AIR QUALITY ASSESSMENT

Demler Poultry Manure Processing Project
PDS2019-MUP-19-004; San Diego County, CA

Prepared for:

County of San Diego
Department of Planning and Development Services
5510 Overland Avenue, Suite 110
San Diego, CA 92123

Prepared By:

Jeremy Louden
Ldn Consulting
42428 Chisolm Trail
Murrieta, California 92562
760-473-1253

Project Proponent:

Michael Baker International
9755 Clairemont Mesa Boulevard
San Diego, CA 92124-1324

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EXECUTIVE SUMMARY

This air quality analysis has been completed to determine air quality impacts, which may be associated with the construction of the proposed chicken manure processing project. The project site is generally located within the unincorporated town of Ramona within the County of San Diego. The site is currently occupied by an existing "Egg Ranch" with capacity by right to operate with up to 3 million chickens, which would generate as much as 1,125 tons of manure per week. Currently, manure is collected and held onsite then loaded into trucks and transported offsite. With the implementation of the proposed project, a manure processing facility would be developed on-site to dry and process manure by removing moisture and compress dried manure into pelletizes. These manure pellets would then be sold and transported offsite. The drying process will occur within a 16,200 square foot (SF) indoor facility which will have a filtered ventilation system installed.

The proposed project would consist of a manure drying system and palletization system. The proposed process for manure drying and creating pellets would be powered using three (3) 145 Kilowatt (kW) electric motors.

All construction phases of the proposed project are anticipated to start in 2021 and be completed later that year. The first full year of operations would be expected in 2022. The project was found to have significant health risk impacts from diesel exhaust during construction without the use of at least Tier 3 or better diesel equipment fitted with diesel particulate filters (DPF). As described herein, the project would be required to implement T-BACT which would consist of Tier 4 engines. However, this analysis conservatively assumes only the use of Tier 3 equipment. This conservative analysis demonstrates that the project's impacts would remain below this threshold should the contractor not be able to provide Tier 4/T-BACT for every piece of equipment used during construction. Given this, a less than significant health risk impact is expected.

Based upon the analysis of construction activities, no criteria pollutant impacts would be expected. No further mitigation requirements will be necessary beyond Tiering requirements discussed above.

The project would likely generate short-term odors from temporary construction equipment such as from architectural coatings. Since odors from this equipment would be short-term, no significant odor impacts would be expected during construction activities.

The proposed project would adhere to the required 1,000-foot setback requirements as outlined under San Diego County Zoning Ordinance Section 6902, Animal Waste Processing Setback (County of San Diego, 2004). Since the operations are allowed by right and since the project would be consistent with Ordinance Section 6902, the project would not generate adverse impacts

to include odor. It should be noted that the onsite uses (offices, dwelling units, etc.) would be exempt from these setback requirements as this home is part of the overall operations. The project would be required to comply with the County's nuisance ordinance, which restricts the project site from discharging from any source air contaminants or other material (such as odors) that could be considered an annoyance to any considerable number of persons.

The project development proposed is consistent with the current A72 (General Agriculture) zoning per the General Plan. Based on this, the proposed project was accounted for in the County's General Plan. Therefore, no cumulative operation impacts would be anticipated since the proposed use would be consistent with the Regional Air Quality Strategy (RAQS) and State Implementation Plan (SIP).

1.0 INTRODUCTION

1.1 Purpose of this Study

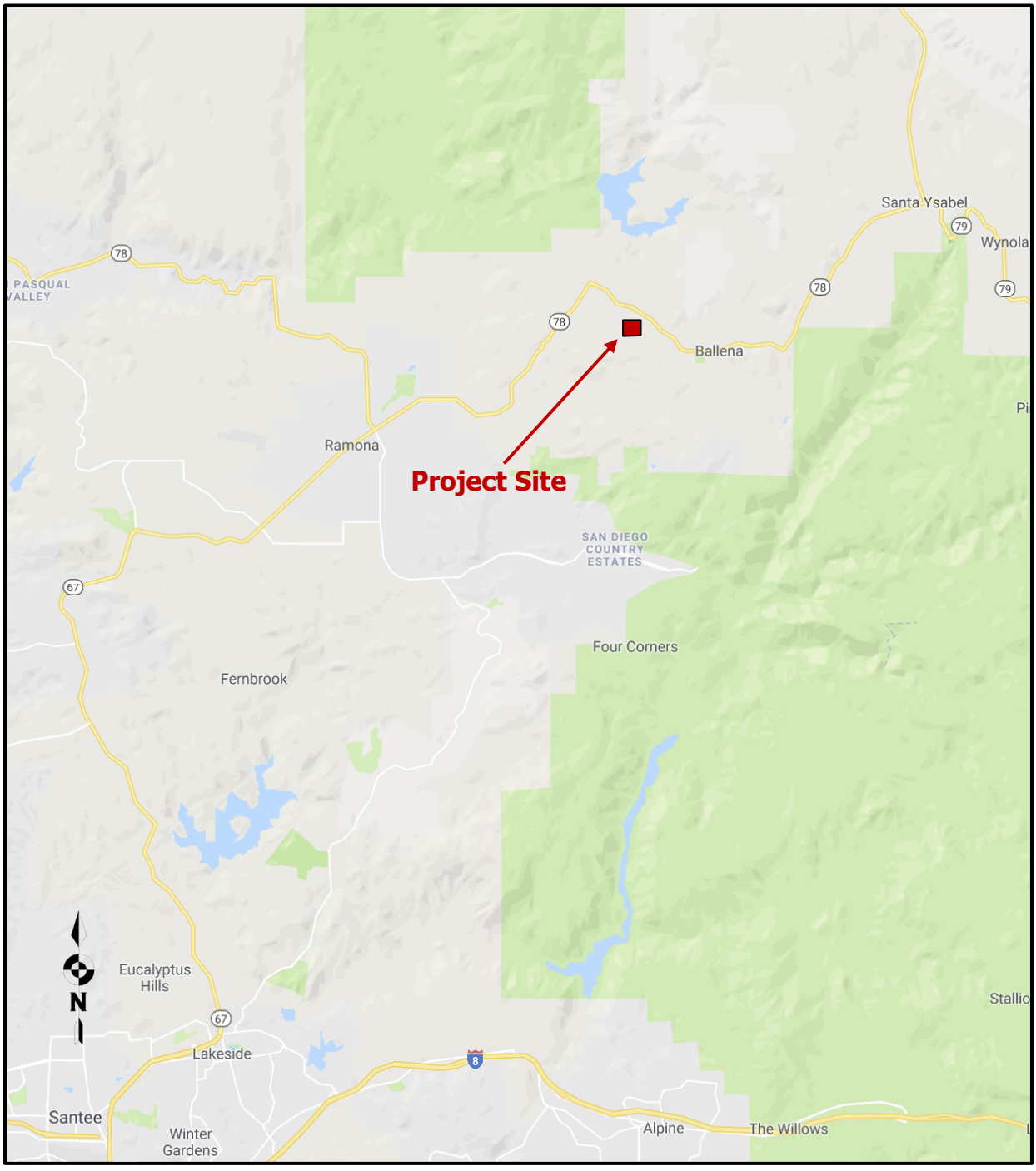
The purpose of this Air Quality study is to determine potential air quality impacts (if any) that may be created during the construction or operation of the proposed Poultry Manure Processing Project located in the Ramona Community Planning Area. Should impacts be determined, the intent of this study would be to recommend mitigation measures to reduce impacts to less than significant when compared to the County of San Diego County Guidelines for Determining Significance for Air Quality (County of San Diego, 2007).

1.2 Project Location and Description

The subject site is located in the Ramona Community Planning Area within unincorporated San Diego County. The project site is located at 25818 State Route 78 (SR 78) (also known as Julian Road) between Rancho Santa Teressa Drive and Casner Road. Access to the site from SR 78 is provided by a private driveway located approximately 1,000 feet west of Rancho Santa Teressa Drive. The overall property on which the existing egg ranch is located spans five contiguous parcels [County Assessor Parcels (APN) 286-030-21, 286-030-22, 286-030-09, 286-031-01, and 286-040-10]. The proposed project would be located on a portion of APN 286-031-01. A general project vicinity map is shown in Figure 1-A.

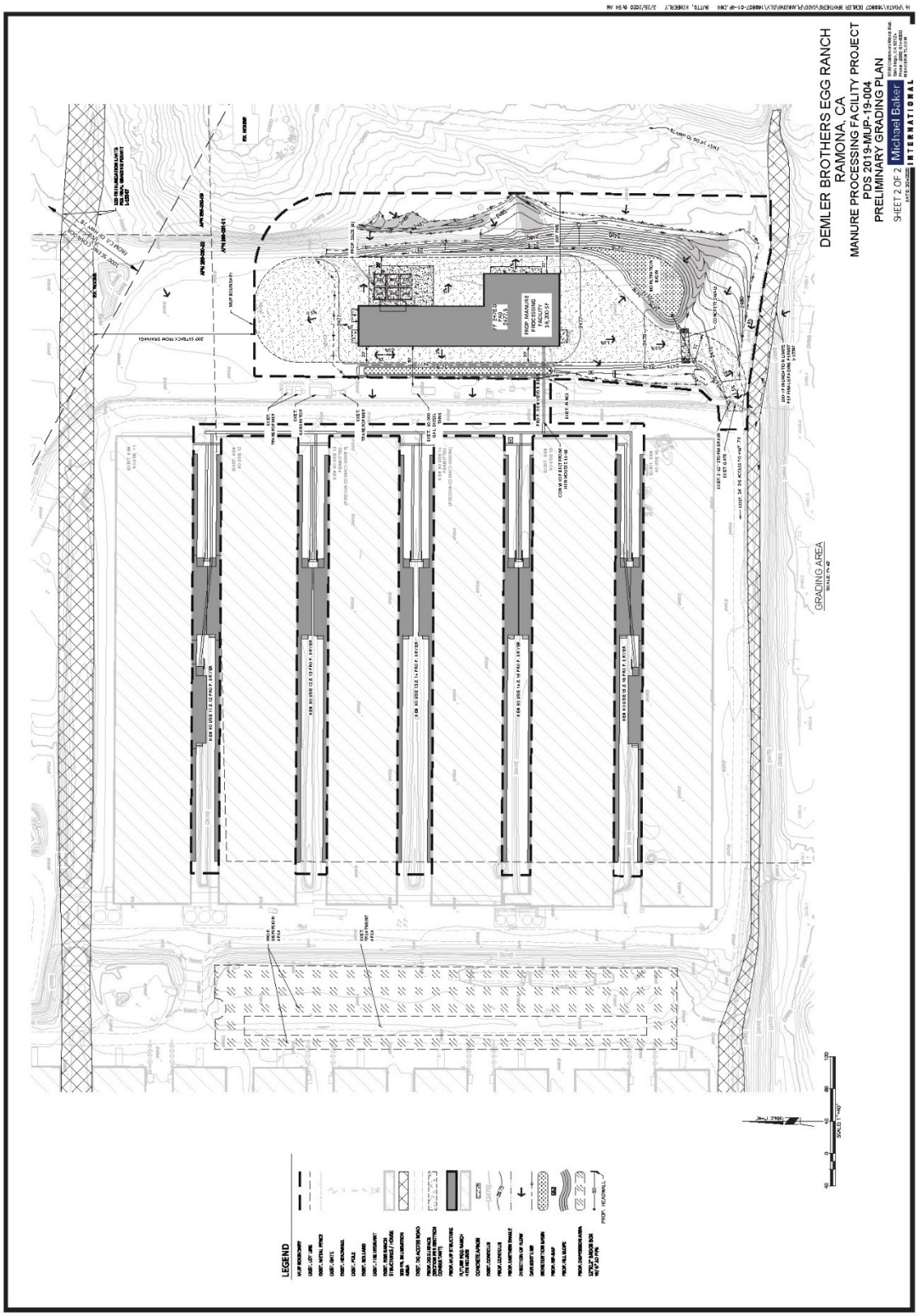
The applicant proposes to construct a 16,200 square foot (SF) manure processing facility with filtered exhaust (ventilation) and minimal lighting. The poultry manure pelletizing system, which will be within the manure processing facility, would allow the existing on-site egg ranch to become more efficient and sustainable. The poultry manure pelleting system would be capable of converting poultry manure into organic fertilizer pellets. Processing the manure on-site and converting the waste into pellets would lower storage and transportation costs and reduce dust and odors generated by the existing manure storage and haul process from an overall reduction in truck trips needed to transport product. The existing General Plan Regional Category for the subject site is Rural and the General Plan land use designation is Rural Lands (RL-40; 1 dwelling unit per 40 acres). The project is an allowed use under the current A72 (General Agriculture) zone that applies to the property with approval of a Major Use Permit (MUP) from the County of San Diego. The proposed MUP area comprises a 6-acre portion of the overall 362.1-acre existing egg ranch property. Construction activities associated with the proposed project would only disturb 2.7 acres and are expected to start in the summer of 2020 and be complete in 6 months. It is estimated that no more than 800 cubic yards (CY) of soil (decomposed granite [d.g.]) will be imported to the site and will be utilized on the existing primary access and around the facilities. Figure 1-B shows the Site Development Plan of the project.

Figure 1-A: Project Vicinity Map



Source: (Google, 2019)

Figure 1-B: Site Development Plan



Source: (International, Michael Baker, 2019)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The location for the proposed building has been selected because of its proximity to the existing farm operations on-site. The building will be placed on a graded pad that was previously used as a location for additional hen houses. The hen houses have since been removed and the site remains heavily disturbed. The project site is predominately barren landscape composed of previously disturbed dirt surfaces and sparse vegetation due to historic and ongoing use by trucks and farming equipment traffic. Site topography is essentially flat open space that gradually slopes to the east and south beyond the development limits of the proposed improvements. The project site is mostly surrounded by agricultural uses though a sensitive residential receptor shares the eastern and southern property line with the project site with receptors approximately 1,200 feet away from the proposed operations.

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 Ramona have daytime highs ranging between 66ºF in the winter to approximately 91ºF in the summer with August usually being the hottest month. Minimum temperatures range from approximately 38.ºF in the winter to approximately 57ºF in the summer. Precipitation is generally about 16.2 inches per year (WRCC, 2019). Prevailing wind patterns for the area vary during any given month during the year and also vary depending on the time of day or night. The predominant pattern though throughout the year is usually from the west or westerly (WRCC, 2018).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

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

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

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

1. ***Carbon Monoxide (CO):*** *is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. ***Lead (Pb):*** *is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. ***Nitrogen Dioxide (NO_2):*** *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, NO_2 is usually visible as a reddish-brown air layer over urban areas. NO_2 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 NO_2 above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.*
4. ***Particulate Matter (PM_{10} 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. PM_{10} 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 (O_3)**: 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 (SO_2)**: 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. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO_2 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 SO_2 results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.*

2.3.2 State Standards and Definitions

California Air Resource Board (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 (H_2S)**: is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H_2S 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 Flourescence; Spectrophotometry (Pararoosaniline 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	-		-
	Calendar Quarter	-		1.5 µg/m3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	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 CARB 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 CARB 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 CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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

2.3.3 Regional Standards

The State of California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. California Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants are designated as "non-attainment areas" for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the $PM_{2.5}$ standard and many areas are in non-attainment for PM_{10} as well. The state therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed for California Air basins to attain ambient air quality standards.

The San Diego County Air Pollution Control District (SDAPCD) is the government agency which regulates sources of air pollution within San Diego County. Therefore, the SDAPCD developed a Regional Air Quality Strategy (RAQS) to provide control measures to try to achieve attainment status for state ozone standards with control measures focused on Volatile Organic Compounds (VOCs) and oxides of nitrogen (NOX). Currently, San Diego is in "non-attainment" status for federal O_3 and the State $PM_{10,}$ $PM_{2.5,}$ and O_3; however, an attainment plan is only available for O_3. The RAQS was adopted in 1992 and has been updated as recently as 2016 which was the latest update incorporating minor changes to the prior 2009 update.

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

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.

2.4 California Environmental Quality Act (CEQA) Significance Thresholds

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

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

1: Conflict with or obstruct implementation of the RAQS or applicable portions of the SIP?

2: Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation?

3: 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 (PM_{10}, $PM_{2.5}$ or exceed quantitative thresholds for O_3 precursors, NO_X and VOCs)?

4: Expose sensitive receptors (including, but not limited to, schools, hospitals, residences, resident care facilities, or day-care centers) to substantial pollutant concentrations?

5: Create objectionable odors affecting a substantial number of people?

These guidelines are based on the version of the CEQA Guidelines Appendix G questions for air quality that were used prior to Appendix G being updated in 2019. The 2019 updated version combined guideline criteria 2 and 3. The pre-2019 guidelines are retained in this analysis for consistency with the General Plan EIR.

2.5 SDAPCD Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established analysis trigger criteria in Rule 20.2 for new or modified stationary sources. The County's Guidelines for Determining Significance and Report Format and Content Requirements incorporate this trigger criteria from Rule 20.2 as Screening Level Thresholds (SLTs) for use in all County related Air Quality Impact Assessments (AQIA) and for 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. Also, since SDAPCD does not have STLs for VOCs, the County has adopted the SCAQMD VOC screening level for the Coachella Valley. Should emissions be found to exceed these SLTs, additional modeling would be required to demonstrate that the project's air quality impacts would not result in exceedances of state and federal ambient air quality standards. These SLTs for construction and daily operations are shown in Table 2.3 on the following page.

Non-Criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that would result in a potential increase in cancer risk greater than one in one million are required to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the project increase the incremental cancer risk to over 10 in one million with the application of T-BACT or a health hazard index (chronic and acute) greater than one since risks above. Projects that are estimated to result in an increase in 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

deviations between compounds that define each term however for purposes of this study we will assume they are essentially the same due to the fact SCAQMD interchanges these words and because Air Quality models directly calculates ROG in place of VOC.

Table 2.3: Screening Level Thresholds for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
Construction Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs) *	75
Operational Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs) *	75

Notes:
* Threshold for VOCs is based on the significance threshold for VOCs from the South Coast Air Quality Management District (SCAQMD) for the Coachella Valley.

2.6 Local Air Quality

Criteria pollutants are measured continuously throughout the SDAB. 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 operates 11 monitoring sites, which collect data on criteria pollutants. The proposed development project is closest to the Alpine and El Cajon monitoring stations which are located approximately 15.7 and 21.5 miles respectively from the project site. Table 2.4 on the following page identifies the criteria pollutants monitored at the aforementioned station.

Four additional sites collect meteorological data which is used by the District to assist with pollutant forecasting, data analysis and characterization of pollutant transport. SDAPCD published the five year air quality summary for all of the monitoring stations however only data within the last three years is shown as this adequately identifies the background ambient air quality environment (SDAPCD, 2018).

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

Pollutant	Monitoring Stations	Averaging Time	CAAQS	NAAQS	2017	2018	2019	Days Exceeded over 3 years
* O_3 (ppm)	Alpine or El Cajon Monitoring Station (Alpine Location Identified with *)	1 Hour	0.09 ppm	No Standard	0.11	0.10	0.11	15
		8 Hour	0.070 ppm	0.070 ppm	0.10	0.08	0.08	84
PM_{10} ($\mu g/m^3$)		24 Hour	50 $\mu g/m^3$	150 $\mu g/m^3$	50	43	38	N/A
		Annual Arithmetic Mean	20 µg/m3	No Standard	22.5	22.7	19.3	N/A
$PM_{2.5}$ ($\mu g/m^3$)		24 Hour	No standard -	35 $\mu g/m^3$	31.8	36.2	23.8	N/A
		Annual Arithmetic Mean	12 $\mu g/m^3$	15 $\mu g/m^3$	9.6	9.6	8.6	N/A
* NO_2 (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.004	0.003	0.003	N/A
		1 Hour	0.18 ppm	0.100 ppm	0.048	0.033	0.028	N/A
CO (ppm)		1 Hour	20 ppm	35 ppm	1.5	1.5	1.3	N/A
		8 Hour	9 ppm	9 ppm	1.4	1.1	1.0	N/A

Notes:
1. Days exceeded marked with "N/A" indicate no data available
2. * Data was selected from the Alpine Monitoring Station. All other data presented was collected at the El Cajon Monitoring Station.
3. SO_2 is only monitored at the El Cajon Monitoring Station. Within the entire County of San Diego, SO_2 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 SO_2) is 0.25 ppm.

3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod 2016.3.2 air quality model, which was developed by BREEZE Software for South Coast Air Quality Management District (SCAQMD) 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. It should be noted that CalEEMod has since released version 2020.4.0 though at the time this report was started was not available. CalEEMod 2016.3.2 has been found to yield slightly higher emissions than 2020.4.0 and is conservative.

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, or diesel particulate matter (DPM), since exposure to diesel exhaust is known to cause cancer and acute and chronic health effects. DPM emissions can be estimated using the annual PM_{10} exhaust emissions 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 shown in ***Attachments B and C*** for both unmitigated and mitigated scenarios with sensitive residential receptors included.

Once the dispersed concentrations of DPM 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 cancer risk dose calculation is defined in Equation 1 (County of San Diego, 2007):

Equation 1 $$Dose_{air} = C_{air} * (BR/BW) * A * EF * (1x10^{-6})$$

$Dose_{air}$	=	Dose through inhalation (mg/kg/d)
C_{air}	=	Concentration in air (µg/m3) Annual average DPM concentration in µg/m3 - 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 cancer risk calculation is defined in Equation 2 (OEHHA, February 2015):

Equation 2

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

$RISK_{inh\text{-}res}$	=	Residential inhalation cancer risk
$DOSE_{air}$	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor ($mg/kg\text{-}day^{-1}$)
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 D***.

Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health Hazard Assessment (OEHHA, February 2015). Diesel Exhaust has a REL of 5 $\mu g/m^3$ 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 residential receptor locations where air quality emissions are calculated by AERMOD. For purposes of analysis an unmitigated and mitigated model was created. It should be noted that receptors 4 and 5 are onsite and are considered part of the existing operations. Receptor 4 is the closest receptor to the site and is roughly 850 feet from the project site. Then next closest is receptor 5 which is roughly 900 feet from the project site. Offsite receptors are approximately at least 1,200 feet from the project site.

Figure 3-A: Construction Health Risk Model Setup

3.2 Construction Assumptions

The project construction dates were estimated based on a construction kickoff starting and completing approximately 6 months later or sometime completing in 2021.

CalEEMod 2016.3.2 was utilized for all calculations. Table 3.1 shows the expected timeframes for the construction processes for all the project infrastructure, facilities, improvements and structures at the proposed project location, as well as the expected number of pieces of equipment. It should be noted that grading will include a balance scenario with about 3,000 cubic yards of earthwork with an additional 800 CY of imported d.g. for roadway surface preparation. CalEEMod has been updated to reflect the anticipated construction activities and dates provided by the Project applicant.

Table 3.1: Expected Construction Equipment and Durations

Equipment Identification	Proposed Start	Proposed Completion	Quantity
Site Preparation	06/01/2021	06/07/2021	
Rubber Tired Dozers			1
Tractors/Loaders/Backhoes			2
Grading	06/08/2021	06/17/2021	
Graders			1
Rubber Tired Dozers			1
Tractors/Loaders/Backhoes			2
Building Construction	06/18/2021	10/29/2021	
Crane			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	10/06/2021	10/29/2021	
Air Compressor			1
This equipment list is based upon equipment inventory within CalEEMod and through direction from the project applicant.			

3.3 Operational Assumptions

Once the manure processing facility is operational, the project would modify existing manure processing operations with a more efficient and sustainable method as it relates to labor and logistics. A description of the existing operation and a description of how the proposed manure processing facility would increase operation efficiency is discussed below.

Existing Operations:

The site is currently occupied by an existing "Egg Ranch" with a capacity to operate with up to 3 million chickens and produces up to 1,125 tons of manure per week which is all transported offsite for processing into fertilizer. The existing egg ranch and the potential future 3 million chicken operation is a by right use under current County zoning.

The site operations require up to 5 full-time workers (Michael Baker International, 2020). Trucks are currently loaded Monday through Saturday from 4:00 a.m. to 3:00 p.m. It typically takes approximately 2-3 hours to load one truck.

Proposed Operations:

Demler Brothers, LLC (Applicant) proposes to construct a 16,200 square foot (sq. ft.) building to house a poultry manure pelleting system (proposed project) which would allow the existing on-site egg ranch to process manure into pellets on-site rather than ship the unprocessed manure off-site. Manure from a chicken (About 0.75 lbs/week) has a moisture content of roughly 75% (Ritz, 2013). The palletization process requires manure to be at 15% or a 60% reduction in moisture content. This process will both reduce weight and volume which will reduce transport requirements (US EPA, Not Dated).

The proposed project would reduce the maximum truckloads generated per week from 48 to 30, an approximately 33 percent reduction in project generated truck traffic compared to existing operations. The typical truck trip length for both the proposed project and the existing use would be similar with typical trips traveling as far as El Centro or 115 miles one way. Employee trips would be local. Since CalEEMod is limited to a single trip distance to reflect the whole project, two separate CalEEMod files were prepared for this analysis. One model represents the entire project with the extended length heavy truck trips and one model to represent the employee trips only. Combined, the two provide an estimate of total emissions generated by the project. Both model runs are shown in ***Attachment A*** to this report.

The proposed project would continue to use the existing manure collection methods within their hen houses. Currently, conveyor belts inside the hen houses transports the manure into semi-truck trailers, which then haul the manure off-site. Instead, manure would be collected and transported to the proposed pelleting system on-site. The existing hen houses, immediately adjacent to the proposed project (not a part of this MUP), would have covered conveyor belts that would transport the manure from the hen houses to the proposed manure pelleting building. On the way to the pelleting building, the conveyor belts would pass through a drying system that is heated from hot air blown out from the existing fans of the henhouses.

The conveyor belts would be self-automated and run on a set schedule. Manure from the older hen houses would first be collected in existing on-site dry wells then transported to the proposed manure processing facility via existing on-site trucks. The proposed building would house three prefabricated 100 horsepower (HP)/75 kW electric manure processing units that would run the pelleting process. The electric motors have been designed to operate at optimal efficiency between 60 and 80 percent load (U.S. Department of Energy). The entire pelleting process would run on electricity and require no fuel, besides for the trucking of materials.

Table 3.2: Change in Total Manure Site Output

	Manure per Chicken per Week (pounds)	Total Exported Manure per Week (tons)	Truckloads per Week [1]	Truckloads per Day (Monday-Saturday)
Current Operational Capacity Unprocessed Manure (3 million chickens)	*0.75*	*1,125*	*48*	*8*
Proposed– Pelleted Manure Operations (3 million chickens)		*750* [2]	*30*	*5*

[1] Transport trucks are assumed to have a capacity of approximately 23 to 25 tons of manure due to volume capacity of standard truck that are currently be utilized at the site.
[2] Proposed manure processing operations would reduce the total tonnage of manure produced by approximately 33%.

Placement of the proposed project on the subject site would adhere to the required 1,000-foot setback from the nearest pool, tennis court, public playground or residential dwelling units, as outlined under San Diego County Zoning Ordinance Section 6902, Animal Waste Processing Setback. In addition to the setback, the MUP would limit operation of the proposed manure pelleting system to the hours of 6:00 a.m. to 10:00 p.m. (16 hours a day) every day of the year (with exception of holidays).

The applicant has indicated that the proposed project would be served trucking the water onsite as needed for construction. Since earthwork activities are expected over 13 days, it's assumed that 26 truck trips would be necessary for water uses during construction and were assumed to be 20 mile trips to the Ramona Water District. The only additional water usage from the project would be during operations at the processing plant which would require roughly 400,000 gallons of water per year which will also be trucked to the site from the Ramona Water district located roughly 15 miles away. Altogether, it's assumed that roughly 100 trucks would be needed for water purposes per year. These truck trips were included in the CalEEMod file for the project.

For purposes of this worst-case assessment, it is assumed the drying facility will operate 365 days per year for 16 hours per day or 5,840 hours per year. Multiplying the rated motor load by the optimal 80 percent load by the operational hours would yield the total energy consumed by the operation or 75 kW * 0.80 x 5,840 hours per unit x 3 units which is 1,051,200 kilowatt hours (kWh) per year. It should be noted that the facility would not use natural gas. Additionally, as noted in section 1.2 above, the facility will be lit using several interior and exterior lights for safety purposes. A worst-case assumption using 80 40-watt LED light fixtures was assumed. Each fixture would which consumes 3.2 kW to operate. Assuming the same operational hours, the project would consume 3.2 kW*5,840 hours or 18,688 kWh per year. Combined the project would consume 1,069,888 kWh per year.

3.4 Micro Scale Operational Emissions

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

In the event the proposed project traffic adds vehicular trips to either an intersection that operates at Level of Service (LOS) E or F or any intersection where the project trips re-classify the intersection level of service from LOS D or better to LOS E or F and when peak-hour trips exceed 3,000 the project must quantify CO levels (County of San Diego, 2007).

The proposed project would reduce vehicular trips and would therefore not add enough trips to the nearby roadway networks to exceed thresholds requiring a CO hotspot analysis. Based on this a less than significant CO hotspot impact is expected.

3.5 Odor Impacts (Onsite)

Potential onsite odor generators would include short term construction odors from activities such as Architectural Coating (painting) or perhaps diesel equipment. Construction operations are fairly quick and are not expected to cause significant long-term odor impacts. Therefore, less than significant odor impacts would be expected from construction.

Long term odors from the proposed project would be reduced from existing operations since the manure will be processed within a newly constructed 16,200 SF building which would have a ventilation filtration systems included. The filtration system would reduce many odors from chickens but will also filter ammonia a primary odor generating substance from poultry production. Furthermore, placement of the proposed project on the subject site would adhere

to the required 1,000-foot setback requirements as outlined under San Diego County Zoning Ordinance Section 6902, Animal Waste Processing Setback. Since the operations are allowed by right and since the project would be consistent with Ordinance Section 6902, the project would not generate adverse impacts to include odor. Throughout project operations, the project would be required to comply with APCD nuisance rules which prohibit the discharge of any source of air contaminants or other material (including odors) which could cause annoyance to a considerable number of persons. Given this, less than significant long-term odor impact would be expected. It should be noted that the onsite uses (offices, dwelling units, etc.) would be exempt from these setback requirements as this home is part of the overall operations.

4.0 FINDINGS

4.1 Construction Health Risks

Based upon the annual air quality modeling results attached to this report, worst-case unmitigated PM_{10} from exhaust emissions would cumulatively produce 0.05879 tons over the construction duration of 184-days or an average of 0.0033 grams/second. The average emission rate over the grading area is $3.07x10^{-7}$ $g/m^2/s$, which was calculated as follows:

$$\frac{0.0033\,\frac{grams}{second}}{2.7\ acres * 4{,}046\,\frac{meters^2}{acre}} = 3.07 * 10^{-7}\ \frac{\frac{grams}{meters^2}}{second}$$

Utilizing the AERMOD dispersion model, we find that the annual concentration is 0.243 $\mu g/m^3$ during construction. Utilizing the risk equation identified above in Section 3.1, the inhalation cancer risk for the closest residential receptor (Receptor 4) using the standard mix of equipment within CalEEMod with no emissions reducing mitigation was found to be 53.7 in one million which would be a potentially significant impact. Therefore, in accordance with SDAPCD Rule 20.2, the project is required to implement T-BACT equipment or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the project increase the cancer risk to over 10 in one million.

It was found that these impacts can be reduced to less than significant through the utilization of Tier 3 or better equipment with DPF equipment. Currently the T-BACT equipment is Tier 4 though this analysis conservatively assumes only the application Tier 3 engines in construction equipment. This conservative analysis was prepared to demonstrate if the project's impacts would fall below the 10 in one million threshold should the contractor not be able to provide Tier 4/T-BACT for every piece of equipment used during construction. With the incorporation of T-BACT equipment (Tier 3 or better), the project would cumulatively produce approximately 0.00709 tons of PM_{10} (0.000404 grams/second) over the same construction duration as described above which would result in a reduction of approximately 0.0517 tons of PM_{10} when compared to the worst case scenario (0.05879 tons of PM_{10}). Based on this projection, the mitigated average emission rate over the grading area is $3.70x10^{-8}$ $g/m^2/s$.

Utilizing the AERMOD dispersion model, we find that the annual concentration is 0.0293 $\mu g/m^3$ during construction at the closest residential receptor. Given this, the inhalation cancer risk for the closest residential receptor would be reduced to 6.48 per one million exposed instead of 53.7 per one million exposed in the worst-case scenario. With incorporation of T-BACT equipment, emissions from the project would not exceed the threshold of significance, which is 10 in one million exposed. Therefore, with the implementation of T-BACT equipment, the project is in compliance with SDAPCD Rule 20.2. Impacts would be considered a less than

significant impact under CEQA. As stated above, the detailed calculations for both the unmitigated and mitigated scenario are shown in ***Attachment D***.

Finally, there are known chronic health risks associated with DPM 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 0.0029 µg/m^3 divided by the REL of 5 µg/m^3 yields a Health Hazard Index of 0.0059, which is less than one. Therefore, non-cancer health risks are not expected, and all health risks are considered less than significant.

4.2 Construction Emission Findings

Construction emissions in pounds per day from the construction operations and equipment identified in Section 3.2 above is shown in Table 4.1. Based on these numbers, the project would not exceed County standards and would not require mitigation to comply.

Table 4.1: Expected Construction Emissions Summary – Pounds per 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)
2021	9.12	15.90	20.09	0.03	6.89	0.15	6.98	3.46	0.15	3.54
Significance Threshold (lb/day)	75	250	550	250	-	-	100	-	-	55
Impact?	**No**	**No**	**No**	**No**	-	-	**No**	-	-	**No**

4.3 Operational Findings

The first full year of operations from the manure processing operation would be expected in 2022. The proposed operation is estimated to generate 10 truck trips and 10 employee trips per day, and 60 total trips per week during operations. It should be noted that the manure drying system would reduce the daily truck trips during operations from 16 trips per day to 10 trips per day. Employee trips will remain the same. As noted earlier, emissions generated by truck trips and employee trips were estimated in separate modeling runs to account for the differences in trip length. Additionally, the model was run for the winter, summer scenarios to determine maximum daily operational emissions during yearly operations.

The expected daily pollutant generation can be calculated utilizing the product of the average daily miles traveled and the expected emissions inventory calculated by EMFAC2014; CALEEMOD 2016.3.2 performs this calculation. The daily pollutants calculated for summer and

winter are shown in Tables 4.2 and 4.3. Based upon these calculations, the proposed project would produce less than significant air quality impacts under CEQA.

Table 4.2: Expected Summer Daily Pollutant Generation

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area	0.45	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile (Employees)	0.02	0.10	0.33	0.00	0.12	0.03
Mobile (Trucks)	0.34	9.65	3.17	0.04	1.08	0.32
Total (Unmitigated)	**0.81**	**9.75**	**3.50**	**0.04**	**1.2**	**0.35**
County Thresholds	75	250	550	250	100	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

Table 4.3: Expected Winter Daily Pollutant Generation

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area	0.45	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile (Employees)	0.02	0.11	0.32	0.00	0.12	0.03
Mobile (Trucks)	0.34	9.91	3.20	0.04	1.08	0.32
Total (Unmitigated)	**0.81**	**10.02**	**3.52**	**0.04**	**1.2**	**0.35**
County Thresholds	75	250	550	250	100	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

4.4 Cumulative Construction Impacts

Cumulative construction impacts would exist when multiple construction projects occur at the same time and when those construction project maximum exposure contours intersect. To illustrate this, if a project were to produce air quality emissions simultaneous to a nearby construction project the addition of both project emissions could exceed significance thresholds. For this project, the construction emissions are well below significance as shown in Table 4.2 above. If a nearby project was to be under construction at the same time, that project would need to produce significantly more emissions and be relatively close to the

proposed project site. Based on discussions with the project applicant, no known cumulative construction projects have been identified within a ½ mile radius of the project site. Therefore, cumulative construction impacts would be less than significant.

Potential onsite odor generators would include short term construction odors from activities such as Architectural Coating (painting) or perhaps diesel equipment. Construction operations are fairly quick and are not expected to cause significant long-term odor impacts. Therefore, less than significant odor impacts would be expected from construction.

4.5 Cumulative Operations Impacts

The proposed project would improve efficiency as it relates to labor and truck trips compared to the capacity of the chicken farm. The project would decrease overall vehicular trips (estimated reduction in three truck trips and an increase in two employee trips per day) due to the fact that the manure will be dried and densified into pellets which will be utilized as fertilizer. As such, the proposed is consistent with the current A72 (General Agriculture) zoning, per the County's General Plan, and all operational trips would be accounted for in the General plan. Furthermore, the proposed project would not conflict with the implementation of the RAQS. Given this status, the project would have been considered consistent with the RAQS and SIP. and a less than significant impact would be expected.

Long term odors from the proposed project would be reduced from existing operations since the manure will be processed within a newly constructed 16,200 SF building which would have a ventilation filtration systems included. The filtration system would reduce many odors from chickens but will also filter ammonia a primary odor generating substance from poultry production. Furthermore, placement of the proposed project on the subject site would adhere to the required 1,000-foot setback requirements as outlined under San Diego County Zoning Ordinance Section 6902, Animal Waste Processing Setback. Since the operations are allowed by right and since the project would be consistent with Ordinance Section 6902, the project would not generate adverse impacts to include odor. The project would continue to be required to comply with APCD's nuisance regulations throughout the project's lifetime. Given this, less than significant long-term odor impact would be expected. It should be noted that the onsite uses (offices, dwelling units, etc.) would be exempt from these setback requirements as this home is part of the overall operations.

Given that the project's emissions are below the significance thresholds, a significant cumulative impact would not result, and the proposed project's contribution to such an impact would be less than cumulatively considerable.

4.6 Conclusion of Findings

All construction phases of the proposed project are anticipated to start in the summer of 2020 and be completed early 2021. The project was found to have significant health risk impacts from diesel exhaust during construction without the use of at least Tier 3 or better diesel equipment fitted with DPF. In accordance with SDAPCD Rule 20.2, the project would implement T-BACT equipment (Tier 3 or better) to reduce the cancer risk to a less than significant level. Based upon the analysis of construction activities, no criteria pollutant impacts would be expected. No further mitigation requirements will be necessary beyond Tiering requirements discussed above. Therefore, construction impacts to sensitive receptors would result in less than significant.

Potential onsite odor generators would include short term construction odors from activities such as Architectural Coating (painting) or perhaps diesel equipment. Construction operations are fairly quick and are not expected to cause significant long-term odor impacts. Therefore, less than significant odor impacts would be expected from construction.

Long term odors from the proposed project would be reduced from existing operations since the manure will be processed within a newly constructed 16,200 SF building which would have a ventilation filtration systems included. The filtration system would reduce many odors from chickens but will also filter ammonia a primary odor generating substance from poultry production. Furthermore, placement of the proposed project on the subject site would adhere to the required 1,000-foot setback requirements as outlined under San Diego County Zoning Ordinance Section 6902, Animal Waste Processing Setback. Since the operations are allowed by right and since the project would be consistent with Ordinance Section 6902, the project would not generate adverse impacts to include odor. Given this, less than significant long-term odor impact would be expected. It should be noted that the onsite uses (offices, dwelling units, etc.) would be exempt from these setback requirements as this home is part of the overall operations.

As the project site is consistent with the General Plan Category and zoning (A72- General Agriculture) for the site, the proposed project was accounted for in the County's General plan. Furthermore, no cumulative operation impacts are anticipated since the proposed project is consistent with the RAQS and SIP. Therefore, the project would result in less than significant air quality impacts.

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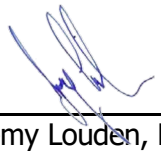
6.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the air quality environment and impacts within and surrounding the proposed development. The report was prepared by Jeremy Louden; a County approved CEQA Consultant for Air Quality.



Jeremy Louden, Principal
Ldn Consulting, Inc.
jlouden@ldnconsulting.net
760-473-1253

Date October 13, 2021

ATTACHMENT A

CALEEMOD 2016.3.2

Demler Egg Farm Manure Processing

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	495.89	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Demler Egg Farm Manure Processing - San Diego County, Summer

Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construciton provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT - Assumes additional hualing trips for water during earthwork activities

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project proposed trips from 5 trucks per day or 10 trips total(No trips on Sunday) Usr Def Indus. ;In additon the project would truck water onsite at 2 trucks per week to Ramona Water District 15 miles away...assumed 20 miles one way (User Def Com.)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year. 75kw*.80*16 hrs/day*365days * 3 Units = 1,051,200 kWH. Lighting is 3.2*16*365 = 18688

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilzer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case and are applied to user defined industrial. Assume all water trucks are HHD and are applied to User Defined Commercial

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblFleetMix	HHD	0.02	1.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.60	0.00

tblFleetMix	LDA	0.60	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00
tblLandUse	LotAcreage	0.00	3.32

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	25.00	35.00
tblTripsAndVMT	HaulingTripNumber	75.00	91.00
tblVehicleTrips	CW_TL	14.70	20.00
tblVehicleTrips	CW_TL	14.70	115.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	2.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	10.5098	23.6367	18.7795	0.0317	6.8894	1.0540	7.8428	3.4574	0.9966	4.3349	0.0000	3,158.2464	3,158.2464	0.7582	0.0000	3,177.2018
Maximum	**10.5098**	**23.6367**	**18.7795**	**0.0317**	**6.8894**	**1.0540**	**7.8428**	**3.4574**	**0.9966**	**4.3349**	**0.0000**	**3,158.2464**	**3,158.2464**	**0.7582**	**0.0000**	**3,177.2018**

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					
2021	9.1233	15.9032	20.0929	0.0317	6.8894	0.1511	6.9764	3.4574	0.1510	3.5440	0.0000	3,158.2464	3,158.2464	0.7582	0.0000	3,177.2018
Maximum	**9.1233**	**15.9032**	**20.0929**	**0.0317**	**6.8894**	**0.1511**	**6.9764**	**3.4574**	**0.1510**	**3.5440**	**0.0000**	**3,158.2464**	**3,158.2464**	**0.7582**	**0.0000**	**3,177.2018**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.19**	**32.72**	**-6.99**	**0.00**	**0.00**	**85.67**	**11.05**	**0.00**	**84.85**	**18.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.3415	9.6456	3.1732	0.0402	1.0384	0.0376	1.0760	0.2845	0.0359	0.3204		4,425.0471	4,425.0471	0.3570		4,433.9724
Total	**0.7910**	**9.6456**	**3.1734**	**0.0402**	**1.0384**	**0.0376**	**1.0760**	**0.2845**	**0.0359**	**0.3204**		**4,425.0475**	**4,425.0475**	**0.3570**	**0.0000**	**4,433.9729**

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	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.3415	9.6456	3.1732	0.0402	1.0384	0.0376	1.0760	0.2845	0.0359	0.3204		4,425.0471	4,425.0471	0.3570		4,433.9724
Total	**0.7910**	**9.6456**	**3.1734**	**0.0402**	**1.0384**	**0.0376**	**1.0760**	**0.2845**	**0.0359**	**0.3204**		**4,425.0475**	**4,425.0475**	**0.3570**	**0.0000**	**4,433.9729**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	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	3	8.00	0.00	35.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	91.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	1.4209	14.7629	8.5583	0.0147		0.7560	0.7560		0.6955	0.6955		1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**1.4209**	**14.7629**	**8.5583**	**0.0147**	**6.0277**	**0.7560**	**6.7837**	**3.3111**	**0.6955**	**4.0066**		**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0520	1.7943	0.4390	5.4000e-003	0.1223	5.4700e-003	0.1278	0.0335	5.2400e-003	0.0388		591.9762	591.9762	0.0523		593.2835
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	0.0384	0.0267	0.3126	1.0100e-003	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		100.3589	100.3589	2.7900e-003		100.4287
Total	**0.0904**	**1.8211**	**0.7516**	**6.4100e-003**	**0.2245**	**6.1500e-003**	**0.2307**	**0.0606**	**5.8700e-003**	**0.0665**		**692.3351**	**692.3351**	**0.0551**		**693.7122**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	0.3610	7.5115	9.2147	0.0147		0.0595	0.0595		0.0595	0.0595	0.0000	1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**0.3610**	**7.5115**	**9.2147**	**0.0147**	**6.0277**	**0.0595**	**6.0872**	**3.3111**	**0.0595**	**3.3705**	**0.0000**	**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0520	1.7943	0.4390	5.4000e-003	0.1223	5.4700e-003	0.1278	0.0335	5.2400e-003	0.0388		591.9762	591.9762	0.0523		593.2835
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	0.0384	0.0267	0.3126	1.0100e-003	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		100.3589	100.3589	2.7900e-003		100.4287
Total	**0.0904**	**1.8211**	**0.7516**	**6.4100e-003**	**0.2245**	**6.1500e-003**	**0.2307**	**0.0606**	**5.8700e-003**	**0.0665**		**692.3351**	**692.3351**	**0.0551**		**693.7122**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	1.8739	20.6875	10.3254	0.0214		0.9437	0.9437		0.8682	0.8682		2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**1.8739**	**20.6875**	**10.3254**	**0.0214**	**6.5629**	**0.9437**	**7.5066**	**3.3691**	**0.8682**	**4.2373**		**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0844	2.9158	0.7133	8.7700e-003	0.1988	8.9000e-003	0.2077	0.0545	8.5100e-003	0.0630		961.9613	961.9613	0.0850		964.0857
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	0.0480	0.0334	0.3908	1.2600e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		125.4486	125.4486	3.4900e-003		125.5359
Total	**0.1325**	**2.9492**	**1.1041**	**0.0100**	**0.3265**	**9.7500e-003**	**0.3362**	**0.0883**	**9.2900e-003**	**0.0976**		**1,087.4100**	**1,087.4100**	**0.0885**		**1,089.6216**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	0.5233	10.6486	12.7305	0.0214		0.0773	0.0773		0.0773	0.0773	0.0000	2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**0.5233**	**10.6486**	**12.7305**	**0.0214**	**6.5629**	**0.0773**	**6.6402**	**3.3691**	**0.0773**	**3.4464**	**0.0000**	**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0844	2.9158	0.7133	8.7700e-003	0.1988	8.9000e-003	0.2077	0.0545	8.5100e-003	0.0630		961.9613	961.9613	0.0850		964.0857
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	0.0480	0.0334	0.3908	1.2600e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		125.4486	125.4486	3.4900e-003		125.5359
Total	**0.1325**	**2.9492**	**1.1041**	**0.0100**	**0.3265**	**9.7500e-003**	**0.3362**	**0.0883**	**9.2900e-003**	**0.0976**		**1,087.4100**	**1,087.4100**	**0.0885**		**1,089.6216**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	8.5800e-003	0.2934	0.0741	7.5000e-004	0.0184	5.9000e-004	0.0190	5.2900e-003	5.6000e-004	5.8500e-003		80.7694	80.7694	5.9400e-003		80.9178
Worker	0.0336	0.0234	0.2735	8.8000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		87.8140	87.8140	2.4400e-003		87.8751
Total	**0.0422**	**0.3168**	**0.3477**	**1.6300e-003**	**0.1078**	**1.1800e-003**	**0.1090**	**0.0290**	**1.1100e-003**	**0.0301**		**168.5834**	**168.5834**	**8.3800e-003**		**168.7929**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.1355**	**0.1355**		**0.1355**	**0.1355**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	8.5800e-003	0.2934	0.0741	7.5000e-004	0.0184	5.9000e-004	0.0190	5.2900e-003	5.6000e-004	5.8500e-003		80.7694	80.7694	5.9400e-003		80.9178
Worker	0.0336	0.0234	0.2735	8.8000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		87.8140	87.8140	2.4400e-003		87.8751
Total	**0.0422**	**0.3168**	**0.3477**	**1.6300e-003**	**0.1078**	**1.1800e-003**	**0.1090**	**0.0290**	**1.1100e-003**	**0.0301**		**168.5834**	**168.5834**	**8.3800e-003**		**168.7929**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**8.5619**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	4.8000e-003	3.3400e-003	0.0391	1.3000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		12.5449	12.5449	3.5000e-004		12.5536
Total	**4.8000e-003**	**3.3400e-003**	**0.0391**	**1.3000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**12.5449**	**12.5449**	**3.5000e-004**		**12.5536**

3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**8.4024**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0143**	**0.0143**		**0.0143**	**0.0143**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	4.8000e-003	3.3400e-003	0.0391	1.3000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		12.5449	12.5449	3.5000e-004		12.5536
Total	**4.8000e-003**	**3.3400e-003**	**0.0391**	**1.3000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**12.5449**	**12.5449**	**3.5000e-004**		**12.5536**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3415	9.6456	3.1732	0.0402	1.0384	0.0376	1.0760	0.2845	0.0359	0.3204		4,425.0471	4,425.0471	0.3570		4,433.9724
Unmitigated	0.3415	9.6456	3.1732	0.0402	1.0384	0.0376	1.0760	0.2845	0.0359	0.3204		4,425.0471	4,425.0471	0.3570		4,433.9724

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	2.00	0.00	2,080	2,080
User Defined Industrial	10.00	10.00	0.00	358,800	358,800
Total	10.00	12.00	0.00	360,880	360,880

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Commercial	20.00	6.60	6.60	100.00	0.00	0.00	100	0	0
User Defined Industrial	115.00	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Commercial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.4496**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.4496**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Demler Egg Farm Manure Processing

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	495.89	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Demler Egg Farm Manure Processing - San Diego County, Winter

Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construciton provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT - Assumes additional hualing trips for water during earthwork activities

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project proposed trips from 5 trucks per day or 10 trips total(No trips on Sunday) Usr Def Indus. ;In additon the project would truck water onsite at 2 trucks per week to Ramona Water District 15 miles away...assumed 20 miles one way (User Def Com.)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year. 75kw*.80*16 hrs/day*365days * 3 Units = 1,051,200 kWH. Lighting is 3.2*16*365 = 18688

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilzer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case and are applied to user defined industrial. Assume all water trucks are HHD and are applied to User Defined Commercial

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

Demler Egg Farm Manure Processing - San Diego County, Winter

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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblFleetMix	HHD	0.02	1.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.60	0.00

tblFleetMix	LDA	0.60	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00
tblLandUse	LotAcreage	0.00	3.32

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	25.00	35.00
tblTripsAndVMT	HaulingTripNumber	75.00	91.00
tblVehicleTrips	CW_TL	14.70	20.00
tblVehicleTrips	CW_TL	14.70	115.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	2.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	10.5165	23.6659	18.7637	0.0316	6.8894	1.0540	7.8430	3.4574	0.9966	4.3351	0.0000	3,133.8906	3,133.8906	0.7608	0.0000	3,152.9102
Maximum	**10.5165**	**23.6659**	**18.7637**	**0.0316**	**6.8894**	**1.0540**	**7.8430**	**3.4574**	**0.9966**	**4.3351**	**0.0000**	**3,133.8906**	**3,133.8906**	**0.7608**	**0.0000**	**3,152.9102**

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					
2021	9.1300	15.9052	20.0771	0.0316	6.8894	0.1511	6.9766	3.4574	0.1510	3.5442	0.0000	3,133.8906	3,133.8906	0.7608	0.0000	3,152.9102
Maximum	**9.1300**	**15.9052**	**20.0771**	**0.0316**	**6.8894**	**0.1511**	**6.9766**	**3.4574**	**0.1510**	**3.5442**	**0.0000**	**3,133.8906**	**3,133.8906**	**0.7608**	**0.0000**	**3,152.9102**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.18**	**32.79**	**-7.00**	**0.00**	**0.00**	**85.67**	**11.05**	**0.00**	**84.85**	**18.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.3435	9.9111	3.1968	0.0401	1.0384	0.0377	1.0762	0.2845	0.0361	0.3206		4,407.5687	4,407.5687	0.3597		4,416.5606
Total	**0.7931**	**9.9111**	**3.1970**	**0.0401**	**1.0384**	**0.0377**	**1.0762**	**0.2845**	**0.0361**	**0.3206**		**4,407.5691**	**4,407.5691**	**0.3597**	**0.0000**	**4,416.5611**

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	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.3435	9.9111	3.1968	0.0401	1.0384	0.0377	1.0762	0.2845	0.0361	0.3206		4,407.5687	4,407.5687	0.3597		4,416.5606
Total	**0.7931**	**9.9111**	**3.1970**	**0.0401**	**1.0384**	**0.0377**	**1.0762**	**0.2845**	**0.0361**	**0.3206**		**4,407.5691**	**4,407.5691**	**0.3597**	**0.0000**	**4,416.5611**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	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	3	8.00	0.00	35.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	91.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	1.4209	14.7629	8.5583	0.0147		0.7560	0.7560		0.6955	0.6955		1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**1.4209**	**14.7629**	**8.5583**	**0.0147**	**6.0277**	**0.7560**	**6.7837**	**3.3111**	**0.6955**	**4.0066**		**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0534	1.8098	0.4666	5.3000e-003	0.1223	5.5900e-003	0.1279	0.0335	5.3500e-003	0.0389		581.7485	581.7485	0.0540		583.0987
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	0.0446	0.0300	0.2879	9.4000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		94.1703	94.1703	2.6100e-003		94.2357
Total	**0.0980**	**1.8398**	**0.7545**	**6.2400e-003**	**0.2245**	**6.2700e-003**	**0.2308**	**0.0606**	**5.9800e-003**	**0.0666**		**675.9188**	**675.9188**	**0.0566**		**677.3344**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	0.3610	7.5115	9.2147	0.0147		0.0595	0.0595		0.0595	0.0595	0.0000	1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**0.3610**	**7.5115**	**9.2147**	**0.0147**	**6.0277**	**0.0595**	**6.0872**	**3.3111**	**0.0595**	**3.3705**	**0.0000**	**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0534	1.8098	0.4666	5.3000e-003	0.1223	5.5900e-003	0.1279	0.0335	5.3500e-003	0.0389		581.7485	581.7485	0.0540		583.0987
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	0.0446	0.0300	0.2879	9.4000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		94.1703	94.1703	2.6100e-003		94.2357
Total	**0.0980**	**1.8398**	**0.7545**	**6.2400e-003**	**0.2245**	**6.2700e-003**	**0.2308**	**0.0606**	**5.9800e-003**	**0.0666**		**675.9188**	**675.9188**	**0.0566**		**677.3344**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	1.8739	20.6875	10.3254	0.0214		0.9437	0.9437		0.8682	0.8682		2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**1.8739**	**20.6875**	**10.3254**	**0.0214**	**6.5629**	**0.9437**	**7.5066**	**3.3691**	**0.8682**	**4.2373**		**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0868	2.9409	0.7582	8.6200e-003	0.1988	9.0900e-003	0.2079	0.0545	8.6900e-003	0.0632		945.3412	945.3412	0.0878		947.5354
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	0.0558	0.0375	0.3599	1.1800e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		117.7129	117.7129	3.2700e-003		117.7946
Total	**0.1425**	**2.9784**	**1.1182**	**9.8000e-003**	**0.3265**	**9.9400e-003**	**0.3364**	**0.0883**	**9.4700e-003**	**0.0978**		**1,063.0541**	**1,063.0541**	**0.0910**		**1,065.3300**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	0.5233	10.6486	12.7305	0.0214		0.0773	0.0773		0.0773	0.0773	0.0000	2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**0.5233**	**10.6486**	**12.7305**	**0.0214**	**6.5629**	**0.0773**	**6.6402**	**3.3691**	**0.0773**	**3.4464**	**0.0000**	**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0868	2.9409	0.7582	8.6200e-003	0.1988	9.0900e-003	0.2079	0.0545	8.6900e-003	0.0632		945.3412	945.3412	0.0878		947.5354
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	0.0558	0.0375	0.3599	1.1800e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		117.7129	117.7129	3.2700e-003		117.7946
Total	**0.1425**	**2.9784**	**1.1182**	**9.8000e-003**	**0.3265**	**9.9400e-003**	**0.3364**	**0.0883**	**9.4700e-003**	**0.0978**		**1,063.0541**	**1,063.0541**	**0.0910**		**1,065.3300**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	9.0600e-003	0.2922	0.0830	7.3000e-004	0.0184	6.1000e-004	0.0190	5.2900e-003	5.9000e-004	5.8800e-003		78.5096	78.5096	6.3200e-003		78.6677
Worker	0.0390	0.0263	0.2520	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		82.3990	82.3990	2.2900e-003		82.4562
Total	**0.0481**	**0.3184**	**0.3350**	**1.5600e-003**	**0.1078**	**1.2000e-003**	**0.1090**	**0.0290**	**1.1400e-003**	**0.0301**		**160.9086**	**160.9086**	**8.6100e-003**		**161.1239**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.1355**	**0.1355**		**0.1355**	**0.1355**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	9.0600e-003	0.2922	0.0830	7.3000e-004	0.0184	6.1000e-004	0.0190	5.2900e-003	5.9000e-004	5.8800e-003		78.5096	78.5096	6.3200e-003		78.6677
Worker	0.0390	0.0263	0.2520	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		82.3990	82.3990	2.2900e-003		82.4562
Total	**0.0481**	**0.3184**	**0.3350**	**1.5600e-003**	**0.1078**	**1.2000e-003**	**0.1090**	**0.0290**	**1.1400e-003**	**0.0301**		**160.9086**	**160.9086**	**8.6100e-003**		**161.1239**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**8.5619**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	5.5800e-003	3.7500e-003	0.0360	1.2000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		11.7713	11.7713	3.3000e-004		11.7795
Total	**5.5800e-003**	**3.7500e-003**	**0.0360**	**1.2000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**11.7713**	**11.7713**	**3.3000e-004**		**11.7795**

3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**8.4024**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0143**	**0.0143**		**0.0143**	**0.0143**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	5.5800e-003	3.7500e-003	0.0360	1.2000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		11.7713	11.7713	3.3000e-004		11.7795
Total	**5.5800e-003**	**3.7500e-003**	**0.0360**	**1.2000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**11.7713**	**11.7713**	**3.3000e-004**		**11.7795**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3435	9.9111	3.1968	0.0401	1.0384	0.0377	1.0762	0.2845	0.0361	0.3206		4,407.5687	4,407.5687	0.3597		4,416.5606
Unmitigated	0.3435	9.9111	3.1968	0.0401	1.0384	0.0377	1.0762	0.2845	0.0361	0.3206		4,407.5687	4,407.5687	0.3597		4,416.5606

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	2.00	0.00	2,080	2,080
User Defined Industrial	10.00	10.00	0.00	358,800	358,800
Total	10.00	12.00	0.00	360,880	360,880

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Commercial	20.00	6.60	6.60	100.00	0.00	0.00	100	0	0
User Defined Industrial	115.00	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Commercial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	0.4496	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.4496**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**0.4496**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Demler Egg Farm Manure Processing

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	495.89	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construciton provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT - Assumes additional hualing trips for water during earthwork activities

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project proposed trips from 5 trucks per day or 10 trips total(No trips on Sunday) Usr Def Indus. ;In additon the project would truck water onsite at 2 trucks per week to Ramona Water District 15 miles away...assumed 20 miles one way (User Def Com.)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year. 75kw*.80*16 hrs/day*365days * 3 Units = 1,051,200 kWH. Lighting is 3.2*16*365 = 18688

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilzer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case and are applied to user defined industrial. Assume all water trucks are HHD and are applied to User Defined Commercial

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblFleetMix	HHD	0.02	1.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.60	0.00

tblFleetMix	LDA	0.60	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00
tblLandUse	LotAcreage	0.00	3.32

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	25.00	35.00
tblTripsAndVMT	HaulingTripNumber	75.00	91.00
tblVehicleTrips	CW_TL	14.70	20.00
tblVehicleTrips	CW_TL	14.70	115.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	2.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

2.0 Emissions Summary

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					
2021	0.1822	1.0023	0.8972	1.5700e-003	0.0483	0.0526	0.1010	0.0236	0.0494	0.0731	0.0000	136.8820	136.8820	0.0313	0.0000	137.6641
Maximum	**0.1822**	**1.0023**	**0.8972**	**1.5700e-003**	**0.0483**	**0.0526**	**0.1010**	**0.0236**	**0.0494**	**0.0731**	**0.0000**	**136.8820**	**136.8820**	**0.0313**	**0.0000**	**137.6641**

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					
2021	0.1138	0.7886	0.9709	1.5700e-003	0.0483	7.2000e-003	0.0555	0.0236	7.2000e-003	0.0308	0.0000	136.8819	136.8819	0.0313	0.0000	137.6639
Maximum	**0.1138**	**0.7886**	**0.9709**	**1.5700e-003**	**0.0483**	**7.2000e-003**	**0.0555**	**0.0236**	**7.2000e-003**	**0.0308**	**0.0000**	**136.8819**	**136.8819**	**0.0313**	**0.0000**	**137.6639**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**37.53**	**21.32**	**-8.22**	**0.00**	**0.00**	**86.32**	**45.00**	**0.00**	**85.43**	**57.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
4	5-1-2021	7-31-2021	0.4463	0.3151
5	8-1-2021	9-30-2021	0.4290	0.3324
		Highest	0.4463	0.3324

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
Total	**0.1337**	**1.4904**	**0.4786**	**6.0600e-003**	**0.1542**	**5.6900e-003**	**0.1599**	**0.0423**	**5.4400e-003**	**0.0478**	**0.0000**	**846.6621**	**846.6621**	**0.0586**	**1.9500e-003**	**848.7082**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
Total	**0.1337**	**1.4904**	**0.4786**	**6.0600e-003**	**0.1542**	**5.6900e-003**	**0.1599**	**0.0423**	**5.4400e-003**	**0.0478**	**0.0000**	**846.6621**	**846.6621**	**0.0586**	**1.9500e-003**	**848.7082**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	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	3	8.00	0.00	35.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	91.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5500e-003	0.0369	0.0214	4.0000e-005		1.8900e-003	1.8900e-003		1.7400e-003	1.7400e-003	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
Total	**3.5500e-003**	**0.0369**	**0.0214**	**4.0000e-005**	**0.0151**	**1.8900e-003**	**0.0170**	**8.2800e-003**	**1.7400e-003**	**0.0100**	**0.0000**	**3.2413**	**3.2413**	**1.0500e-003**	**0.0000**	**3.2675**

3.2 Site Preparation - 2021

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	1.3000e-004	4.5700e-003	1.1300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.3328	1.3328	1.2000e-004	0.0000	1.3358
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
Total	**2.3000e-004**	**4.6400e-003**	**1.8600e-003**	**1.0000e-005**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**1.5000e-004**	**1.0000e-005**	**1.7000e-004**	**0.0000**	**1.5486**	**1.5486**	**1.3000e-004**	**0.0000**	**1.5517**

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					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0188	0.0230	4.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
Total	**9.0000e-004**	**0.0188**	**0.0230**	**4.0000e-005**	**0.0151**	**1.5000e-004**	**0.0152**	**8.2800e-003**	**1.5000e-004**	**8.4300e-003**	**0.0000**	**3.2413**	**3.2413**	**1.0500e-003**	**0.0000**	**3.2675**

3.2 Site Preparation - 2021

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	1.3000e-004	4.5700e-003	1.1300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.3328	1.3328	1.2000e-004	0.0000	1.3358
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
Total	**2.3000e-004**	**4.6400e-003**	**1.8600e-003**	**1.0000e-005**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**1.5000e-004**	**1.0000e-005**	**1.7000e-004**	**0.0000**	**1.5486**	**1.5486**	**1.3000e-004**	**0.0000**	**1.5517**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-003	0.0828	0.0413	9.0000e-005		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
Total	**7.5000e-003**	**0.0828**	**0.0413**	**9.0000e-005**	**0.0263**	**3.7700e-003**	**0.0300**	**0.0135**	**3.4700e-003**	**0.0170**	**0.0000**	**7.5145**	**7.5145**	**2.4300e-003**	**0.0000**	**7.5753**

3.3 Grading - 2021

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	3.4000e-004	0.0119	2.9300e-003	3.0000e-005	7.8000e-004	4.0000e-005	8.1000e-004	2.1000e-004	3.0000e-005	2.5000e-004	0.0000	3.4654	3.4654	3.1000e-004	0.0000	3.4732
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
Total	**5.4000e-004**	**0.0120**	**4.3800e-003**	**3.0000e-005**	**1.2800e-003**	**4.0000e-005**	**1.3100e-003**	**3.4000e-004**	**3.0000e-005**	**3.9000e-004**	**0.0000**	**3.8968**	**3.8968**	**3.2000e-004**	**0.0000**	**3.9050**

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					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	0.0426	0.0509	9.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
Total	**2.0900e-003**	**0.0426**	**0.0509**	**9.0000e-005**	**0.0263**	**3.1000e-004**	**0.0266**	**0.0135**	**3.1000e-004**	**0.0138**	**0.0000**	**7.5145**	**7.5145**	**2.4300e-003**	**0.0000**	**7.5753**

3.3 Grading - 2021

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	3.4000e-004	0.0119	2.9300e-003	3.0000e-005	7.8000e-004	4.0000e-005	8.1000e-004	2.1000e-004	3.0000e-005	2.5000e-004	0.0000	3.4654	3.4654	3.1000e-004	0.0000	3.4732
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
Total	**5.4000e-004**	**0.0120**	**4.3800e-003**	**3.0000e-005**	**1.2800e-003**	**4.0000e-005**	**1.3100e-003**	**3.4000e-004**	**3.0000e-005**	**3.9000e-004**	**0.0000**	**3.8968**	**3.8968**	**3.2000e-004**	**0.0000**	**3.9050**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0912	0.8367	0.7956	1.2900e-003		0.0460	0.0460		0.0433	0.0433	0.0000	111.1859	111.1859	0.0268	0.0000	111.8565
Total	**0.0912**	**0.8367**	**0.7956**	**1.2900e-003**		**0.0460**	**0.0460**		**0.0433**	**0.0433**	**0.0000**	**111.1859**	**111.1859**	**0.0268**	**0.0000**	**111.8565**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
Total	**2.0700e-003**	**0.0154**	**0.0160**	**8.0000e-005**	**5.0500e-003**	**6.0000e-005**	**5.1100e-003**	**1.3600e-003**	**6.0000e-005**	**1.4200e-003**	**0.0000**	**7.1000**	**7.1000**	**3.7000e-004**	**0.0000**	**7.1091**

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	0.0324	0.6829	0.8579	1.2900e-003		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	111.1858	111.1858	0.0268	0.0000	111.8564
Total	**0.0324**	**0.6829**	**0.8579**	**1.2900e-003**		**6.5100e-003**	**6.5100e-003**		**6.5100e-003**	**6.5100e-003**	**0.0000**	**111.1858**	**111.1858**	**0.0268**	**0.0000**	**111.8564**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
Total	**2.0700e-003**	**0.0154**	**0.0160**	**8.0000e-005**	**5.0500e-003**	**6.0000e-005**	**5.1100e-003**	**1.3600e-003**	**6.0000e-005**	**1.4200e-003**	**0.0000**	**7.1000**	**7.1000**	**3.7000e-004**	**0.0000**	**7.1091**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.0771**	**0.0137**	**0.0164**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.5 Architectural Coating - 2021

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	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
Total	**4.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0971**	**0.0971**	**0.0000**	**0.0000**	**0.0971**

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	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	0.0122	0.0165	3.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.0756**	**0.0122**	**0.0165**	**3.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.5 Architectural Coating - 2021

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	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
Total	**4.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0971**	**0.0971**	**0.0000**	**0.0000**	**0.0971**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411
Unmitigated	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	2.00	0.00	2,080	2,080
User Defined Industrial	10.00	10.00	0.00	358,800	358,800
Total	10.00	12.00	0.00	360,880	360,880

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Commercial	20.00	6.60	6.60	100.00	0.00	0.00	100	0	0
User Defined Industrial	115.00	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Commercial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
Total		**240.6430**	**9.7100e-003**	**1.9400e-003**	**241.4641**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
Total		**240.6430**	**9.7100e-003**	**1.9400e-003**	**241.4641**

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	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

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	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**0.0820**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

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	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**0.0820**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9996	4.0000e-005	1.0000e-005	1.0030
Unmitigated	0.9996	4.0000e-005	1.0000e-005	1.0030

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
Total		**0.9996**	**4.0000e-005**	**1.0000e-005**	**1.0030**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
Total		**0.9996**	**4.0000e-005**	**1.0000e-005**	**1.0030**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Demler Egg Farm Manure Processing with employee trips only

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	495.89	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Summer

Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construciton provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT -

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project employee trips from 5 employees(No trips on Sunday)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year. 75kw*.80*16 hrs/day*365days * 3 Units = 1,051,200 kWH. Lighting is 3.2*16*365 = 18688

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilzer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Summer

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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00

tblLandUse	LotAcreage	0.00	3.32
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	10.5098	23.1240	18.7795	0.0317	6.8544	1.0540	7.8063	3.4478	0.9966	4.3238	0.0000	3,015.9402	3,015.9402	0.7433	0.0000	3,032.0417
Maximum	**10.5098**	**23.1240**	**18.7795**	**0.0317**	**6.8544**	**1.0540**	**7.8063**	**3.4478**	**0.9966**	**4.3238**	**0.0000**	**3,015.9402**	**3,015.9402**	**0.7433**	**0.0000**	**3,032.0417**

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					
2021	9.1233	15.9032	20.0929	0.0317	6.8544	0.1511	6.9399	3.4478	0.1510	3.5330	0.0000	3,015.9402	3,015.9402	0.7433	0.0000	3,032.0417
Maximum	**9.1233**	**15.9032**	**20.0929**	**0.0317**	**6.8544**	**0.1511**	**6.9399**	**3.4478**	**0.1510**	**3.5330**	**0.0000**	**3,015.9402**	**3,015.9402**	**0.7433**	**0.0000**	**3,032.0417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.19**	**31.23**	**-6.99**	**0.00**	**0.00**	**85.67**	**11.10**	**0.00**	**84.85**	**18.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0226	0.1018	0.3343	1.2700e-003	0.1135	9.9000e-004	0.1145	0.0303	9.3000e-004	0.0313		129.2047	129.2047	6.0900e-003		129.3569
Total	**0.4721**	**0.1018**	**0.3344**	**1.2700e-003**	**0.1135**	**9.9000e-004**	**0.1145**	**0.0303**	**9.3000e-004**	**0.0313**		**129.2049**	**129.2049**	**6.0900e-003**	**0.0000**	**129.3571**

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	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0226	0.1018	0.3343	1.2700e-003	0.1135	9.9000e-004	0.1145	0.0303	9.3000e-004	0.0313		129.2047	129.2047	6.0900e-003		129.3569
Total	**0.4721**	**0.1018**	**0.3344**	**1.2700e-003**	**0.1135**	**9.9000e-004**	**0.1145**	**0.0303**	**9.3000e-004**	**0.0313**		**129.2049**	**129.2049**	**6.0900e-003**	**0.0000**	**129.3571**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	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	3	8.00	0.00	25.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	75.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	1.4209	14.7629	8.5583	0.0147		0.7560	0.7560		0.6955	0.6955		1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**1.4209**	**14.7629**	**8.5583**	**0.0147**	**6.0277**	**0.7560**	**6.7837**	**3.3111**	**0.6955**	**4.0066**		**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0371	1.2817	0.3136	3.8600e-003	0.0874	3.9100e-003	0.0913	0.0239	3.7400e-003	0.0277		422.8401	422.8401	0.0374		423.7739
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	0.0384	0.0267	0.3126	1.0100e-003	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		100.3589	100.3589	2.7900e-003		100.4287
Total	**0.0755**	**1.3084**	**0.6262**	**4.8700e-003**	**0.1896**	**4.5900e-003**	**0.1941**	**0.0510**	**4.3700e-003**	**0.0554**		**523.1990**	**523.1990**	**0.0401**		**524.2027**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	0.3610	7.5115	9.2147	0.0147		0.0595	0.0595		0.0595	0.0595	0.0000	1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**0.3610**	**7.5115**	**9.2147**	**0.0147**	**6.0277**	**0.0595**	**6.0872**	**3.3111**	**0.0595**	**3.3705**	**0.0000**	**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0371	1.2817	0.3136	3.8600e-003	0.0874	3.9100e-003	0.0913	0.0239	3.7400e-003	0.0277		422.8401	422.8401	0.0374		423.7739
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	0.0384	0.0267	0.3126	1.0100e-003	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		100.3589	100.3589	2.7900e-003		100.4287
Total	**0.0755**	**1.3084**	**0.6262**	**4.8700e-003**	**0.1896**	**4.5900e-003**	**0.1941**	**0.0510**	**4.3700e-003**	**0.0554**		**523.1990**	**523.1990**	**0.0401**		**524.2027**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	1.8739	20.6875	10.3254	0.0214		0.9437	0.9437		0.8682	0.8682		2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**1.8739**	**20.6875**	**10.3254**	**0.0214**	**6.5629**	**0.9437**	**7.5066**	**3.3691**	**0.8682**	**4.2373**		**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0696	2.4031	0.5879	7.2300e-003	0.1638	7.3300e-003	0.1712	0.0449	7.0200e-003	0.0519		792.8253	792.8253	0.0700		794.5761
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	0.0480	0.0334	0.3908	1.2600e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		125.4486	125.4486	3.4900e-003		125.5359
Total	**0.1176**	**2.4365**	**0.9787**	**8.4900e-003**	**0.2916**	**8.1800e-003**	**0.2997**	**0.0788**	**7.8000e-003**	**0.0866**		**918.2739**	**918.2739**	**0.0735**		**920.1120**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	0.5233	10.6486	12.7305	0.0214		0.0773	0.0773		0.0773	0.0773	0.0000	2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**0.5233**	**10.6486**	**12.7305**	**0.0214**	**6.5629**	**0.0773**	**6.6402**	**3.3691**	**0.0773**	**3.4464**	**0.0000**	**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0696	2.4031	0.5879	7.2300e-003	0.1638	7.3300e-003	0.1712	0.0449	7.0200e-003	0.0519		792.8253	792.8253	0.0700		794.5761
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	0.0480	0.0334	0.3908	1.2600e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		125.4486	125.4486	3.4900e-003		125.5359
Total	**0.1176**	**2.4365**	**0.9787**	**8.4900e-003**	**0.2916**	**8.1800e-003**	**0.2997**	**0.0788**	**7.8000e-003**	**0.0866**		**918.2739**	**918.2739**	**0.0735**		**920.1120**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	8.5800e-003	0.2934	0.0741	7.5000e-004	0.0184	5.9000e-004	0.0190	5.2900e-003	5.6000e-004	5.8500e-003		80.7694	80.7694	5.9400e-003		80.9178
Worker	0.0336	0.0234	0.2735	8.8000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		87.8140	87.8140	2.4400e-003		87.8751
Total	**0.0422**	**0.3168**	**0.3477**	**1.6300e-003**	**0.1078**	**1.1800e-003**	**0.1090**	**0.0290**	**1.1100e-003**	**0.0301**		**168.5834**	**168.5834**	**8.3800e-003**		**168.7929**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.1355**	**0.1355**		**0.1355**	**0.1355**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	8.5800e-003	0.2934	0.0741	7.5000e-004	0.0184	5.9000e-004	0.0190	5.2900e-003	5.6000e-004	5.8500e-003		80.7694	80.7694	5.9400e-003		80.9178
Worker	0.0336	0.0234	0.2735	8.8000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		87.8140	87.8140	2.4400e-003		87.8751
Total	**0.0422**	**0.3168**	**0.3477**	**1.6300e-003**	**0.1078**	**1.1800e-003**	**0.1090**	**0.0290**	**1.1100e-003**	**0.0301**		**168.5834**	**168.5834**	**8.3800e-003**		**168.7929**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**8.5619**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	4.8000e-003	3.3400e-003	0.0391	1.3000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		12.5449	12.5449	3.5000e-004		12.5536
Total	**4.8000e-003**	**3.3400e-003**	**0.0391**	**1.3000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**12.5449**	**12.5449**	**3.5000e-004**		**12.5536**

3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**8.4024**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0143**	**0.0143**		**0.0143**	**0.0143**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	4.8000e-003	3.3400e-003	0.0391	1.3000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		12.5449	12.5449	3.5000e-004		12.5536
Total	**4.8000e-003**	**3.3400e-003**	**0.0391**	**1.3000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**12.5449**	**12.5449**	**3.5000e-004**		**12.5536**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0226	0.1018	0.3343	1.2700e-003	0.1135	9.9000e-004	0.1145	0.0303	9.3000e-004	0.0313		129.2047	129.2047	6.0900e-003		129.3569
Unmitigated	0.0226	0.1018	0.3343	1.2700e-003	0.1135	9.9000e-004	0.1145	0.0303	9.3000e-004	0.0313		129.2047	129.2047	6.0900e-003		129.3569

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	10.00	10.00	0.00	45,864	45,864
Total	10.00	10.00	0.00	45,864	45,864

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	14.70	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.4496**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.4496**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Demler Egg Farm Manure Processing with employee trips only

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	495.89	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Winter

Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construciton provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT -

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project employee trips from 5 employees(No trips on Sunday)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year. 75kw*.80*16 hrs/day*365days * 3 Units = 1,051,200 kWH. Lighting is 3.2*16*365 = 18688

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilzer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Winter

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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00

tblLandUse	LotAcreage	0.00	3.32
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	10.5165	23.1488	18.7637	0.0316	6.8544	1.0540	7.8065	3.4478	0.9966	4.3240	0.0000	3,007.4919	3,007.4919	0.7454	0.0000	3,023.5986
Maximum	**10.5165**	**23.1488**	**18.7637**	**0.0316**	**6.8544**	**1.0540**	**7.8065**	**3.4478**	**0.9966**	**4.3240**	**0.0000**	**3,007.4919**	**3,007.4919**	**0.7454**	**0.0000**	**3,023.5986**

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					
2021	9.1300	15.9052	20.0771	0.0316	6.8544	0.1511	6.9401	3.4478	0.1510	3.5331	0.0000	3,007.4919	3,007.4919	0.7454	0.0000	3,023.5986
Maximum	**9.1300**	**15.9052**	**20.0771**	**0.0316**	**6.8544**	**0.1511**	**6.9401**	**3.4478**	**0.1510**	**3.5331**	**0.0000**	**3,007.4919**	**3,007.4919**	**0.7454**	**0.0000**	**3,023.5986**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.18**	**31.29**	**-7.00**	**0.00**	**0.00**	**85.67**	**11.10**	**0.00**	**84.85**	**18.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0219	0.1057	0.3180	1.2100e-003	0.1135	1.0000e-003	0.1145	0.0303	9.3000e-004	0.0313		122.7023	122.7023	6.0300e-003		122.8530
Total	**0.4715**	**0.1057**	**0.3181**	**1.2100e-003**	**0.1135**	**1.0000e-003**	**0.1145**	**0.0303**	**9.3000e-004**	**0.0313**		**122.7025**	**122.7025**	**6.0300e-003**	**0.0000**	**122.8532**

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	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0219	0.1057	0.3180	1.2100e-003	0.1135	1.0000e-003	0.1145	0.0303	9.3000e-004	0.0313		122.7023	122.7023	6.0300e-003		122.8530
Total	**0.4715**	**0.1057**	**0.3181**	**1.2100e-003**	**0.1135**	**1.0000e-003**	**0.1145**	**0.0303**	**9.3000e-004**	**0.0313**		**122.7025**	**122.7025**	**6.0300e-003**	**0.0000**	**122.8532**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	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	3	8.00	0.00	25.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	75.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	1.4209	14.7629	8.5583	0.0147		0.7560	0.7560		0.6955	0.6955		1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**1.4209**	**14.7629**	**8.5583**	**0.0147**	**6.0277**	**0.7560**	**6.7837**	**3.3111**	**0.6955**	**4.0066**		**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0381	1.2927	0.3333	3.7900e-003	0.0874	3.9900e-003	0.0914	0.0239	3.8200e-003	0.0278		415.5346	415.5346	0.0386		416.4991
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	0.0446	0.0300	0.2879	9.4000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		94.1703	94.1703	2.6100e-003		94.2357
Total	**0.0828**	**1.3227**	**0.6212**	**4.7300e-003**	**0.1896**	**4.6700e-003**	**0.1942**	**0.0510**	**4.4500e-003**	**0.0555**		**509.7049**	**509.7049**	**0.0412**		**510.7348**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0277	0.0000	6.0277	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	0.3610	7.5115	9.2147	0.0147		0.0595	0.0595		0.0595	0.0595	0.0000	1,429.1523	1,429.1523	0.4622		1,440.7078
Total	**0.3610**	**7.5115**	**9.2147**	**0.0147**	**6.0277**	**0.0595**	**6.0872**	**3.3111**	**0.0595**	**3.3705**	**0.0000**	**1,429.1523**	**1,429.1523**	**0.4622**		**1,440.7078**

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	0.0381	1.2927	0.3333	3.7900e-003	0.0874	3.9900e-003	0.0914	0.0239	3.8200e-003	0.0278		415.5346	415.5346	0.0386		416.4991
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	0.0446	0.0300	0.2879	9.4000e-004	0.1022	6.8000e-004	0.1029	0.0271	6.3000e-004	0.0277		94.1703	94.1703	2.6100e-003		94.2357
Total	**0.0828**	**1.3227**	**0.6212**	**4.7300e-003**	**0.1896**	**4.6700e-003**	**0.1942**	**0.0510**	**4.4500e-003**	**0.0555**		**509.7049**	**509.7049**	**0.0412**		**510.7348**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	1.8739	20.6875	10.3254	0.0214		0.9437	0.9437		0.8682	0.8682		2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**1.8739**	**20.6875**	**10.3254**	**0.0214**	**6.5629**	**0.9437**	**7.5066**	**3.3691**	**0.8682**	**4.2373**		**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0715	2.4239	0.6249	7.1000e-003	0.1638	7.4900e-003	0.1713	0.0449	7.1600e-003	0.0521		779.1274	779.1274	0.0723		780.9358
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	0.0558	0.0375	0.3599	1.1800e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		117.7129	117.7129	3.2700e-003		117.7946
Total	**0.1273**	**2.4614**	**0.9849**	**8.2800e-003**	**0.2916**	**8.3400e-003**	**0.2999**	**0.0788**	**7.9400e-003**	**0.0867**		**896.8403**	**896.8403**	**0.0756**		**898.7304**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5629	0.0000	6.5629	3.3691	0.0000	3.3691			0.0000			0.0000
Off-Road	0.5233	10.6486	12.7305	0.0214		0.0773	0.0773		0.0773	0.0773	0.0000	2,070.8365	2,070.8365	0.6698		2,087.5802
Total	**0.5233**	**10.6486**	**12.7305**	**0.0214**	**6.5629**	**0.0773**	**6.6402**	**3.3691**	**0.0773**	**3.4464**	**0.0000**	**2,070.8365**	**2,070.8365**	**0.6698**		**2,087.5802**

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	0.0715	2.4239	0.6249	7.1000e-003	0.1638	7.4900e-003	0.1713	0.0449	7.1600e-003	0.0521		779.1274	779.1274	0.0723		780.9358
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	0.0558	0.0375	0.3599	1.1800e-003	0.1277	8.5000e-004	0.1286	0.0339	7.8000e-004	0.0347		117.7129	117.7129	3.2700e-003		117.7946
Total	**0.1273**	**2.4614**	**0.9849**	**8.2800e-003**	**0.2916**	**8.3400e-003**	**0.2999**	**0.0788**	**7.9400e-003**	**0.0867**		**896.8403**	**896.8403**	**0.0756**		**898.7304**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	9.0600e-003	0.2922	0.0830	7.3000e-004	0.0184	6.1000e-004	0.0190	5.2900e-003	5.9000e-004	5.8800e-003		78.5096	78.5096	6.3200e-003		78.6677
Worker	0.0390	0.0263	0.2520	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		82.3990	82.3990	2.2900e-003		82.4562
Total	**0.0481**	**0.3184**	**0.3350**	**1.5600e-003**	**0.1078**	**1.2000e-003**	**0.1090**	**0.0290**	**1.1400e-003**	**0.0301**		**160.9086**	**160.9086**	**8.6100e-003**		**161.1239**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.1355**	**0.1355**		**0.1355**	**0.1355**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	9.0600e-003	0.2922	0.0830	7.3000e-004	0.0184	6.1000e-004	0.0190	5.2900e-003	5.9000e-004	5.8800e-003		78.5096	78.5096	6.3200e-003		78.6677
Worker	0.0390	0.0263	0.2520	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.5000e-004	0.0243		82.3990	82.3990	2.2900e-003		82.4562
Total	**0.0481**	**0.3184**	**0.3350**	**1.5600e-003**	**0.1078**	**1.2000e-003**	**0.1090**	**0.0290**	**1.1400e-003**	**0.0301**		**160.9086**	**160.9086**	**8.6100e-003**		**161.1239**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**8.5619**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	5.5800e-003	3.7500e-003	0.0360	1.2000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		11.7713	11.7713	3.3000e-004		11.7795
Total	**5.5800e-003**	**3.7500e-003**	**0.0360**	**1.2000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**11.7713**	**11.7713**	**3.3000e-004**		**11.7795**

3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.3430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**8.4024**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0143**	**0.0143**		**0.0143**	**0.0143**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	5.5800e-003	3.7500e-003	0.0360	1.2000e-004	0.0128	8.0000e-005	0.0129	3.3900e-003	8.0000e-005	3.4700e-003		11.7713	11.7713	3.3000e-004		11.7795
Total	**5.5800e-003**	**3.7500e-003**	**0.0360**	**1.2000e-004**	**0.0128**	**8.0000e-005**	**0.0129**	**3.3900e-003**	**8.0000e-005**	**3.4700e-003**		**11.7713**	**11.7713**	**3.3000e-004**		**11.7795**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0219	0.1057	0.3180	1.2100e-003	0.1135	1.0000e-003	0.1145	0.0303	9.3000e-004	0.0313		122.7023	122.7023	6.0300e-003		122.8530
Unmitigated	0.0219	0.1057	0.3180	1.2100e-003	0.1135	1.0000e-003	0.1145	0.0303	9.3000e-004	0.0313		122.7023	122.7023	6.0300e-003		122.8530

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	10.00	10.00	0.00	45,864	45,864
Total	10.00	10.00	0.00	45,864	45,864

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	14.70	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.4496	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.4496**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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	0.1029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.4496**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Demler Egg Farm Manure Processing with employee trips only

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	495.89	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Annual

Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construciton provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT -

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project employee trips from 5 employees(No trips on Sunday)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year. 75kw*.80*16 hrs/day*365days * 3 Units = 1,051,200 kWH. Lighting is 3.2*16*365 = 18688

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilzer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00

tblLandUse	LotAcreage	0.00	3.32
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

2.0 Emissions Summary

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					
2021	0.1821	0.9989	0.8963	1.5600e-003	0.0481	0.0526	0.1007	0.0236	0.0494	0.0730	0.0000	135.8919	135.8919	0.0312	0.0000	136.6717
Maximum	**0.1821**	**0.9989**	**0.8963**	**1.5600e-003**	**0.0481**	**0.0526**	**0.1007**	**0.0236**	**0.0494**	**0.0730**	**0.0000**	**135.8919**	**135.8919**	**0.0312**	**0.0000**	**136.6717**

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					
2021	0.1137	0.7852	0.9701	1.5600e-003	0.0481	7.1900e-003	0.0553	0.0236	7.1900e-003	0.0308	0.0000	135.8918	135.8918	0.0312	0.0000	136.6716
Maximum	**0.1137**	**0.7852**	**0.9701**	**1.5600e-003**	**0.0481**	**7.1900e-003**	**0.0553**	**0.0236**	**7.1900e-003**	**0.0308**	**0.0000**	**135.8918**	**135.8918**	**0.0312**	**0.0000**	**136.6716**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**37.55**	**21.39**	**-8.22**	**0.00**	**0.00**	**86.34**	**45.11**	**0.00**	**85.45**	**57.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
4	5-1-2021	7-31-2021	0.4431	0.3119
5	8-1-2021	9-30-2021	0.4290	0.3324
		Highest	0.4431	0.3324

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
Total	**0.0854**	**0.0165**	**0.0495**	**1.9000e-004**	**0.0173**	**1.5000e-004**	**0.0174**	**4.6300e-003**	**1.4000e-004**	**4.7700e-003**	**0.0000**	**259.1494**	**259.1494**	**0.0106**	**1.9500e-003**	**259.9951**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
Total	**0.0854**	**0.0165**	**0.0495**	**1.9000e-004**	**0.0173**	**1.5000e-004**	**0.0174**	**4.6300e-003**	**1.4000e-004**	**4.7700e-003**	**0.0000**	**259.1494**	**259.1494**	**0.0106**	**1.9500e-003**	**259.9951**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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

Demler Egg Farm Manure Processing with employee trips only - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	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	3	8.00	0.00	25.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	75.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5500e-003	0.0369	0.0214	4.0000e-005		1.8900e-003	1.8900e-003		1.7400e-003	1.7400e-003	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
Total	**3.5500e-003**	**0.0369**	**0.0214**	**4.0000e-005**	**0.0151**	**1.8900e-003**	**0.0170**	**8.2800e-003**	**1.7400e-003**	**0.0100**	**0.0000**	**3.2413**	**3.2413**	**1.0500e-003**	**0.0000**	**3.2675**

3.2 Site Preparation - 2021

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	9.0000e-005	3.2600e-003	8.1000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9520	0.9520	9.0000e-005	0.0000	0.9542
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
Total	**1.9000e-004**	**3.3300e-003**	**1.5400e-003**	**1.0000e-005**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**1.3000e-004**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**1.1678**	**1.1678**	**1.0000e-004**	**0.0000**	**1.1701**

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					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0188	0.0230	4.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
Total	**9.0000e-004**	**0.0188**	**0.0230**	**4.0000e-005**	**0.0151**	**1.5000e-004**	**0.0152**	**8.2800e-003**	**1.5000e-004**	**8.4300e-003**	**0.0000**	**3.2413**	**3.2413**	**1.0500e-003**	**0.0000**	**3.2675**

3.2 Site Preparation - 2021

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	9.0000e-005	3.2600e-003	8.1000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9520	0.9520	9.0000e-005	0.0000	0.9542
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
Total	**1.9000e-004**	**3.3300e-003**	**1.5400e-003**	**1.0000e-005**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**1.3000e-004**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**1.1678**	**1.1678**	**1.0000e-004**	**0.0000**	**1.1701**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-003	0.0828	0.0413	9.0000e-005		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
Total	**7.5000e-003**	**0.0828**	**0.0413**	**9.0000e-005**	**0.0263**	**3.7700e-003**	**0.0300**	**0.0135**	**3.4700e-003**	**0.0170**	**0.0000**	**7.5145**	**7.5145**	**2.4300e-003**	**0.0000**	**7.5753**

3.3 Grading - 2021

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	2.8000e-004	9.7900e-003	2.4200e-003	3.0000e-005	6.4000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8561	2.8561	2.6000e-004	0.0000	2.8625
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
Total	**4.8000e-004**	**9.9400e-003**	**3.8700e-003**	**3.0000e-005**	**1.1400e-003**	**3.0000e-005**	**1.1700e-003**	**3.1000e-004**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**3.2875**	**3.2875**	**2.7000e-004**	**0.0000**	**3.2943**

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					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	0.0426	0.0509	9.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
Total	**2.0900e-003**	**0.0426**	**0.0509**	**9.0000e-005**	**0.0263**	**3.1000e-004**	**0.0266**	**0.0135**	**3.1000e-004**	**0.0138**	**0.0000**	**7.5145**	**7.5145**	**2.4300e-003**	**0.0000**	**7.5753**

3.3 Grading - 2021

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	2.8000e-004	9.7900e-003	2.4200e-003	3.0000e-005	6.4000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8561	2.8561	2.6000e-004	0.0000	2.8625
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
Total	**4.8000e-004**	**9.9400e-003**	**3.8700e-003**	**3.0000e-005**	**1.1400e-003**	**3.0000e-005**	**1.1700e-003**	**3.1000e-004**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**3.2875**	**3.2875**	**2.7000e-004**	**0.0000**	**3.2943**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0912	0.8367	0.7956	1.2900e-003		0.0460	0.0460		0.0433	0.0433	0.0000	111.1859	111.1859	0.0268	0.0000	111.8565
Total	**0.0912**	**0.8367**	**0.7956**	**1.2900e-003**		**0.0460**	**0.0460**		**0.0433**	**0.0433**	**0.0000**	**111.1859**	**111.1859**	**0.0268**	**0.0000**	**111.8565**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
Total	**2.0700e-003**	**0.0154**	**0.0160**	**8.0000e-005**	**5.0500e-003**	**6.0000e-005**	**5.1100e-003**	**1.3600e-003**	**6.0000e-005**	**1.4200e-003**	**0.0000**	**7.1000**	**7.1000**	**3.7000e-004**	**0.0000**	**7.1091**

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	0.0324	0.6829	0.8579	1.2900e-003		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	111.1858	111.1858	0.0268	0.0000	111.8564
Total	**0.0324**	**0.6829**	**0.8579**	**1.2900e-003**		**6.5100e-003**	**6.5100e-003**		**6.5100e-003**	**6.5100e-003**	**0.0000**	**111.1858**	**111.1858**	**0.0268**	**0.0000**	**111.8564**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
Total	**2.0700e-003**	**0.0154**	**0.0160**	**8.0000e-005**	**5.0500e-003**	**6.0000e-005**	**5.1100e-003**	**1.3600e-003**	**6.0000e-005**	**1.4200e-003**	**0.0000**	**7.1000**	**7.1000**	**3.7000e-004**	**0.0000**	**7.1091**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.0771**	**0.0137**	**0.0164**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.5 Architectural Coating - 2021

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	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
Total	**4.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0971**	**0.0971**	**0.0000**	**0.0000**	**0.0971**

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	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	0.0122	0.0165	3.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.0756**	**0.0122**	**0.0165**	**3.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.5 Architectural Coating - 2021

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	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
Total	**4.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0971**	**0.0971**	**0.0000**	**0.0000**	**0.0971**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281
Unmitigated	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	10.00	10.00	0.00	45,864	45,864
Total	10.00	10.00	0.00	45,864	45,864

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	14.70	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
Total		**240.6430**	**9.7100e-003**	**1.9400e-003**	**241.4641**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
Total		**240.6430**	**9.7100e-003**	**1.9400e-003**	**241.4641**

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	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0820**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0820**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9996	4.0000e-005	1.0000e-005	1.0030
Unmitigated	0.9996	4.0000e-005	1.0000e-005	1.0030

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
Total		**0.9996**	**4.0000e-005**	**1.0000e-005**	**1.0030**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
Total		**0.9996**	**4.0000e-005**	**1.0000e-005**	**1.0030**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT B

AERMOD - Unmitigated

1 AERMOD PRIME - (DATED 18081)

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

Run Began on 3/17/2019 at 20:53:10

```
** BREEZE AERMOD
** Trinity Consultants
** VERSION  8.1

CO STARTING
CO TITLEONE  Poultry Manure Processing 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  WGD3G000  AREAPOLY  521047.7  3659371.1  0
** SRCDESCR  Grading Area Source
SO SRCPARAM  WGD3G000  3.07E-07  3  14  1
SO AREAVERT  WGD3G000  521047.7 3659371.1  521048.5 3659238.9  521043.5 3659203.6  521035.9
3659195.1
SO AREAVERT  WGD3G000  521033.4 3659188.4  521054.4 3659185  521094 3659179.1  521115.9
3659178.3
SO AREAVERT  WGD3G000  521118.4 3659336.6  521116.7 3659349.2  521110 3659361  521102.4
3659371.1
SO AREAVERT  WGD3G000  521092.3 3659372  521047.7 3659371.1
SO SRCGROUP  ALL
SO FINISHED

RE STARTING
RE ELEVUNIT  METERS
RE DISCCART  520540.5  3658803.6  0  0
** SENSITIV
** RCPDESCR  R1
RE DISCCART  520768.7  3658953.7  0  0
** SENSITIV
** RCPDESCR  R2
RE DISCCART  520941.7  3658890.9  0  0
** SENSITIV
** RCPDESCR  R3
RE DISCCART  521397.2  3659342.6  0  0
** SENSITIV
** RCPDESCR  R4
RE DISCCART  521139.4  3659620.2  0  0
** SENSITIV
** RCPDESCR  R5
RE DISCCART  521326.1  3659832.9  0  0
** SENSITIV
** RCPDESCR  R6
RE FINISHED
```

```
ME STARTING
ME SURFFILE  "C:\Users\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.SFC"
** SURFFILE  "C:\Users\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.SFC"
ME PROFFILE  "C:\Users\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.PFL"
** PROFFILE  "C:\Users\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\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 FINISHED

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


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

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_19
84",6378137,298.257223563],TOWGS84[0,0,0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.017
4532925199433]],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_18081_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            3 Warning Message(s)
 A Total of            0 Informational Message(s)


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


    ********   WARNING MESSAGES   ********
 ME W186      63       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.40
 MX W403      63       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA
Data
 MX W402      63       PFLCNV: Turbulence data being used with ADJ_U* w/o DFAULT
Option

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

 *** AERMOD - VERSION  18081 ***   ***  Poultry Manure Processing Unmitigated
                ***        03/17/19
 *** AERMET - VERSION  15181 ***   ***
                ***        20:53:10

                           PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data

                                            ***     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 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

**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 =   3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

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

                                                *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA BASE   RELEASE NUMBER   INIT.
 URBAN EMISSION RATE

```
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.     SZ
 SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)            (METERS)
           BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

 WGD3G000         0   0.30700E-06  521047.7 3659371.1     0.0     3.00      14         1.00
   NO
```

```
 *** AERMOD - VERSION  18081 ***   ***  Poultry Manure Processing Unmitigated
              ***       03/17/19
 *** AERMET - VERSION  15181 ***   ***
             ***       20:53:10

                         PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data


                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

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


  ALL        WGD3G000    ,
```

```
 *** AERMOD - VERSION  18081 ***   ***  Poultry Manure Processing Unmitigated
              ***       03/17/19
 *** AERMET - VERSION  15181 ***   ***
             ***       20:53:10

                         PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data

                                           *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING
***
                                                            (1=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1
1 1 1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1
1 1 1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1
1 1 1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1
1 1 1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1
1 1 1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1
1 1 1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1
1 1 1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
INCLUDED IN THE DATA FILE.
```

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

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

Surface file: C:\Users\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.SFC
Met Version: 15181
Profile file: C:\Users\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.PFL

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  18081 ***   ***  Poultry Manure Processing Unmitigated
                ***        03/17/19
 *** AERMET - VERSION  15181 ***   ***
              ***        20:53:10

                          PAGE   6
 *** 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):     WGD3G000    ,

                                          *** 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
```

- -
520540.50 3658803.60 0.12020 520768.70 3658953.70 0.23268
520941.70 3658890.90 0.15145 521397.20 3659342.60 0.24286
521139.40 3659620.20 0.06880 521326.10 3659832.90 0.02874

*** 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)	NETWORK OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.24286	AT (521397.20, 3659342.60, 0.00, 0.00, 0.00)	SR	
	2ND HIGHEST VALUE IS	0.23268	AT (520768.70, 3658953.70, 0.00, 0.00, 0.00)	SR	
	3RD HIGHEST VALUE IS	0.15145	AT (520941.70, 3658890.90, 0.00, 0.00, 0.00)	SR	
	4TH HIGHEST VALUE IS	0.12020	AT (520540.50, 3658803.60, 0.00, 0.00, 0.00)	SR	
	5TH HIGHEST VALUE IS	0.06880	AT (521139.40, 3659620.20, 0.00, 0.00, 0.00)	SR	
	6TH HIGHEST VALUE IS	0.02874	AT (521326.10, 3659832.90, 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

*** 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   3 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   63   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.40
MX W403   63   PFLCNV: Turbulence data is being used w/o ADJ_U* option   SigA
Data
MX W402   63   PFLCNV: Turbulence data being used with ADJ_U* w/o DFAULT
Option

****
*** AERMOD Finishes Successfully ***
****

ATTACHMENT C

AERMOD - Mitigated

AERMOD PRIME - (DATED 18081)

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

Run Began on 3/17/2019 at 20:52:00

```
** BREEZE AERMOD
** Trinity Consultants
** VERSION  8.1

CO STARTING
CO TITLEONE  Poultry Manure Processing 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  WGD3G000  AREAPOLY  521047.7  3659371.1  0
** SRCDESCR  Grading Area Source
SO SRCPARAM  WGD3G000  3.7E-08  3  14  1
SO AREAVERT  WGD3G000  521047.7 3659371.1  521048.5 3659238.9  521043.5 3659203.6  521035.9
3659195.1
SO AREAVERT  WGD3G000  521033.4 3659188.4  521054.4 3659185  521094 3659179.1  521115.9
3659178.3
SO AREAVERT  WGD3G000  521118.4 3659336.6  521116.7 3659349.2  521110 3659361  521102.4
3659371.1
SO AREAVERT  WGD3G000  521092.3 3659372  521047.7 3659371.1
SO SRCGROUP  ALL
SO FINISHED

RE STARTING
RE ELEVUNIT  METERS
RE DISCCART  520540.5  3658803.6  0  0
** SENSITIV
** RCPDESCR  R1
RE DISCCART  520768.7  3658953.7  0  0
** SENSITIV
** RCPDESCR  R2
RE DISCCART  520941.7  3658890.9  0  0
** SENSITIV
** RCPDESCR  R3
RE DISCCART  521397.2  3659342.6  0  0
** SENSITIV
** RCPDESCR  R4
RE DISCCART  521139.4  3659620.2  0  0
** SENSITIV
** RCPDESCR  R5
RE DISCCART  521326.1  3659832.9  0  0
** SENSITIV
** RCPDESCR  R6
RE FINISHED
```

```
ME STARTING
ME SURFFILE  "C:\USERS\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.SFC"
** SURFFILE  "C:\USERS\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.SFC"
ME PROFFILE  "C:\USERS\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.PFL"
** PROFFILE  "C:\USERS\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\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 FINISHED

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


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

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_19
84",6378137,298.257223563],TOWGS84[0,0,0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.017
4532925199433]],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_18081_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            3 Warning Message(s)
 A Total of            0 Informational Message(s)


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


    ********   WARNING MESSAGES   ********
 ME W186      63       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.40
 MX W403      63       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA
Data
 MX W402      63       PFLCNV: Turbulence data being used with ADJ_U* w/o DFAULT
Option

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

↟ *** AERMOD - VERSION  18081 ***   ***  Poultry Manure Processing Unmitigated
                ***        03/17/19
 *** AERMET - VERSION  15181 ***   ***
                ***        20:52:00

                           PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  SigA Data

                                            ***     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 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

**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 =   3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

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

                                                *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA BASE   RELEASE NUMBER   INIT.
 URBAN EMISSION RATE

```
   SOURCE       PART.  (GRAMS/SEC       X        Y       ELEV.    HEIGHT  OF VERTS.     SZ
 SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)            (METERS)
            BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

 WGD3G000         0   0.37000E-07  521047.7 3659371.1     0.0     3.00      14          1.00
   NO
```



```
                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

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


  ALL        WGD3G000    ,
```



```
                                           *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING
***
                                                              (1=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1
1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1
1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1
1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1
1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1
1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1
1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1
1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
INCLUDED IN THE DATA FILE.
```

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

Surface file: C:\USERS\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.SFC
Met Version: 15181
Profile file: C:\USERS\XEONRT\AMAZON~1\LDN\METDAT~1\ESCOND~1\ESCONDIDO-2012-V15181.PFL

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  18081 ***   ***  Poultry Manure Processing Unmitigated
                ***        03/17/19
 *** AERMET - VERSION  15181 ***   ***
              ***        20:52:00

                          PAGE   6
 *** 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):     WGD3G000    ,

                                          *** 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
```

- -
520540.50 3658803.60 0.01449 520768.70 3658953.70
0.02804
520941.70 3658890.90 0.01825 521397.20 3659342.60
0.02927
521139.40 3659620.20 0.00829 521326.10 3659832.90
0.00346

*** 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)	NETWORK OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.02927	AT (521397.20, 3659342.60, 0.00, 0.00, 0.00)	SR	
	2ND HIGHEST VALUE IS	0.02804	AT (520768.70, 3658953.70, 0.00, 0.00, 0.00)	SR	
	3RD HIGHEST VALUE IS	0.01825	AT (520941.70, 3658890.90, 0.00, 0.00, 0.00)	SR	
	4TH HIGHEST VALUE IS	0.01449	AT (520540.50, 3658803.60, 0.00, 0.00, 0.00)	SR	
	5TH HIGHEST VALUE IS	0.00829	AT (521139.40, 3659620.20, 0.00, 0.00, 0.00)	SR	
	6TH HIGHEST VALUE IS	0.00346	AT (521326.10, 3659832.90, 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

*** 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   3 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   63   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.40
MX W403   63   PFLCNV: Turbulence data is being used w/o ADJ_U* option   SigA
Data
MX W402   63   PFLCNV: Turbulence data being used with ADJ_U* w/o DFAULT
Option

****
*** AERMOD Finishes Successfully ***
****

ATTACHMENT D

Construction Health Risk Calculations - Unmitigated and Mitigated

Air Quality Health Risk Calculations (Worst-Case)
Demler Egg Farm Manure Processing Unmitigated

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.05879**
	Construction Start	**8/1/2020**
	Construction Complete	**2/1/2021**
	Days	**184**
	Construction Emission per day (lb/day)	**0.639021739**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.003350426**
	Project Site Size (Acres)	**2.7**
	Project Site Size (meters^2)	**10926.51234**
	Length of Smalles Side (meters)	**104.5299591**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**3.07E-07**
From AERMOD	Concentration Annual (Ug/M^3)	**0.24286**

	Days	Days to years					
Duration	458	1.254794521					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.24286	0.24286	0.24286	0.24286	0.24286	0.24286	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00008417	0.00025413	0.00020074	0.00017369	0.00007810	0.00006761	
Construction Days	458	1.254794521					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.254794521	1.254794521	1.254794521	1.254794521	1.254794521	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	2.81053E-06	4.25932E-05	8.54971E-06	7.39783E-06	1.12425E-06	9.7323E-07	
Risk per million Exposed	2.810528575	42.59316435	8.54971002	7.397832711	1.124248067	0.97322967	
Cancer Risk Per Million 9-years	53.95						
Cancer Risk Per Million 30-years	53.93						
Cancer Risk Per Million 70-years	**53.77**						

Air Quality Health Risk Calculations (Worst-Case)
Demler Egg Farm Manure Processing Mitigated

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.00709**
	Construction Start	**8/1/2020**
	Construction Complete	**2/1/2021**
	Days	**184**
	Construction Emission per day (lb/day)	**0.077065217**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.000404057**
	Project Site Size (Acres)	**2.7**
	Project Site Size (meters^2)	**10926.51234**
	Length of Smalles Side (meters)	**104.5299591**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**3.70E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.02927**

	Days	Days to years					
Duration	458	1.254794521					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.02927	0.02927	0.02927	0.02927	0.02927	0.02927	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00001014	0.00003063	0.00002419	0.00002093	0.00000941	0.00000815	
Construction Days	458	1.254794521					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.254794521	1.254794521	1.254794521	1.254794521	1.254794521	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	3.38731E-07	5.13342E-06	1.03043E-06	8.91602E-07	1.35497E-07	1.17296E-07	
Risk per million Exposed	0.338730838	5.133418103	1.030429104	0.891602419	0.135496751	0.117295695	
Cancer Risk Per Million 9-years	6.50						
Cancer Risk Per Million 30-years	6.50						
Cancer Risk Per Million 70-years	**6.48**						