.0000	197.5262	197.5262	9.7700e-003	0.0000	197.7705
Waste						0.0000	0.0000		0.0000	0.0000	4.7439	0.0000	4.7439	0.2804	0.0000	11.7528
Water						0.0000	0.0000		0.0000	0.0000	0.4134	8.5279	8.9413	0.0428	1.0700e-003	10.3313
Total	1.5059	0.2396	2.2801	5.0900e-003	0.2033	0.2214	0.4247	0.0544	0.2213	0.2757	25.8165	292.8372	318.6537	0.3548	3.5900e-003	328.5965

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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	1.4563	0.0262	1.6975	2.8100e-003		0.2180	0.2180		0.2180	0.2180	20.6592	8.9067	29.5659	0.0193	1.6200e-003	30.5326
Energy	2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	77.8764	77.8764	2.6100e-003	9.0000e-004	78.2093
Mobile	0.0471	0.1919	0.5734	2.1400e-003	0.2033	1.6600e-003	0.2049	0.0544	1.5500e-003	0.0560	0.0000	197.5262	197.5262	9.7700e-003	0.0000	197.7705
Waste						0.0000	0.0000		0.0000	0.0000	4.7439	0.0000	4.7439	0.2804	0.0000	11.7528
Water						0.0000	0.0000		0.0000	0.0000	0.4134	8.5279	8.9413	0.0428	1.0700e-003	10.3313
Total	1.5059	0.2396	2.2801	5.0900e-003	0.2033	0.2214	0.4247	0.0544	0.2213	0.2757	25.8165	292.8372	318.6537	0.3548	3.5900e-003	328.5965

	ROG	NOx	CO	SO2	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**

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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	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	4/21/2023	5	300	
4	Paving	Paving	4/22/2023	5/19/2023	5	20	
5	Architectural Coating	Architectural Coating	4/22/2023	5/19/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 72,900; Residential Outdoor: 24,300; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (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
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,025.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	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 - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e-004	0.0903	8.0600e-003	0.0984	0.0497	7.4200e-003	0.0571	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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3.2 Site Preparation - 2022**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	3.0000e-004	2.0000e-004	2.0900e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6074	0.6074	2.0000e-005	0.0000	0.6078
Total	3.0000e-004	2.0000e-004	2.0900e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6074	0.6074	2.0000e-005	0.0000	0.6078

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	2.3300e-003	0.0101	0.1043	1.9000e-004	0.0903	5.0000e-005	0.0904	0.0497	5.0000e-005	0.0497	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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3.2 Site Preparation - 2022**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	3.0000e-004	2.0000e-004	2.0900e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6074	0.6074	2.0000e-005	0.0000	0.6078
Total	3.0000e-004	2.0000e-004	2.0900e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6074	0.6074	2.0000e-005	0.0000	0.6078

3.3 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1312	0.0000	0.1312	0.0541	0.0000	0.0541	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	0.0544	0.5827	0.4356	9.3000e-004	0.1312	0.0245	0.1558	0.0541	0.0226	0.0767	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633

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3.3 Grading - 2022**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	7.1400e-003	0.2418	0.0648	7.6000e-004	0.0173	6.8000e-004	0.0180	4.7600e-003	6.5000e-004	5.4100e-003	0.0000	76.1026	76.1026	6.8900e-003	0.0000	76.2747
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	9.9000e-004	6.8000e-004	6.9600e-003	2.0000e-005	2.4100e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0245	2.0245	6.0000e-005	0.0000	2.0259
Total	8.1300e-003	0.2424	0.0717	7.8000e-004	0.0197	7.0000e-004	0.0204	5.4000e-003	6.7000e-004	6.0600e-003	0.0000	78.1271	78.1271	6.9500e-003	0.0000	78.3007

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					0.1312	0.0000	0.1312	0.0541	0.0000	0.0541	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0495	0.4950	9.3000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	0.0114	0.0495	0.4950	9.3000e-004	0.1312	2.3000e-004	0.1315	0.0541	2.3000e-004	0.0544	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632

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3.3 Grading - 2022**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	7.1400e-003	0.2418	0.0648	7.6000e-004	0.0173	6.8000e-004	0.0180	4.7600e-003	6.5000e-004	5.4100e-003	0.0000	76.1026	76.1026	6.8900e-003	0.0000	76.2747
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	9.9000e-004	6.8000e-004	6.9600e-003	2.0000e-005	2.4100e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0245	2.0245	6.0000e-005	0.0000	2.0259
Total	8.1300e-003	0.2424	0.0717	7.8000e-004	0.0197	7.0000e-004	0.0204	5.4000e-003	6.7000e-004	6.0600e-003	0.0000	78.1271	78.1271	6.9500e-003	0.0000	78.3007

3.4 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1877	1.7177	1.8000	2.9600e-003		0.0890	0.0890		0.0837	0.0837	0.0000	254.8978	254.8978	0.0611	0.0000	256.4244
Total	0.1877	1.7177	1.8000	2.9600e-003		0.0890	0.0890		0.0837	0.0837	0.0000	254.8978	254.8978	0.0611	0.0000	256.4244

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3.4 Building Construction - 2022**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	6.3000e-004	0.0214	5.7100e-003	6.0000e-005	1.4600e-003	4.0000e-005	1.5000e-003	4.2000e-004	4.0000e-005	4.6000e-004	0.0000	5.6972	5.6972	4.1000e-004	0.0000	5.7076
Worker	2.5300e-003	1.7400e-003	0.0179	6.0000e-005	6.1700e-003	4.0000e-005	6.2200e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	5.1963	5.1963	1.4000e-004	0.0000	5.1998
Total	3.1600e-003	0.0231	0.0236	1.2000e-004	7.6300e-003	8.0000e-005	7.7200e-003	2.0600e-003	8.0000e-005	2.1400e-003	0.0000	10.8935	10.8935	5.5000e-004	0.0000	10.9074

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	0.0361	0.2458	1.9206	2.9600e-003		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	254.8975	254.8975	0.0611	0.0000	256.4241
Total	0.0361	0.2458	1.9206	2.9600e-003		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	254.8975	254.8975	0.0611	0.0000	256.4241

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3.4 Building Construction - 2022**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	6.3000e-004	0.0214	5.7100e-003	6.0000e-005	1.4600e-003	4.0000e-005	1.5000e-003	4.2000e-004	4.0000e-005	4.6000e-004	0.0000	5.6972	5.6972	4.1000e-004	0.0000	5.7076
Worker	2.5300e-003	1.7400e-003	0.0179	6.0000e-005	6.1700e-003	4.0000e-005	6.2200e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	5.1963	5.1963	1.4000e-004	0.0000	5.1998
Total	3.1600e-003	0.0231	0.0236	1.2000e-004	7.6300e-003	8.0000e-005	7.7200e-003	2.0600e-003	8.0000e-005	2.1400e-003	0.0000	10.8935	10.8935	5.5000e-004	0.0000	10.9074

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0629	0.5754	0.6498	1.0800e-003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7219	92.7219	0.0221	0.0000	93.2733
Total	0.0629	0.5754	0.6498	1.0800e-003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7219	92.7219	0.0221	0.0000	93.2733

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3.4 Building Construction - 2023**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	1.8000e-004	6.1000e-003	1.8900e-003	2.0000e-005	5.3000e-004	1.0000e-005	5.4000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	2.0196	2.0196	1.4000e-004	0.0000	2.0230
Worker	8.7000e-004	5.8000e-004	6.0200e-003	2.0000e-005	2.2500e-003	2.0000e-005	2.2600e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8174	1.8174	5.0000e-005	0.0000	1.8186
Total	1.0500e-003	6.6800e-003	7.9100e-003	4.0000e-005	2.7800e-003	3.0000e-005	2.8000e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	3.8369	3.8369	1.9000e-004	0.0000	3.8416

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	0.0131	0.0894	0.6984	1.0800e-003		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	92.7218	92.7218	0.0221	0.0000	93.2732
Total	0.0131	0.0894	0.6984	1.0800e-003		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	92.7218	92.7218	0.0221	0.0000	93.2732

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3.4 Building Construction - 2023**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	1.8000e-004	6.1000e-003	1.8900e-003	2.0000e-005	5.3000e-004	1.0000e-005	5.4000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	2.0196	2.0196	1.4000e-004	0.0000	2.0230
Worker	8.7000e-004	5.8000e-004	6.0200e-003	2.0000e-005	2.2500e-003	2.0000e-005	2.2600e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8174	1.8174	5.0000e-005	0.0000	1.8186
Total	1.0500e-003	6.6800e-003	7.9100e-003	4.0000e-005	2.7800e-003	3.0000e-005	2.8000e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	3.8369	3.8369	1.9000e-004	0.0000	3.8416

3.5 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

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3.5 Paving - 2023**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	4.7000e-004	3.1000e-004	3.2300e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9736	0.9736	3.0000e-005	0.0000	0.9742
Total	4.7000e-004	3.1000e-004	3.2300e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9736	0.9736	3.0000e-005	0.0000	0.9742

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	2.8000e-003	0.0122	0.1730	2.3000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8000e-003	0.0122	0.1730	2.3000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

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3.5 Paving - 2023**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	4.7000e-004	3.1000e-004	3.2300e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9736	0.9736	3.0000e-005	0.0000	0.9742
Total	4.7000e-004	3.1000e-004	3.2300e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9736	0.9736	3.0000e-005	0.0000	0.9742

3.6 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.5651	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

Idaho Estates - San Diego County, Annual

3.6 Architectural Coating - 2023**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	3.0000e-005	2.0000e-005	2.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0649	0.0649	0.0000	0.0000	0.0650
Total	3.0000e-005	2.0000e-005	2.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0649	0.0649	0.0000	0.0000	0.0650

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	0.5632					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.5635	1.2900e-003	0.0183	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

Idaho Estates - San Diego County, Annual

3.6 Architectural Coating - 2023**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	3.0000e-005	2.0000e-005	2.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0649	0.0649	0.0000	0.0000	0.0650
Total	3.0000e-005	2.0000e-005	2.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0649	0.0649	0.0000	0.0000	0.0650

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

Idaho Estates - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.0471	0.1919	0.5734	2.1400e-003	0.2033	1.6600e-003	0.2049	0.0544	1.5500e-003	0.0560	0.0000	197.5262	197.5262	9.7700e-003	0.0000	197.7705
Unmitigated	0.0471	0.1919	0.5734	2.1400e-003	0.2033	1.6600e-003	0.2049	0.0544	1.5500e-003	0.0560	0.0000	197.5262	197.5262	9.7700e-003	0.0000	197.7705

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	190.40	198.20	172.40	539,489	539,489
Total	190.40	198.20	172.40	539,489	539,489

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

Idaho Estates - San Diego County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	52.9161	52.9161	2.1300e-003	4.4000e-004	53.1007
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	52.9161	52.9161	2.1300e-003	4.4000e-004	53.1007
NaturalGas Mitigated	2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.9603	24.9603	4.8000e-004	4.6000e-004	25.1086
NaturalGas Unmitigated	2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.9603	24.9603	4.8000e-004	4.6000e-004	25.1086

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					
Single Family Housing	467738	2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.9603	24.9603	4.8000e-004	4.6000e-004	25.1086
Total		2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.9603	24.9603	4.8000e-004	4.6000e-004	25.1086

Idaho Estates - San Diego County, Annual

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					
Single Family Housing	467738	2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.9603	24.9603	4.8000e-004	4.6000e-004	25.1086
Total		2.5200e-003	0.0216	9.1700e-003	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.9603	24.9603	4.8000e-004	4.6000e-004	25.1086

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	161918	52.9161	2.1300e-003	4.4000e-004	53.1007
Total		52.9161	2.1300e-003	4.4000e-004	53.1007

Idaho Estates - San Diego County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	161918	52.9161	2.1300e-003	4.4000e-004	53.1007
Total		52.9161	2.1300e-003	4.4000e-004	53.1007

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4563	0.0262	1.6975	2.8100e-003		0.2180	0.2180		0.2180	0.2180	20.6592	8.9067	29.5659	0.0193	1.6200e-003	30.5326
Unmitigated	1.4563	0.0262	1.6975	2.8100e-003		0.2180	0.2180		0.2180	0.2180	20.6592	8.9067	29.5659	0.0193	1.6200e-003	30.5326

Idaho Estates - San Diego County, Annual

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	0.0563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1406					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.2549	0.0245	1.5491	2.8100e-003		0.2172	0.2172		0.2172	0.2172	20.6592	8.6642	29.3233	0.0191	1.6200e-003	30.2842
Landscaping	4.4600e-003	1.7100e-003	0.1484	1.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	0.2426	0.2426	2.3000e-004	0.0000	0.2484
Total	1.4563	0.0262	1.6975	2.8200e-003		0.2180	0.2180		0.2180	0.2180	20.6592	8.9067	29.5659	0.0193	1.6200e-003	30.5326

Idaho Estates - San Diego County, Annual

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	0.0563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1406					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.2549	0.0245	1.5491	2.8100e-003		0.2172	0.2172		0.2172	0.2172	20.6592	8.6642	29.3233	0.0191	1.6200e-003	30.2842
Landscaping	4.4600e-003	1.7100e-003	0.1484	1.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	0.2426	0.2426	2.3000e-004	0.0000	0.2484
Total	1.4563	0.0262	1.6975	2.8200e-003		0.2180	0.2180		0.2180	0.2180	20.6592	8.9067	29.5659	0.0193	1.6200e-003	30.5326

7.0 Water Detail**7.1 Mitigation Measures Water**

Idaho Estates - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.9413	0.0428	1.0700e-003	10.3313
Unmitigated	8.9413	0.0428	1.0700e-003	10.3313

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.30308 / 0.821507	8.9413	0.0428	1.0700e-003	10.3313
Total		8.9413	0.0428	1.0700e-003	10.3313

Idaho Estates - San Diego County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.30308 / 0.821507	8.9413	0.0428	1.0700e-003	10.3313
Total		8.9413	0.0428	1.0700e-003	10.3313

8.0 Waste Detail

8.1 Mitigation Measures Waste**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7439	0.2804	0.0000	11.7528
Unmitigated	4.7439	0.2804	0.0000	11.7528

Idaho Estates - San Diego County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.37	4.7439	0.2804	0.0000	11.7528
Total		4.7439	0.2804	0.0000	11.7528

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.37	4.7439	0.2804	0.0000	11.7528
Total		4.7439	0.2804	0.0000	11.7528

9.0 Operational Offroad

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

Idaho Estates - San Diego County, Annual

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
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

ATTACHMENT B

AERMOD for DPM PM₁₀

```

1          AERMOD PRIME - (DATED 19191)

          AERMODPrMSPx VERSION
          (C) COPYRIGHT 1998-2017, Trinity Consultants

Run Began on 4/22/2021 at 17:25:03

** BREEZE AERMOD
** Trinity Consultants
** VERSION 9.0

CO STARTING
CO TITLEONE PM10 Exhaust Unmitigated
CO MODELOPT DFAULT CONC NODRYDPLT NOWETDPLT
CO RUNORNOT RUN
CO AVERTIME ANNUAL
CO POLLUTID PM10
CO FINISHED

SO STARTING
SO ELEVUNIT METERS
SO LOCATION 1U12L000 AREAPOLY 494802.6 3664167.9 0
SO SRCPARAM 1U12L000 7.77E-08 3 5 1
SO AREAVERT 1U12L000 494802.6 3664167.9 494827.6 3663986.1 494659.2 3663962.6 494527.7 3664127.7
SO AREAVERT 1U12L000 494802.6 3664167.9
SO SRCGROUP ALL
SO FINISHED

RE STARTING
RE ELEVUNIT METERS
RE DISCCART 494892.3 3664288.1 0 0
** SENSITIV
** RCPDESCR R1
RE DISCCART 494847 3664126.4 0 0
** SENSITIV
** RCPDESCR R2
RE DISCCART 494804.5 3663960.5 0 0
** SENSITIV
** RCPDESCR R3
RE DISCCART 494577.3 3663878.5 0 0
** SENSITIV
** RCPDESCR R4 Escondido Christian School
RE DISCCART 494522.1 3664029.8 0 0
** SENSITIV
** RCPDESCR R5 Escondido Chrisitan School
RE DISCCART 494494.2 3664277.6 0 0
** SENSITIV
** RCPDESCR R6
RE FINISHED

ME STARTING
ME SURFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.SFC"
** SURFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.SFC"
ME PROFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.PFL"
** PROFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.PFL"
ME SURFDATA 53120 2012
ME UAIRDATA 3190 2012
ME SITEDATA 00001002 2012
ME PROFBASE 0 METERS
ME FINISHED

OU STARTING
OU FILEFORM FIX
OU PLOTFILE ANNUAL ALL ALL`ANNUAL.plt 10000
OU FINISHED

** *****
** It is recommended that the user not edit any data below this line
** *****

** AMPTYPE
** AMPDATUM -1
** AMPZONE -1
** AMPHEMISPHERE

** PROJECTIONWK
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.257223563],TOWGS84[0,0,0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",11],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION UTM
** DATUM WGE
** UNITS METER
** ZONE 11
** HEMISPHERE N
** ORIGINLON 0
** ORIGINLAT 0
** PARALLEL1 0
** PARALLEL2 0
** AZIMUTH 0
** SCALEFACT 0
** FALSEEAST 0

```

```

** FALSENORTH 0

** POSTFMT UNFORM
** TEMPLATE UserDefined
** AERMODEXE AERMOD_BREEZE_19191_64.EXE
** AERMAPEXE AERMAP_EPA_18081_64.EXE

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of      0 Fatal Error Message(s)
A Total of      2 Warning Message(s)
A Total of      0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186      60      MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used      0.40
MX W403      60      PFLCNV: Turbulence data is being used w/o ADJ_U* option      SigA Data

*****
*** SETUP Finishes Successfully ***
*****

^ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust Unmitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** *** 17:25:03
*** MODELOPTS: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data *** PAGE 1

*** MODEL SETUP OPTIONS SUMMARY ***
-----

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM10

**Model Calculates ANNUAL Averages Only

**This Run Includes:      1 Source(s);      1 Source Group(s); and      6 Receptor(s)

with:      0 POINT(s), including
            0 POINTCAP(s) and      0 POINTHOR(s)
and:      0 VOLUME source(s)
and:      1 AREA type source(s)
and:      0 LINE source(s)
and:      0 RLINE/RLINEXT source(s)
and:      0 OPENPIT source(s)
and:      0 BUOYANT LINE source(s) with      0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 15181

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 0.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

```

```
**Input Runstream File:      aermod.inp
**Output Print File:        aermod.out
```

```
*** MODELOPTs:  RegDEFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data
```

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
--------------	--------------------------	---	--	--	---------------------------	-------------------------------	---------------------	-------------------------	-----------------	------------------------------------

```
*** MODELOPTs:  RegDFault  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data
```

SRCGROUP ID	SOURCE IDs
-------------	------------

```
*** MODELOPTs:  RegDFault  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data
```

[illegible]

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

```
*** MODELOPTs:  RegDFault  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file:	C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70	Met Version:	15181
Profile file:	C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70		
Surface format:	FREE		
Profile format:	FREE		
Surface station no.:	53120	Upper air station no.:	3190
Name:	UNKNOWN	Name:	UNKNOWN
Year:	2012	Year:	2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	51.	10.0	282.5	10.0	
12	01	01	1	02	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	64.	10.0	281.9	10.0	
12	01	01	1	03	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	31.	10.0	280.9	10.0	
12	01	01	1	04	-2.9	0.056	-9.000	-9.000	-999.	32.	5.5	0.15	1.10	1.00	1.18	130.	10.0	280.4	10.0	
12	01	01	1	05	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	47.	10.0	280.4	10.0	
12	01	01	1	06	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	39.	10.0	279.8	10.0	
12	01	01	1	07	-0.7	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	60.	10.0	279.2	10.0	
12	01	01	1	08	-0.5	0.029	-9.000	-9.000	-999.	12.	4.0	0.47	1.10	0.50	0.44	42.	10.0	280.4	10.0	
12	01	01	1	09	33.3	0.106	0.323	0.014	36.	83.	-3.2	0.47	1.10	0.30	0.44	44.	10.0	285.4	10.0	
12	01	01	1	10	85.9	0.121	0.634	0.011	106.	101.	-1.8	0.48	1.10	0.23	0.44	232.	10.0	291.4	10.0	
12	01	01	1	11	123.6	0.252	0.982	0.005	273.	303.	-11.5	0.48	1.10	0.21	1.34	242.	10.0	297.5	10.0	
12	01	01	1	12	141.2	0.255	1.253	0.005	496.	309.	-10.4	0.48	1.10	0.20	1.34	249.	10.0	299.8	10.0	
12	01	01	1	13	139.0	0.308	1.399	0.005	700.	410.	-18.6	0.48	1.10	0.20	1.78	244.	10.0	300.4	10.0	
12	01	01	1	14	118.4	0.303	1.510	0.005	1033.	401.	-20.9	0.48	1.10	0.21	1.78	241.	10.0	301.4	10.0	
12	01	01	1	15	79.3	0.291	1.390	0.005	1204.	377.	-27.6	0.48	1.10	0.24	1.78	260.	10.0	301.4	10.0	
12	01	01	1	16	24.5	0.162	0.951	0.005	1244.	167.	-15.4	0.51	1.10	0.34	0.89	292.	10.0	299.8	10.0	

12	01	01	1	17	-2.5	0.060	-9.000	-9.000	-999.	45.	7.5	0.51	1.10	0.61	0.89	282.	10.0	296.9	10.0
12	01	01	1	18	-0.6	0.029	-9.000	-9.000	-999.	12.	3.4	0.47	1.10	1.00	0.44	10.	10.0	293.1	10.0
12	01	01	1	19	-4.0	0.066	-9.000	-9.000	-999.	40.	6.3	0.11	1.10	1.00	1.48	329.	10.0	290.4	10.0
12	01	01	1	20	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	65.	10.0	288.1	10.0
12	01	01	1	21	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	61.	10.0	286.4	10.0
12	01	01	1	22	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	33.	10.0	285.4	10.0
12	01	01	1	23	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	50.	10.0	284.2	10.0
12	01	01	1	24	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	42.	10.0	283.1	10.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB	TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.0	1	51.	0.44	282.6	30.0	-99.00	0.20	

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 19191 *** PM10 Exhaust Unmitigated
*** AERMET - VERSION 15181 ***

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*** MODELOPTS: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): 1U12L000 ,

*** SENSITIVE DISCRETE RECEPTOR POINTS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
494892.30	3664288.10	0.10990	494847.00	3664126.40	0.63185
494804.50	3663960.50	0.74900	494577.30	3663878.50	0.40498
494522.10	3664029.80	0.99074	494494.20	3664277.60	0.14517

*** AERMOD - VERSION 19191 *** PM10 Exhaust Unmitigated
*** AERMET - VERSION 15181 ***

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*** MODELOPTS: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS 0.99074 AT (494522.10, 3664029.80, 0.00, 0.00, 0.00)	SR		
	2ND HIGHEST VALUE IS 0.74900 AT (494804.50, 3663960.50, 0.00, 0.00, 0.00)	SR		
	3RD HIGHEST VALUE IS 0.63185 AT (494847.00, 3664126.40, 0.00, 0.00, 0.00)	SR		
	4TH HIGHEST VALUE IS 0.40498 AT (494577.30, 3663878.50, 0.00, 0.00, 0.00)	SR		
	5TH HIGHEST VALUE IS 0.14517 AT (494494.20, 3664277.60, 0.00, 0.00, 0.00)	SR		
	6TH HIGHEST VALUE IS 0.10990 AT (494892.30, 3664288.10, 0.00, 0.00, 0.00)	SR		
	7TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	8TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	9TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	10TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 19191 *** PM10 Exhaust Unmitigated
*** AERMET - VERSION 15181 ***

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*** MODELOPTS: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of	0 Fatal Error Message(s)
A Total of	2 Warning Message(s)
A Total of	378 Informational Message(s)
A Total of	8784 Hours Were Processed
A Total of	250 Calm Hours Identified
A Total of	128 Missing Hours Identified (1.46 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 60 MEOPEN: THRESH_IMIN 1-min ASOS wind speed threshold used 0.40
MX W403 60 PFLCNV: Turbulence data is being used w/o ADJ_U* option SigA Data

*** AERMOD Finishes Successfully ***

[illegible]

```

** RCPDESCR R6
RE FINISHED

ME STARTING
ME SURFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.SFC"
** SURFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.SFC"
ME PROFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.PFL"
** PROFFILE "C:\Users\ryan.DESKTOP-5P6B2VB\OneDrive\LDN One Drive 2\County of San Diego\19-70 Idaho Estate\AERMOD\ESCONDIDO-2012-V15181.PFL"
ME SURFDATA 53120 2012
ME UAIRDATA 3190 2012
ME SITEDATA 00001002 2012
ME PROFBASE 0 METERS
ME FINISHED

OU STARTING
OU FILEFORM FIX
OU PLOTFILE ANNUAL ALL ALL`ANNUAL.plt 10000
OU FINISHED

** *****
** It is recommended that the user not edit any data below this line
** *****

** TERRFILE C:\USERS\RYAN\ONEDRIVE\LDNONE~2\COUNTY~4\19-70I~1\AERMOD\CA_ESC~1\CA_ESCONDIDO_20180907_TM_GEO.TIF 2 0 WGS84 11 0 492709.2 3648930.2
492709.2 3666622.8 507360.0 3666622.8 507360.0 3648930.2
** AMPTYPE NED
** AMPDATUM 2
** AMPZONE 11
** AMPHEMISPHERE N

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.257223563],TOWGS84[0,0,0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",11],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION UTM
** DATUM WGE
** UNITS METER
** ZONE 11
** HEMISPHERE N
** ORIGINLON 0
** ORIGINLAT 0
** PARALLEL1 0
** PARALLEL2 0
** AZIMUTH 0
** SCALEFACT 0
** FALSEEAST 0
** FALSENORTH 0

** POSTFMT UNFORM
** TEMPLATE USERDEFINED
** AERMODEXE AERMOD_BREEZE_19191_64.EXE
** AERMAPEXE AERMAP_EPA_18081_64.EXE

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 105 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.40
MX W403 105 PFLCNV: Turbulence data is being used w/o ADJ_U* option SigA Data

*****
*** SETUP Finishes Successfully ***
*****

^ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** *** 17:26:36
*** MODELPTS: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data *** PAGE 1

- - - - -
*** MODEL SETUP OPTIONS SUMMARY ***
- - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

```


**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM10

**Model Calculates ANNUAL Averages Only

**This Run Includes: 1 Source(s); 1 Source Group(s); and 447 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 15181

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 0.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File: aermod.inp
**Output Print File: aermod.out

▲ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
1U12L000	0	0.63000E-09	494802.6	3664167.9	0.0	3.00	5	1.00	NO	

▲ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----

ALL 1U12L000 ,
▲ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

494236.4, 494282.1, 494327.8, 494373.5, 494419.2, 494464.9, 494510.6, 494556.3, 494602.0, 494647.7,
494693.4, 494739.1, 494784.8, 494830.5, 494876.2, 494921.9, 494967.6, 495013.3, 495059.0, 495104.7,
495150.4,

*** Y-COORDINATES OF GRID ***
(METERS)

3664580.5, 3664533.2, 3664485.9, 3664438.6, 3664391.3, 3664344.0, 3664296.7, 3664249.4, 3664202.1, 3664154.8,
3664107.5, 3664060.2, 3664012.9, 3663965.6, 3663918.3, 3663871.0, 3663823.7, 3663776.4, 3663729.1, 3663681.8,
3663634.5,

▲ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	494236.40	494282.10	494327.80	494373.50	494419.20	494464.90	494510.60	494556.30	494602.00
3663634.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663681.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663729.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663776.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663823.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663918.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663965.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664012.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664060.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664107.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664154.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664202.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664249.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664296.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664344.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664391.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664438.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664485.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664533.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664580.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

▲ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	494647.70	494693.40	494739.10	494784.80	494830.50	494876.20	494921.90	494967.60	495013.30
3663634.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663681.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663729.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663776.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663823.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663918.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663965.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664012.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664060.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664107.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664154.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664202.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664249.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664296.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664344.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664391.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664438.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664485.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664533.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664580.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

▲ *** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)		
	495059.00	495104.70	495150.40
3663634.50	0.00	0.00	0.00

3663681.80	0.00	0.00	0.00
3663729.10	0.00	0.00	0.00
3663776.40	0.00	0.00	0.00
3663823.70	0.00	0.00	0.00
3663871.00	0.00	0.00	0.00
3663918.30	0.00	0.00	0.00
3663965.60	0.00	0.00	0.00
3664012.90	0.00	0.00	0.00
3664060.20	0.00	0.00	0.00
3664107.50	0.00	0.00	0.00
3664154.80	0.00	0.00	0.00
3664202.10	0.00	0.00	0.00
3664249.40	0.00	0.00	0.00
3664296.70	0.00	0.00	0.00
3664344.00	0.00	0.00	0.00
3664391.30	0.00	0.00	0.00
3664438.60	0.00	0.00	0.00
3664485.90	0.00	0.00	0.00
3664533.20	0.00	0.00	0.00
3664580.50	0.00	0.00	0.00

*** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
 *** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	494236.40	494282.10	494327.80	X-COORD (METERS)		494464.90	494510.60	494556.30	494602.00
				494373.50	494419.20				
3663634.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663681.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663729.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663776.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663823.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663918.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663965.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664012.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664060.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664107.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664154.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664202.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664249.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664296.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664344.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664391.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664438.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664485.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664533.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664580.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
 *** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	494647.70	494693.40	494739.10	X-COORD (METERS)		494876.20	494921.90	494967.60	495013.30
				494784.80	494830.50				
3663634.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663681.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663729.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663776.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663823.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663918.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3663965.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664012.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664060.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664107.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664154.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664202.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664249.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664296.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664344.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664391.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664438.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664485.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664533.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3664580.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated *** 04/22/21
 *** AERMET - VERSION 15181 *** *** 17:26:36
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

* HILL HEIGHT SCALES IN METERS *

First 24 hours of scalar data																						
YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
12	01	01	1	01	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	51.	10.0	282.5	10.0			
12	01	01	1	02	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	64.	10.0	281.9	10.0			
12	01	01	1	03	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	31.	10.0	280.9	10.0			
12	01	01	1	04	-2.9	0.056	-9.000	-9.000	-999.	32.	5.5	0.15	1.10	1.00	1.18	130.	10.0	280.4	10.0			
12	01	01	1	05	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	47.	10.0	280.4	10.0			
12	01	01	1	06	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	39.	10.0	279.8	10.0			
12	01	01	1	07	-0.7	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	60.	10.0	279.2	10.0			
12	01	01	1	08	-0.5	0.029	-9.000	-9.000	-999.	12.	4.0	0.47	1.10	0.50	0.44	42.	10.0	280.4	10.0			
12	01	01	1	09	33.3	0.106	0.323	0.014	36.	83.	-3.2	0.47	1.10	0.30	0.44	44.	10.0	285.4	10.0			
12	01	01	1	10	85.9	0.121	0.634	0.011	106.	101.	-1.8	0.48	1.10	0.23	0.44	232.	10.0	291.4	10.0			
12	01	01	1	11	123.6	0.252	0.982	0.005	273.	303.	-11.5	0.48	1.10	0.21	1.34	242.	10.0	297.5	10.0			
12	01	01	1	12	141.2	0.255	1.253	0.005	496.	309.	-10.4	0.48	1.10	0.20	1.34	249.	10.0	299.8	10.0			
12	01	01	1	13	139.0	0.308	1.399	0.005	700.	410.	-18.6	0.48	1.10	0.20	1.78	244.	10.0	300.4	10.0			
12	01	01	1	14	118.4	0.303	1.510	0.005	1033.	401.	-20.9	0.48	1.10	0.21	1.78	241.	10.0	301.4	10.0			
12	01	01	1	15	79.3	0.291	1.390	0.005	1204.	377.	-27.6	0.48	1.10	0.24	1.78	260.	10.0	301.4	10.0			
12	01	01	1	16	24.5	0.162	0.951	0.005	1244.	167.	-15.4	0.51	1.10	0.34	0.89	292.	10.0	299.8	10.0			
12	01	01	1	17	-2.5	0.060	-9.000	-9.000	-999.	45.	7.5	0.51	1.10	0.61	0.89	282.	10.0	296.9	10.0			
12	01	01	1	18	-0.6	0.029	-9.000	-9.000	-999.	12.	3.4	0.47	1.10	1.00	0.44	10.	10.0	293.1	10.0			
12	01	01	1	19	-4.0	0.066	-9.000	-9.000	-999.	40.	6.3	0.11	1.10	1.00	1.48	329.	10.0	290.4	10.0			

12	01	01	1	20	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	65.	10.0	288.1	10.0
12	01	01	1	21	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	61.	10.0	286.4	10.0
12	01	01	1	22	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	33.	10.0	285.4	10.0
12	01	01	1	23	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	50.	10.0	284.2	10.0
12	01	01	1	24	-0.6	0.029	-9.000	-9.000	-999.	12.	3.3	0.47	1.10	1.00	0.44	42.	10.0	283.1	10.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.0	1	51.	0.44	282.6	30.0	-99.00	0.20

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated

*** 04/22/21

*** AERMET - VERSION 15181 *** ***

*** 17:26:36

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*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 1U12L000 ,

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	494236.40	494282.10	494327.80	494373.50	494419.20	494464.90	494510.60	494556.30	494602.00
3663634.50	0.00088	0.00089	0.00090	0.00090	0.00088	0.00085	0.00081	0.00078	0.00074
3663681.80	0.00101	0.00105	0.00107	0.00108	0.00107	0.00105	0.00101	0.00096	0.00091
3663729.10	0.00118	0.00123	0.00128	0.00131	0.00132	0.00131	0.00127	0.00122	0.00116
3663776.40	0.00138	0.00146	0.00154	0.00161	0.00166	0.00167	0.00165	0.00160	0.00152
3663823.70	0.00160	0.00173	0.00186	0.00199	0.00210	0.00218	0.00221	0.00217	0.00208
3663871.00	0.00182	0.00202	0.00223	0.00245	0.00268	0.00288	0.00303	0.00309	0.00304
3663918.30	0.00203	0.00229	0.00260	0.00296	0.00336	0.00379	0.00421	0.00458	0.00477
3663965.60	0.00217	0.00251	0.00293	0.00344	0.00406	0.00482	0.00571	0.00672	0.00782
3664012.90	0.00221	0.00259	0.00309	0.00373	0.00458	0.00570	0.00715	0.00897	0.01113
3664060.20	0.00212	0.00250	0.00301	0.00369	0.00466	0.00605	0.00799	0.01044	0.01343
3664107.50	0.00191	0.00223	0.00266	0.00324	0.00406	0.00532	0.00736	0.01011	0.01247
3664154.80	0.00161	0.00184	0.00213	0.00249	0.00296	0.00356	0.00430	0.00509	0.00596
3664202.10	0.00130	0.00144	0.00159	0.00177	0.00197	0.00219	0.00240	0.00257	0.00268
3664249.40	0.00101	0.00109	0.00117	0.00126	0.00135	0.00143	0.00150	0.00153	0.00153
3664296.70	0.00078	0.00083	0.00087	0.00092	0.00097	0.00101	0.00103	0.00103	0.00101
3664344.00	0.00062	0.00065	0.00068	0.00071	0.00073	0.00075	0.00075	0.00074	0.00071
3664391.30	0.00050	0.00053	0.00055	0.00056	0.00057	0.00058	0.00057	0.00056	0.00054
3664438.60	0.00042	0.00044	0.00045	0.00046	0.00046	0.00046	0.00045	0.00044	0.00042
3664485.90	0.00036	0.00037	0.00038	0.00038	0.00038	0.00037	0.00036	0.00035	0.00034
3664533.20	0.00031	0.00031	0.00032	0.00032	0.00032	0.00031	0.00030	0.00029	0.00028
3664580.50	0.00027	0.00027	0.00027	0.00027	0.00027	0.00026	0.00025	0.00024	0.00023

*** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated

*** 04/22/21

*** AERMET - VERSION 15181 *** ***

*** 17:26:36

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*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 1U12L000 ,

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	494647.70	494693.40	494739.10	494784.80	494830.50	494876.20	494921.90	494967.60	495013.30
3663634.50	0.00072	0.00070	0.00070	0.00070	0.00070	0.00070	0.00069	0.00068	0.00067
3663681.80	0.00088	0.00085	0.00084	0.00084	0.00084	0.00084	0.00083	0.00082	0.00080
3663729.10	0.00110	0.00106	0.00105	0.00104	0.00104	0.00104	0.00103	0.00100	0.00096
3663776.40	0.00143	0.00137	0.00135	0.00134	0.00134	0.00133	0.00129	0.00123	0.00116
3663823.70	0.00197	0.00187	0.00182	0.00180	0.00179	0.00174	0.00165	0.00153	0.00139
3663871.00	0.00289	0.00274	0.00265	0.00259	0.00251	0.00236	0.00214	0.00189	0.00164
3663918.30	0.00470	0.00455	0.00436	0.00404	0.00371	0.00326	0.00274	0.00227	0.00187
3663965.60	0.00875	0.00945	0.00853	0.00705	0.00580	0.00446	0.00335	0.00258	0.00204
3664012.90	0.01374	0.01457	0.01366	0.01145	0.00866	0.00539	0.00371	0.00273	0.00210
3664060.20	0.01519	0.01522	0.01396	0.01150	0.00843	0.00529	0.00361	0.00264	0.00202
3664107.50	0.01340	0.01334	0.01222	0.00993	0.00697	0.00441	0.00310	0.00232	0.00182
3664154.80	0.00675	0.00737	0.00752	0.00656	0.00456	0.00315	0.00238	0.00188	0.00153
3664202.10	0.00275	0.00274	0.00264	0.00247	0.00229	0.00198	0.00168	0.00143	0.00122
3664249.40	0.00151	0.00147	0.00141	0.00136	0.00132	0.00125	0.00115	0.00105	0.00094
3664296.70	0.00097	0.00094	0.00090	0.00088	0.00087	0.00085	0.00081	0.00077	0.00072
3664344.00	0.00069	0.00066	0.00064	0.00063	0.00063	0.00062	0.00060	0.00058	0.00055
3664391.30	0.00052	0.00050	0.00048	0.00048	0.00048	0.00047	0.00046	0.00045	0.00044
3664438.60	0.00040	0.00039	0.00038	0.00038	0.00038	0.00037	0.00037	0.00036	0.00036
3664485.90	0.00032	0.00031	0.00031	0.00031	0.00031	0.00030	0.00030	0.00029	0.00029
3664533.20	0.00027	0.00026	0.00026	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025
3664580.50	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00021	0.00021	0.00021

*** AERMOD - VERSION 19191 *** *** PM10 Exhaust mitigated

*** 04/22/21

*** AERMET - VERSION 15181 *** ***

*** 17:26:36

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*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): 1U12L000 ,

*** NETWORK ID: 70GFF001 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	495059.00	495104.70	495150.40	X-COORD (METERS)
3663634.50	0.00066	0.00064	0.00061	
3663681.80	0.00077	0.00074	0.00070	
3663729.10	0.00091	0.00086	0.00080	
3663776.40	0.00107	0.00098	0.00090	
3663823.70	0.00125	0.00111	0.00099	
3663871.00	0.00142	0.00123	0.00107	
3663918.30	0.00156	0.00132	0.00112	
3663965.60	0.00165	0.00137	0.00115	
3664012.90	0.00167	0.00137	0.00114	
3664060.20	0.00161	0.00132	0.00110	
3664107.50	0.00147	0.00122	0.00102	
3664154.80	0.00127	0.00108	0.00092	
3664202.10	0.00106	0.00092	0.00081	
3664249.40	0.00085	0.00076	0.00069	
3664296.70	0.00067	0.00062	0.00057	
3664344.00	0.00053	0.00050	0.00047	
3664391.30	0.00042	0.00040	0.00039	
3664438.60	0.00035	0.00033	0.00032	
3664485.90	0.00029	0.00028	0.00027	
3664533.20	0.00025	0.00024	0.00023	
3664580.50	0.00021	0.00021	0.00020	

▲ *** AERMOD - VERSION 19191 *** ** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** ** 17:26:36
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*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 1U12L000 ,

*** SENSITIVE DISCRETE RECEPTOR POINTS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
494892.30	3664288.10	0.00089	494847.00	3664126.40	0.00512
494804.50	3663960.50	0.00607	494577.30	3663878.50	0.00328
494522.10	3664029.80	0.00803	494494.20	3664277.60	0.00118

▲ *** AERMOD - VERSION 19191 *** ** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** ** 17:26:36
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*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.01522 AT (	494693.40,	3664060.20,	0.00,	0.00,	0.00)	GC	70GFF001	
	2ND HIGHEST VALUE IS	0.01519 AT (	494647.70,	3664060.20,	0.00,	0.00,	0.00)	GC	70GFF001	
	3RD HIGHEST VALUE IS	0.01457 AT (	494693.40,	3664012.90,	0.00,	0.00,	0.00)	GC	70GFF001	
	4TH HIGHEST VALUE IS	0.01396 AT (	494739.10,	3664060.20,	0.00,	0.00,	0.00)	GC	70GFF001	
	5TH HIGHEST VALUE IS	0.01374 AT (	494647.70,	3664012.90,	0.00,	0.00,	0.00)	GC	70GFF001	
	6TH HIGHEST VALUE IS	0.01366 AT (	494739.10,	3664012.90,	0.00,	0.00,	0.00)	GC	70GFF001	
	7TH HIGHEST VALUE IS	0.01343 AT (	494602.00,	3664060.20,	0.00,	0.00,	0.00)	GC	70GFF001	
	8TH HIGHEST VALUE IS	0.01340 AT (	494647.70,	3664107.50,	0.00,	0.00,	0.00)	GC	70GFF001	
	9TH HIGHEST VALUE IS	0.01334 AT (	494693.40,	3664107.50,	0.00,	0.00,	0.00)	GC	70GFF001	
	10TH HIGHEST VALUE IS	0.01247 AT (	494602.00,	3664107.50,	0.00,	0.00,	0.00)	GC	70GFF001	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 19191 *** ** PM10 Exhaust mitigated *** 04/22/21
*** AERMET - VERSION 15181 *** ** 17:26:36
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*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL SigA Data

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 378 Informational Message(s)

A Total of 8784 Hours Were Processed

A Total of 250 Calm Hours Identified
A Total of 128 Missing Hours Identified (1.46 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 105 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.40
MX W403 105 PFLCNV: Turbulence data is being used w/o ADJ_U* option SigA Data

*** AERMOD Finishes Successfully ***

ATTACHMENT C

Health Risk Calculations

Air Quality Health Risk Calculations (Worst-Case) Idaho Estates Unmitigated						
From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	0.15537				
	Construction Start	1/1/2022				
	Construction Complete	5/19/2023				
	Days	503				
	Construction Emission per day (lb/day)	0.61777336				
	Annual Duration (Days)	365				
	Annualized Emission Rate (Grams/Second)	0.00323902				
	Project Site Size (Acres)	10.3				
	Project Site Size (meters^2)	41682.62115				
	Length of Smalles Side (meters)	204.1632218				
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	7.77E-08				
Output from AERMOD	Concentration Annual (Ug/M^3)	0.99				
Duration	Days	503	Days to years			
			1.378082192			
Age (Years)	3rd Trimester (0.25)		0-2	2-9	2-16	16-30
						16-70
Cair (annual) - From F15	0.99		0.99	0.99	0.99	0.99
Breathing Rate per agegroup BR/BW (Page 5-25)	361		1090	861	745	335
A (Default is 1)	1		1	1	1	1
Exposure Frequency = EF (days/365days)	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
Dose-inh	0.00034309		0.00103594	0.00081829	0.00070805	0.00031838
						0.00027562
Construction Days	503		1.378082192			
potency factor for Diesel	1.1		1.1	1.1	1.1	1.1
Age Sensitivity Factor	10		10	3	3	1
						1
ED	0.25		1.378082192	1.378082192	1.378082192	1.378082192
AT	70		70	70	70	70
FAH	0.85		0.85	0.72	0.72	0.73
Risk for Each Age Group	1.14569E-05		0.000190687	3.82766E-05	3.31197E-05	5.0332E-06
Risk per million Exposed	11.45690229		190.6872331	38.27657729	33.1196865	5.033196206
						4.3571E-06
						4.357095223
Cancer Risk Per Million 9-years	240.42					
Cancer Risk Per Million 30-years	240.30					
Cancer Risk Per Million 70-years	239.62					

**Air Quality Health Risk Calculations (Worst-Case)
Idaho Estates with Tier 4 and DPF**

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	0.00126				
	Construction Start	1/1/2022				
	Construction Complete	5/19/2023				
	Days	503				
	Construction Emission per day (lb/day)	0.00500994				
	Annual Duration (Days)	365				
	Annualized Emission Rate (Grams/Second)	2.62674E-05				
	Project Site Size (Acres)	10.3				
	Project Site Size (meters^2)	41682.62115				
	Length of Smalles Side (meters)	204.1632218				
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	6.30E-10				
Output from AERMOD	Concentration Annual (Ug/M^3)	0.00803				
Duration	Days	503	Days to years			
			1.378082192			
Age (Years)	3rd Trimester (0.25)		0-2	2-9	2-16	16-30
						16-70
Cair (annual) - From F15	0.00803		0.00803	0.00803	0.00803	0.00803
Breathing Rate per agegroup BR/BW (Page 5-25)	361		1090	861	745	335
A (Default is 1)	1		1	1	1	1
Exposure Frequency = EF (days/365days)	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
Dose-inh	0.00000278		0.00000840	0.00000664	0.00000574	0.00000258
						0.00000224
Construction Days	503		1.378082192			
potency factor for Diesel	1.1		1.1	1.1	1.1	1.1
Age Sensitivity Factor	10		10	3	3	1
ED	0.25		1.378082192	1.378082192	1.378082192	1.378082192
AT	70		70	70	70	70
FAH	0.85		0.85	0.72	0.72	0.73
Risk for Each Age Group	9.29282E-08		1.54669E-06	3.10466E-07	2.68637E-07	4.08248E-08
Risk per million Exposed	0.092928207		1.546685335	0.310465571	0.268637457	0.040824814
						0.035340883
Cancer Risk Per Million 9-years	1.95					
Cancer Risk Per Million 30-years	1.95					
Cancer Risk Per Million 70-years	1.94					