

APPENDIX B – AIR QUALITY ASSESSMENT HUDSON RANCH MINERAL RECOVERY

A solid blue horizontal bar spans the width of the page at the bottom.

AIR QUALITY ASSESSMENT

Hudson Ranch Mineral Recovery County of Imperial

Prepared for:

**Energy Source LLC
409 W. McDonald Rd.
Calipatria, CA 92233**

Prepared by:

Ldn Consulting, Inc.
**42428 Chisolm Trail
Murrieta, CA 92562**

June 17, 2021

TABLE OF CONTENTS

TABLE OF CONTENTS	II
LIST OF FIGURES	III
LIST OF TABLES	III
APPENDIX	III
LIST OF COMMON ACRONYMS	IV
EXECUTIVE SUMMARY	V
1.0 INTRODUCTION	1
1.1 PURPOSE OF THIS STUDY	1
1.2 PROJECT LOCATION	1
1.3 PROJECT DESCRIPTION	1
2.0 EXISTING ENVIRONMENTAL SETTING	9
2.1 EXISTING SETTING	9
2.2 CLIMATE AND METEOROLOGY	9
2.3 REGULATORY STANDARDS.....	9
2.3.1 FEDERAL STANDARDS AND DEFINITIONS	9
2.3.2 STATE STANDARDS AND DEFINITIONS.....	11
2.3.3 REGIONAL STANDARDS.....	13
2.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) SIGNIFICANCE THRESHOLDS.....	14
2.5 ICAPCD AIR QUALITY IMPACT ASSESSMENT SCREENING THRESHOLDS (CEQA).....	14
2.6 LOCAL AIR QUALITY.....	17
3.0 METHODOLOGY	18
3.1 CONSTRUCTION EMISSIONS CALCULATIONS.....	18
3.2 CONSTRUCTION ASSUMPTIONS.....	22
3.3 OPERATIONAL EMISSIONS.....	23
3.4 MANUFACTURING AND SHIPPING AND RECEIVING OPERATIONAL EMISSIONS.....	24
3.5 ODOR IMPACTS (ONSITE)	27
4.0 FINDINGS	28
4.1 CONSTRUCTION FINDINGS	28
4.2 CONSTRUCTION HEALTH RISKS	29
4.3 OPERATIONAL FINDINGS.....	29
4.4 OPERATIONAL HEALTH RISKS.....	31
4.5 CUMULATIVE IMPACT FINDINGS.....	33
4.6 CONCLUSION OF FINDINGS.....	33
5.0 REFERENCES	36
6.0 CERTIFICATIONS	37

List of Figures

FIGURE 1-A: PROJECT VICINITY MAP	2
FIGURE 1-B: PROPOSED PROJECT SITE LAYOUT	3
FIGURE 3-A: CONSTRUCTION HEALTH RISK MODEL SETUP.....	21
FIGURE 3-B: AERMOD MODELING SOURCES AND RECEPTOR - ONSITE OPERATIONS	26
FIGURE 4-A: PM10–TRUCK OPERATIONS STARTING/IDLING/MOVEMENT AERMOD PLOT	32

List of Tables

TABLE 2.1: AMBIENT AIR QUALITY STANDARDS	12
TABLE 2.2: IMPERIAL COUNTY AIR BASIN ATTAINMENT STATUS BY POLLUTANT	14
TABLE 2.3: SCREENING THRESHOLD FOR CRITERIA POLLUTANTS	15
TABLE 2.4: SSAB THREE-YEAR AMBIENT AIR QUALITY DATA	17
TABLE 3.1: EXPECTED CONSTRUCTION EQUIPMENT	22
TABLE 3.2: OPERATIONAL TRUCK EMISSION RATES	25
TABLE 3.3: EXPECTED PM ₁₀ TRUCK OPERATIONS EMISSIONS CALCULATION	27
TABLE 4.1: EXPECTED CONSTRUCTION EMISSIONS SUMMARY – POUNDS PER DAY	28
TABLE 4.2: EXPECTED DAILY POLLUTANT GENERATION	30
TABLE 4.3: EXPECTED DAILY POLLUTANT GENERATION	30

Appendix

CALEEMOD	38
AERMOD FOR ONSITE CONSTRUCTION PM ₁₀ - DPM	162
CONSTRUCTION HEALTH RISK CALCULATIONS.....	170
AERMOD ONSITE AND OFFSITE TRUCK OPERATIONS.....	172
ONSITE AND OFFSITE TRUCK OPERATIONS HEALTH RISK ANALYSIS	232

LIST OF COMMON ACRONYMS

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

EXECUTIVE SUMMARY

This air quality analysis has been completed to determine impacts, which may be associated with the construction or operation of the proposed Hudson Ranch Mineral Recovery Project is located on a 37-acre project site located within the County of Imperial near Niland, CA.

During construction, the proposed Project would not be expected to produce significant air quality impacts under the California Environmental Quality Act or exceed thresholds of significance established by the Imperial County Air Pollution Control District (ICAPCD).

The proposed Project would not generate significant operational impacts offsite either during construction or during post construction operations.

Finally, the project would not be expected to generate offensive objective odors during either the construction or operation of the project.

Per the requirements of ICAPCD, the project would be required to implement standard mitigation measures for both construction and operations and are identified below:

Standard Construction Site Design Measures (SDM):

1. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.
2. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
3. Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.
4. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Standard Operations Site Design Measures:

1. Provide on-site bicycle lockers and/or racks.
2. Provide on-site eating, refrigeration and food vending facilities to reduce lunchtime trips.
5. Provide shower and locker facilities to encourage employees to bike and/or walk to work.
6. Provide for paving a minimum of 100 feet from the property line for commercial driveways that access County paved roads as per County Standard Commercial Driveway Detail 410B (formerly SW-131A). It should be noted that the project would also pave McDonald Road from HWY 111 to English Road.

3. Measures which meet mandatory, prescriptive and/or performance measures as required by Title 24.

The project will include a number of design features during construction as follows:

1. Diesel equipment required which does not satisfy SDM 1 shall be rated Tier 4 per EPA requirements. All modeling assumes the use of this equipment and is therefore a condition to the project.
2. Access to the site will be via HWY 111 and McDonald Rd. All equipment workers, vendors and haul trucks will be required to utilize these roadways.
3. Operational On-Road trips will not operate on unpaved dirt roads.
4. An agreement between County of Imperial Public Works and the applicant has been established requiring the applicant to improve a 2-mile section of the unpaved portion of McDonald Road adjacent to the site by installing a 12-18" thick engineered Class II base section. In addition, at the request of the County, the applicant would utilize the improved section during construction and would wet the site continuously during construction activities. The road would be immediately paved after construction prior to operations of the plant to avoid damaging a new asphalt section.
5. During construction of the project, the project would be required to maintain daily dust suppression at the 2-mile section of McDonald Road using a water truck operating continuously while vehicles are using it.
6. The project will provide wheel shakers at both the exit of the construction site to minimize dust being tracked off the project site and onto the roadways.

An operational health risk analysis was performed which referenced the nearest residential receptor approximately 1 mile from the project site. Based on that analysis, less than significant PM₁₀ exhaust health risks would be expected from both onsite and offsite diesel truck operations from the project.

The proposed Project is consistent with the existing land use zoning designation which is designated as industrial. Also, since no direct or cumulative impacts are expected, the proposed project would be consistent with the AQMP and SIP. Given this, less than significant cumulative operational impacts would be expected.

1.0 INTRODUCTION

1.1 Purpose of this Study

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

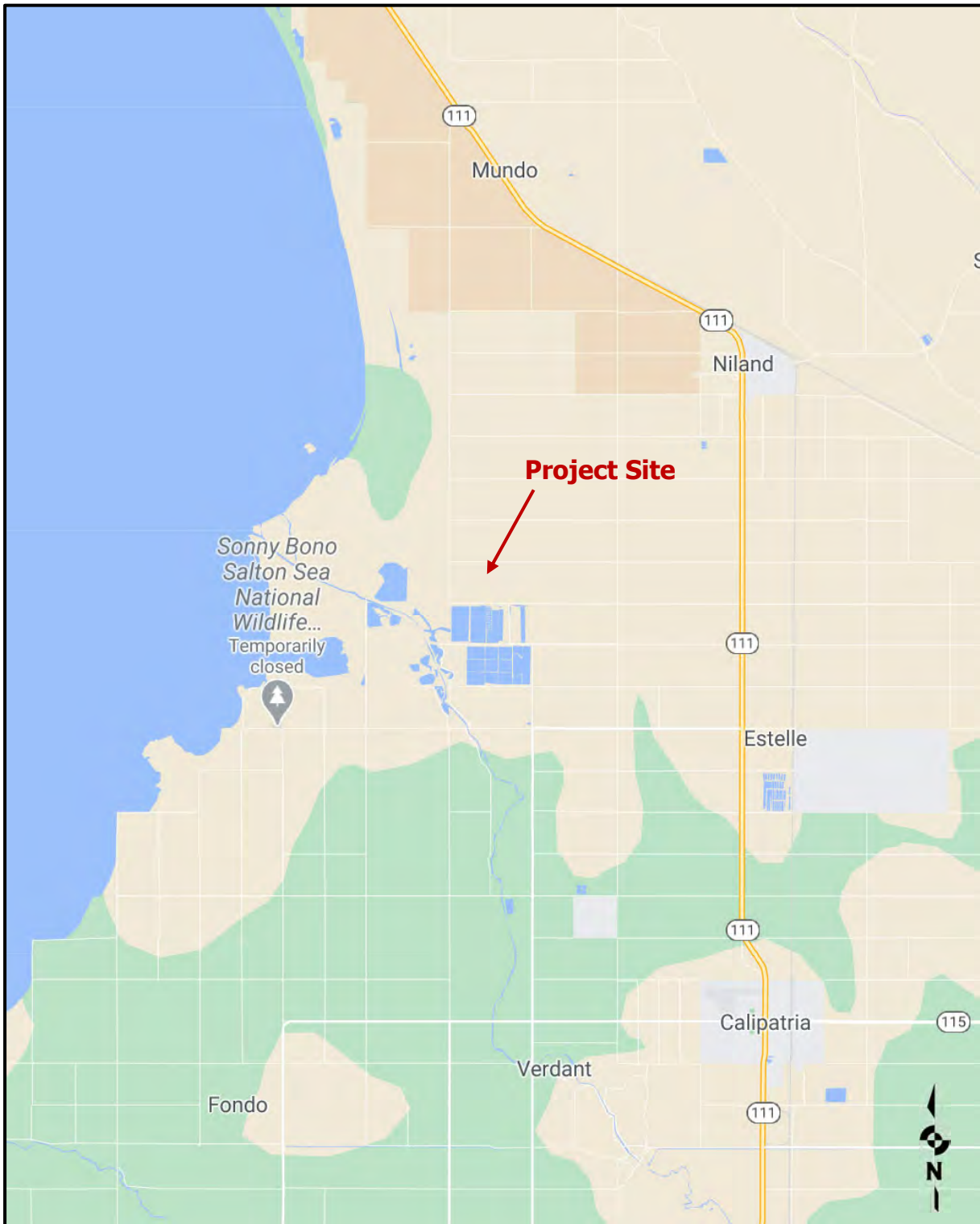
1.2 Project Location

The project applicant, Energy Source Minerals LLC (E S Minerals), seeks to construct a mineral recovery facility using geothermal brine from the neighboring Hudson Ranch I Geothermal Power Plant (HR1). The Project facilities will be located in the north half of Section 24 in Township 11 South, Range 13 East, San Bernardino Base and Meridian (SBB&M) as shown on the USGS Niland Quadrangle topographic map within the County of Imperial California. The site is located about 3 miles west-southwest of the community of Niland near the southwest corner of the existing HR1 power plant site, on Imperial County parcel APN 020-100-044 (about 65.12 acres). The proposed ATLiS plant site and associated plant facilities would be built within an existing approximately 37-acre project area, with the addition of the 15 acres located at the southeast corner of Davis Rd. and McDonald Rd. Primary highway access to the proposed plant site will be via State Highway 111. A general project vicinity map is shown in Figure 1–A.

1.3 Project Description

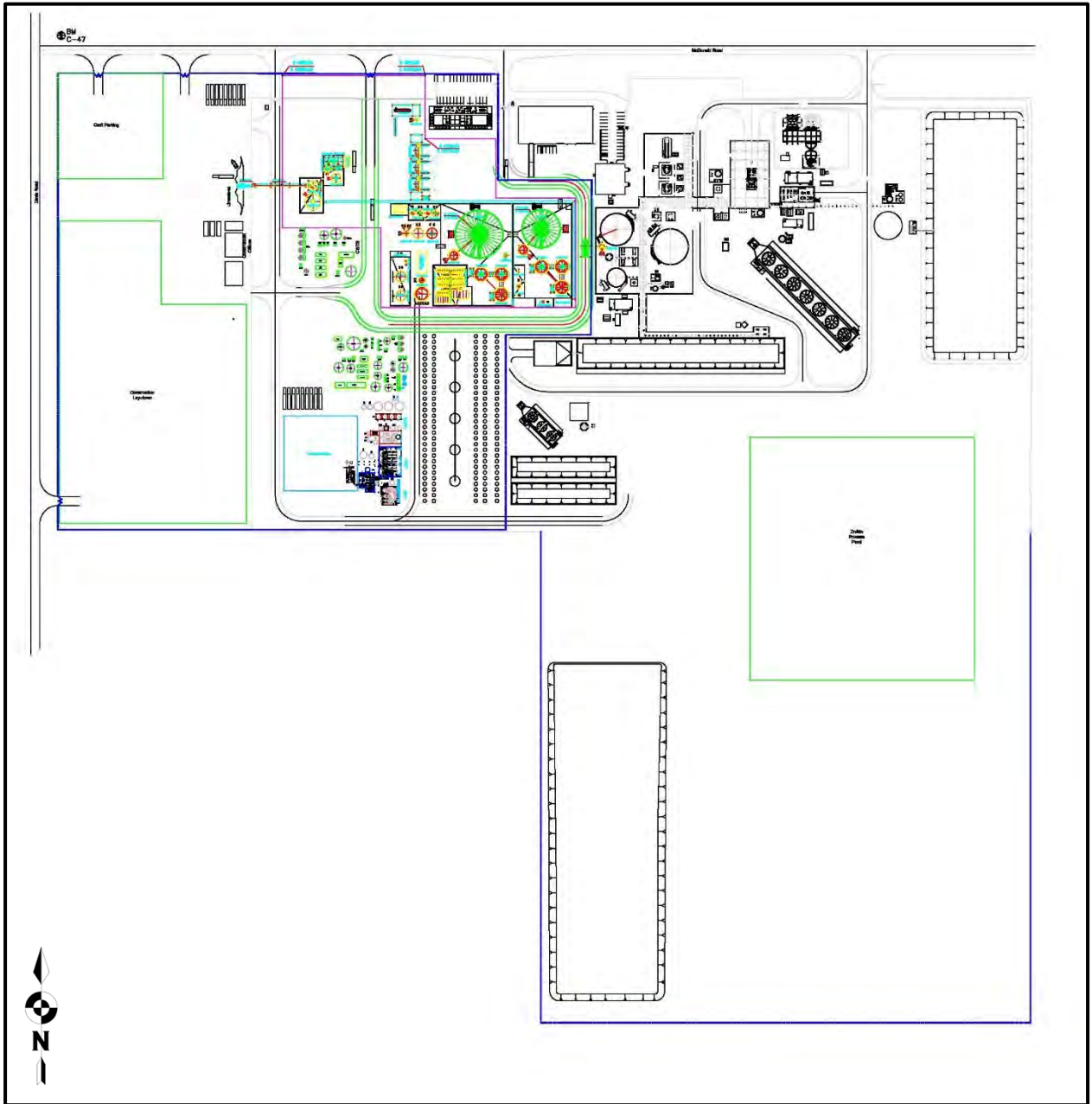
The facility will process geothermal brine from HR1 to produce lithium hydroxide (LiOH), zinc (Zn), and manganese (Mn) products which will be sold commercially. The proposed Project seeks to construct and operate a facility capable of extracting and producing viable lithium (Li), Mn and Zn and other commercially viable substances from geothermal brine. The facility will include a brine supply and return pipeline system and other associated interconnection facilities, infrastructure and systems linking to the HR1 power plant as well as a shipping and receiving area. Additionally, the project would construct a primary access road from McDonald Road as well as an emergency access entrance from Davis Road. Also, the project will pave McDonald Road from SR-111 to English Road. Finally, a laydown yard will be constructed with temporary offices which will be utilized during construction. The project site plan is shown in Figure 1–B.

Figure 1-A: Project Vicinity Map



Source: (Google, 2020)

Figure 1-B: Proposed Project Site Layout



Source: (Energy Source LLC, 2020)

Based on discussions with the Project applicant, the total combined facility area is not known at this time but would be expected to be no more than 100,000 square Feet (SF) also, paving quantities are not known at this time but would be expected to be less than 10 acres of asphalt and includes paving McDonald Road from SR-111 to English Road.

The project will include a number of design features during construction as follows:

1. Diesel equipment required which does not satisfy SDM 1 shall be rated Tier 4 per EPA requirements. All modeling assumes the use of this equipment and is therefore a condition to the project.
2. Access to the site will be via HWY 111 and McDonald Rd. All equipment workers, vendors and haul trucks will be required to utilize these roadways. On-Road trips will not operate on unpaved dirt roads.
3. An agreement between County of Imperial Public Works and the applicant has been established requiring the applicant to improve a 2-mile section of an unpaved portion of McDonald Road adjacent to the site by installing a 12-18" thick engineered Class II base section. In addition, at the request of the County, the applicant would utilize the improved section during construction and would wet the site continuously during construction activities. The road would be immediately paved after construction prior to operations of the plant to avoid damaging a new asphalt section.
4. During construction of the project, the project would be required to maintain daily dust suppression at the 2-mile section of McDonald Road using a water truck operating continuously while vehicles are using it.
5. The project will provide wheel shakers at both the exit of the construction site to minimize dust being tracked off the project site and onto the roadways.

The ATLiS plant site will include construction of the following buildings and structures:

- Plant offices (which will house offices and meeting rooms) [Note: offices for both plants may be incorporated into one building].
- Operations and employee facilities (which will house offices for supervisors, meeting rooms, breakroom/lunchroom, locker/shower rooms); [Note: these may all be in one building with the main offices]
- Maintenance shop, materials warehouse (which will house plant maintenance equipment and supplies, and shops such as machine, paint, welding and electronic);
- Materials warehouse (which will store equipment, reagents, etc.);
- Electrical building(s) (which will house motor control centers, electric power switchgear and metering to provide power for plant operations);
- Emergency generator building;
- Two reagent storage and preparation buildings;
- Chemical laboratory building (which will contain a wet chemistry laboratory and analytical instruments for analysis of in-process and finished products);

- Filter press sheds (which will house filter presses. Li product production building (which will house the proprietary technology for manufacturing the lithium carbonate and lithium hydroxide products);
- Li product handling, packaging and warehouse buildings (which will house the filtration and drying equipment for the Li products and bagging and palletizing of finished products);
- Manganese product handling, production, and warehouse building (which will house the filtration and drying equipment for the Mn product and bagging and palletizing of finished products);
- Zn product handling, production, and warehouse building (which will house the filtration and drying equipment for the Zn product and bagging and palletizing and storage of finished products);
- Calcium oxide (CaO) silo and slacker;
- Limestone stockpile and solution tanks
- HCL offloading and storage tank(s)
- Gate (guard) house; and
- Cooling tower
- The sewage from this plant will be processed by the HR 1 sewer treatment plant, hence no further permitting is required.

Production Plant Operations

The ATLiS plant will utilize post-secondary clarifier brine produced from the geothermal fluid management activities on the neighboring HR1 power plant site as the resource process stream for the commercial production of LiOH, Zn and Mn products.

Impurity Removal

Post heat extraction geothermal brine from the secondary clarifier of the HR1 power plant site will be transported via pipeline to the impurity removal process area on the ATLiS plant site. A nominal 7,000 gallons per minute (gpm) of the brine will be processed by the facility. This process rate is used as the basis for the estimates provided throughout this Project description, but the actual rate of brine eventually processed on the site will be optimized to take advantage of the available facilities on the HR1 and ATLiS plant sites.

Iron (Fe) and silica (SiO₂) will be removed from the brine followed by the removal of the Mn and Zn in a two-stage process. The separated Fe-SiO₂ material, and the Mn-Zn material will be dewatered in the Filter Press sheds. The mineral depleted brine will then be transported via pipeline to the Li Extraction process area.

The separated Fe-SiO₂ material will be initially managed as a waste stream. The waste material will be collected and analyzed in conformance with appropriate laboratory testing

protocols to ensure that it is handled and disposed of in an appropriate manner. If and when in the future, opportunities exist to use this material, ATLiS plans to market iron-silica material as an additional product(s) to be shipped to a third party(ies) for use in other industrial processes. Based on average production rates at the target nominal process rate of 7,000 gpm, approximately 136,200 metric tons of iron-silica material will be produced annually.

Lithium Chloride Extraction

The treated brine will be fed to a Li extraction process located within the Li Extraction process area on the ATLiS plant site. This area will be outside on a concrete pad. The area will contain proprietary Li extraction media. Li from the brine will be retained on the extraction media. A lithium chloride (LiCl) product stream will be produced from the extraction process. The LiCl will be transported via pipeline from the Li Extraction area into the Li Purification process area. Impurities will be removed from the LiCl product stream and handled as nonhazardous waste. The purified LiCl will then be concentrated and transported via pipeline to a Li Product Production Building where the materials will be processed into a usable product which will consist of a packaged palletized unit ready of shipping.

The dried Li products will be packaged, palletized, staged, and loaded into trucks for distribution in the Li Product Handling, Production and Warehouse buildings. The dried Li products will be loaded into bulk bags in a bagging station. Packaging is expected to be 1,000 kg super sacks.

Extraction of Zink and Manganese

Zn/Mn filter cake will be acid leached, separated and purified int a two-part solvent extraction process. The separated steams will each then be dried and packaged for further processing by others.

Manganese Extraction and Processing

The SiO₂-, -Fe -depleted brine from the impurity removal process will be transported to the Mn Extraction and Production Area. Mn will be precipitated from the brine into Mn oxides/hydroxides by adding reagents, then dewatered in filter presses into wet cake product. The products will be transported to the Mn Product Handling, Production and Warehouse building for further handling, packaging, and offsite shipment to market.

Product Shipping to Offsite Markets

The ATLiS plant may produce multiple products for offsite shipment to market by truck. The average annual amount of product shipped out of the plant is estimated at 19,000 metric tons of Li product 10,000 to 20,000 metric tons of Zn product(s), and up to 60,000 metric tons of Mn product(s). Products will be transported by freight truck on existing roadways to shipping distribution point(s). Other products of the production operations may be generated by the proprietary technology on the plant site and would also be shipped offsite to market by truck.

Air Quality Emissions from onsite equipment operations

Small quantities of criteria air pollutants, criteria air pollutant precursors and hazardous air pollutants would be released into the atmosphere from the ATLiS plant extraction, processing and packaging equipment during normal plant operations. Small quantities of diesel particulate matter (DPM) emissions would also be released to the atmosphere from the emergency diesel engines during testing and any emergency operations. Testing operations are required each year. Based on historic testing at the HR 1, it is expected that each unit will have 50 hours runtime each year for testing and maintenance.

A Permit to Construct and a Permit to Operate would be obtained, as required by the ICAPCD, for the facility stationary air pollutant emission sources and air pollutant control equipment. Warehouse/yard vehicles (forklifts and manlift) would electric powered to minimize particulate emissions from these sources though the project will have two propane forklifts each being less than 50 horsepower.

The following paragraphs describe the principal operational emission sources, abatement equipment and emission control methods that will be incorporated into the ATLiS plant and operations.

Cooling Tower: The ATLiS plant will utilize a small cooling tower that will operate at a relatively low circulation rate. The cooling tower will be designed and operated to minimize particulate emissions. Dissolved solids in the circulating cooling water would be released to the environment as particulate emissions via "drift" (small water droplets that become entrained in the air stream leaving the cooling tower). Drift eliminators are designed to capture the water droplets in the cooling tower air stream and prevent their escape by causing the droplets to change direction, lose velocity and fall back into the circulating cooling water. Particulate emissions from the ATLiS cooling tower will be minimized by maintaining a low total dissolved solids (TDS) concentration in the circulating water by removing a slipstream of the higher TDS circulating cooling water as blowdown and replacing it with the lower TDS canal water; and by controlling cooling tower drift losses by using high efficiency drift eliminators, which are

considered best available control technology (BACT) for cooling tower drift. The cooling tower blowdown will be used within the process dilution water. Cooling tower particulate emissions are estimated at 4.37 lbs/day and 0.80 tons/yr.

Operating Equipment and Emission Abatement: Other plant operating equipment will also be designed and operated to minimize particulate and other air pollutant emissions. Small quantities of particulates will be released from the loading and unloading of the dry materials in open areas, as well as chemical storage silos and tanks; and the drying, transfer and packaging of the Li, and Zn/Mn products.

Drying, transfer and packaging the lithium and zinc/manganese products would create small amounts of particulate matter which, in each case, would be collected by a wet scrubber, baghouse or other dust collector to prevent the loss of product, as well as to minimize particulate emissions to the atmosphere. The estimated controlled particulate emissions from these production processes are 0.97 lbs./day and 0.17 tons/year. The Li Product Handling Buildings' and Packaging and Warehouse Buildings' air will also be filtered and operated with a negative pressure to further prevent dust emissions from these operations. As an alternative Nitrogen Gas may be used to create a positive pressure system.

The loading of bulk dry reagent chemicals into storage silos or tanks is typically done pneumatically, which can release particulate matter into the atmosphere. These silo or tank loading particulate emissions would be controlled using fabric filter units called "bin vents," which are typically installed on top of silos, or other dust collectors to prevent the loss of reagent, as well as to minimize particulate emissions to the atmosphere. Bin vent fans induce a draft which directs any particulate emissions to the fabric filter. Dust collected on the filters or the other types of dust collectors is discharged back into the appropriate silo. Bulk dry chemicals removed from the silos or tanks are discharged into wet processes which would not result in particulate emissions. As a group, the emissions from the loading of the bulk dry reagent from open areas and from silos and tanks is estimated at 0.07 lbs./day and 0.01 tons/year.

Combined, the project operations from the mineral extraction processes from the existing geothermal brine will produce 5.41 lb/day of particulate matter and 0.98 tons/year.

Furthermore, the extraction process will require the use of concentrated liquid Hydrochloric Acid. Due to the offload operations, the project would produce HCl vapor emissions from the storage tank(s). Scrubbers will be installed on the storage tanks to control HCl vapor emissions from the storage tank though it is estimated that roughly 12.5lbs/day and 3.72 tons/year or 7,440 pounds per year would evaporate and become an aerosol form of Hydrochloric Acid otherwise known as Hydrogen Chloride.

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The location of the ATLiS project is on the existing HR 1 site which was previously permitted for the Geothermal Plant. The site is zoned manufacturing (medium industrial) (M2G-PE), and is located entirely within the existing Salton Sea Geothermal Overlay Zone. In addition to the actual power plant, the rest of the land has been used for lay down areas, storage areas and storm water management. The only additional land that will be included is an approximate 15-acre parcel located at the southeast corner of Davis Rd. and McDonald Rd. This 15-acre site has been vacant for several decades and was previously used for geothermal testing.

To the west of the site and west of Davis Rd. is generally IID owned vacant marsh land adjoining the Salton Sea. To the north of the site and north of McDonald Rd. is vacant land that that now is mostly used for duck hunting clubs and the location of the production and injection wells for HR 1. To the south is vacant land that has never been in any production and is also the site of numerous "mud-pots". The nearest residential unit is roughly one mile north of the proposed project's northern property line.

2.2 Climate and Meteorology

Climate within the SSAB experiences mild and dry winters with daytime temperatures ranging from 65 to 75 °F, extremely hot summers with daytime temperatures ranging from 104 to 115 °F, and very little rain. Imperial County usually receives approximately three inches of rain per year mostly occurring in late summer or midwinter. Summer weather patterns are dominated by intense heat induction low-pressure areas over the interior desert. The flat terrain of the Imperial Valley and the strong temperature differentials created by intense solar heating produce moderate winds and deep thermal convection.

The general wind speeds in the area are less than 10 mph, but occasionally experience winds speeds of greater than 30 mph during the months of April and May. Statistics reveal that prevailing winds blow from the northwest-northeast; a secondary trend of wind direction from the southeast is also evident.

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

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

the act included the development of national ambient air quality standards (NAAQS) for major air pollutants.

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

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

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

6. **Sulfur Dioxide (SO₂):** *is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO₂ is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO₂ exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO₂ results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.*

The project will utilize Liquid Hydrochloric Acid and has indicated that some of the liquid hydrochloric Acid may be converted to the aerosol form (Hydrogen Chloride). Release of hydrogen chloride must comply with Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (US EPA, 2012) requires certain facilities manufacturing, processing, or otherwise using listed toxic chemicals to report their environmental releases of such chemicals annually. Thresholds are specified amounts of toxic chemicals manufactured, processed, or otherwise used during the calendar year that trigger reporting requirements. Reporting is required for hydrochloric acid aerosols if the following thresholds are exceeded.

1. *If a facility manufactures or imports 25,000 pounds of hydrochloric acid aerosols over the calendar year.*
2. *If a facility processes 25,000 pounds of hydrochloric acid aerosols over the calendar year.*
3. *If a facility otherwise uses 10,000 pounds of hydrochloric acid aerosols over the calendar year.*

Acute (short-term) inhalation exposure to Hydrogen Chloride may cause eye, nose, and respiratory tract irritation and inflammation and pulmonary edema in humans. Acute oral exposure may cause corrosion of the mucous membranes, esophagus, and stomach and dermal contact may produce severe burns, ulceration, and scarring in humans. Chronic (long-term) occupational exposure to hydrochloric acid has been reported to cause gastritis, chronic bronchitis, dermatitis, and photosensitization in workers. Prolonged exposure to low concentrations may also cause dental discoloration and erosion. The US EPA has not classified Hydrogen Chloride for carcinogenicity.

2.3.2 State Standards and Definitions

The State of California Air Resources Board (CARB) sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) are either the same as or more restrictive than the NAAQS with the exception of the 1-hr NO₂ standards which are stricter under the NAAQS. The CAAQS also restricts four additional contaminants. Table 2.1 identifies both the NAAQS and CAAQS.

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards							
Pollutant	Average Time	California Standards ¹		Federal Standards ²			
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)			
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m ³		-			
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³			15 µg/m ³
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	-	Non-Dispersive Infrared Photometry	
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)			
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		-			-
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³) ⁸	Same as Primary Standard	Gas Phase Chemiluminescence	
	1 Hour	0.18 ppm (339 µg/m ³)		0.100 ppm ⁸ (188/ µg/m ³)			
Sulfur Dioxide (SO ₂) ¹¹	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm ¹⁰ (for Certain Areas)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) ⁹	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm ¹⁰ (for Certain Areas) (See Footnote 9)			
	3 Hour	-		-			0.5 ppm (1300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³)			-
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	-	Same as Primary Standard	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	-		1.5 µg/m ³			
	Rolling 3-Month Average	-		0.15 µg/m ³			
Visibility Reducing Particles	8 Hour	See footnote 14					
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence				
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				

- California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- 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.
- Any equivalent procedure which can be shown to the satisfaction CARB to give equivalent results at or near the level of the air quality standard may be used.
- National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 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.
- On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 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.
- 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.
- 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.
- 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.
- 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)

The additional contaminants as regulated by the CAAQS are defined below:

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

2.3.3 Regional Standards

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

The Imperial County Air Pollution Control District (ICAPCD) is the government agency which regulates stationary sources of air pollution within Imperial County and the SSAB. Currently, the SSAB is in “non-attainment” status for O₃ and serious non-attainment of PM₁₀. Therefore, the ICAPCD developed an Ambient Air Quality Plan (AAQP) to provide control measures to try to achieve attainment status. The AAQP was adopted in 1991. A new NAAQS for ozone was adopted by EPA in 1997 and required modified strategies to decrease higher ozone concentrations.

In order to guide non-attainment areas closer to NAAQS requirements an 8-hr Ozone Air Quality Management Plan (AQMP) was approved by ICAPCD in 2009 and was accepted by the EPA in 2010. Similarly, in 2009 the County revised their SIP to address the serious non-attainment status of PM₁₀ and again revised the plan in 2013, 2017 and 2018 (ICAPCD, 2018). The criteria pollutant standards are generally attained when each monitor within the region that has had no exceedances during the previous three calendar years. Attainment status within the County of Imperial as of the date of this report is shown below in Table 2.2.

Table 2.2: Imperial County Air Basin Attainment Status by Pollutant

Criteria Pollutant	Federal Designation	State Designation
Ozone	Marginal Nonattainment	Nonattainment
Carbon Monoxide	Unclassified/ Attainment	Attainment
PM10	Serious Nonattainment	Nonattainment
PM2.5	Moderate Nonattainment – partial*	Attainment
Nitrogen Dioxide	Unclassified/ Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Unclassified/ Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

2.4 California Environmental Quality Act (CEQA) Significance Thresholds

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

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

- A:* Conflict with or obstruct implementation of the applicable air quality plan?
- B:* Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- C:* Expose sensitive receptors to substantial pollutant concentrations?
- D:* Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)

2.5 ICAPCD Air Quality Impact Assessment Screening Thresholds (CEQA)

The ICAPCD has established significance thresholds in the 2017 ICAPCD CEQA Handbook for the preparation of Air Quality Impact Assessments (AQIA) (ICAPCD, 2017). The screening criteria within this handbook can be used to determine whether a project’s total emissions would result in a significant impact as defined by CEQA. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project’s total air quality impacts are below the state and federal ambient air quality standards. These screening thresholds for construction and daily operations are shown in Table 2.3.

Table 2.3: Screening Threshold for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)	
Construction Emissions		
Respirable Particulate Matter (PM ₁₀ and PM _{2.5})	150	
Nitrogen Oxide (NO _x)	100	
Carbon Monoxide (CO)	550	
Reactive Organic Gases (ROG)	75	
Operational Emissions		
Pollutant	Tier I (Pounds per Day)	Tier II (Pounds per Day)
PM ₁₀ and Sulfur Oxide (SO _x)	< 150	150 or greater
NO _x and ROG	< 137	137 or greater
CO	< 550	550 or greater
Level of Significance:	Less Than Significant	Significant Impact
Level of Analysis:	Initial Study	Comprehensive Air Quality Analysis Report
Environmental Document:	Negative Declaration	Mitigated ND or EIR
Source: (ICAPCD, 2017)		

The CEQA handbook further states that any proposed project with a potential to emit less than the Tier I thresholds during operations may potentially still have adverse impacts on the local air quality and would be required to develop an Initial Study to help the Lead Agency determine whether the project would have a less than significant impact. On the other hand, if the proposed project's operational development fits within the Tier II classification, it is considered to have a significant impact on regional and local air quality. Therefore, Tier II projects are required to implement all standard mitigation measures as well as all feasible discretionary mitigation measures. Additionally, ICAPCD defined standard mitigation measures for construction equipment and fugitive PM10 must be implemented at all construction sites. The implementation of mitigation measures, as listed in the ICAPCD CEQA handbook, apply to those construction sites which are 5 acres or more for non-residential developments such as the proposed Project. In an effort to reduce PM₁₀ or Fugitive Dust from ambient air, the Project would be required to develop a dust management plan consistent with Regulation VIII of ICAPCD's Rules and Regulations. Additionally, the project shall not exceed the 20 percent opacity threshold under Rule 801.

Standard Construction Site Design Measures:

1. *Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.*
2. *Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.*

3. *Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.*
4. *Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).*

Should the project be sufficiently large enough that operational mitigation measures simply cannot reduce pollutant levels below thresholds of significance, pollutant levels the ICAPCD has adopted the Operation Development Fee as was adopted under Rule 310 which provides the ICAPCD with a sound method for mitigating the emissions produced from the operation of new commercial and residential development projects. Projects unmitigable through standard procedures are assessed a one-time fee for either Ozone Precursors or PM₁₀ impacts, which is based upon either the square footage of the commercial development or the number of residential units. Impacts of this sort are calculated based on the assumption that the worst-case daily emissions are allowed for an entire year and then converted to an annual emission equivalent. Emissions exceeding annual thresholds would pay a fair share sum to reduce impacts to below significance.

Similar to construction, the project would be required to implement standard mitigation measures for operations. According to Table 2.3, Tier I, projects generating less than 137 lbs/day of NO_x or ROG; less than 150 lbs/day of PM₁₀ or SO_x; or less than 550 lbs/day of CO or PM_{2.5}, the Project is required to implement all the Standard Operational Mitigation Measures in order to help mitigate or reduce the air quality impacts to a level of insignificance. These mitigation measures are identified below:

Standard Operations Site Design Measures:

1. *Provide on-site bicycle lockers and/or racks.*
2. *Provide on-site eating, refrigeration and food vending facilities to reduce lunchtime trips.*
3. *Provide shower and locker facilities to encourage employees to bike and/or walk to work.*
4. *Provide for paving a minimum of 100 feet from the property line for commercial driveways that access County paved roads as per County Standard Commercial Driveway Detail 410B (formerly SW-131A). It should be noted that the project would also pave McDonald Road from HWY 111 to English Road.*
5. *Measures which meet mandatory, prescriptive and/or performance measures as required by Title 24.*

Furthermore, consistent with the California Air Resource Board, ICAPCD requires PM₁₀ emitted by diesel powered construction equipment (DPM) to be analyzed. DPM can potentially increase the cancer risk for nearby residential receptors if any. Generally, sites increasing the cancer risk between one and ten in one million need to implement toxics best available control technology or impose effective emission limitations, emission control devices or control

techniques to reduce the cancer risk. Finally, at no time shall the project increase the cancer risk to over 10 in one million.

2.6 Local Air Quality

Criteria pollutants are measured continuously throughout the County of Imperial and the 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 ICAPCD is responsible for monitoring four sites which collect meteorological and criteria pollutant data used by the district to assist with pollutant forecasting, data analysis and characterization of air pollutant transport. Also, a fifth monitoring locations is located in the City of Calexico which is monitored by CARB.

The monitoring stations surrounding the project provide various pieces of data but no single station has all the data. Table 2.4 provides the criteria pollutant levels monitored within the Basin for 2017-2019. The criteria pollutants monitored closest to the Project [Ambient data was obtained from the California Environmental Protection Agency's Air Resources Board Website (ARB, 2020)]. Based on review of the ambient data, Both Ozone and PM emissions exceed AAQS and therefore are in non-attainment status. The 8 hour Ozone non-Attainment is considered moderate Non-Attainment while the 24-Hour PM10 is considered "Serious" Non-Attainment. Therefore, to comply with the ICAPCDs SIP and AAQP, the project must implement Best Available Control Measure (BACM) and BACT as outlined in the standard mitigation measures that all projects must implement in Section 2.5.

Table 2.4: SSAB Three-Year Ambient Air Quality data

Pollutant	Averaging Time	CAAQS	NAAQS	2017	2018	2019
O ₃ (ppm)	1 Hour	0.09 ppm	No Standard	0.122	0.111	0.106
	8 Hour	0.070 ppm	0.070 ppm	0.097	0.099	0.089
PM ₁₀ (µg/m ³)	24 Hour	50 µg/m ³	150 µg/m ³	477.6	422.3	324.4
	Annual Arithmetic Mean	20 µg/m ³	No Standard	45.0	41.3	46.9
PM _{2.5} (µg/m ³)	24 Hour	No standard	35 µg/m ³	49.1	90.6	53.1
	Annual Arithmetic Mean	12 µg/m ³	15 µg/m ³	11.9	10.4	10.8
NO ₂ (ppm)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.012	0.012	0.09
	1 Hour	0.18 ppm	0.100 ppm	0.074	0.073	0.096
ppm=Parts per Million N/A=Not Available for give year						

3.0 METHODOLOGY

3.1 Construction Emissions Calculations

CalEEMod

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 default settings for CalEEMod include an assumption for roads within imperial county to be only 50% paved. The County has been improving many of these roads to paved sections. As noted in construction design measures 2-4 above, the project would implement design features which would require all construction workers, vendors and hauling to only used paved or improved roads to minimize dust. Based on this the default setting was revised to 100% paved. The project would also install wheel shakers leaving the project site to minimize dust from leaving the project site onto the roadways.

AERMOD

The AERMOD dispersion model was used to determine the concentration for air pollutants at any location near the pollutant generator. Additionally, the model will predict the maximum exposure distance and concentrations. The notable toxic air contaminant from construction is diesel exhaust since exposure to diesel exhaust is known to cause cancer and acute and chronic health effects. Diesel exhaust emissions can be estimated using the annual PM₁₀ exhaust emissions 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 **Attachment B** at the end of this report for both an unmitigated scenario with sensitive residential receptors included.

Health Risks

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70

years. The following calculates this dose for exposure through the inhalation pathways and the worst case cancer risk dose calculation is defined in Equation 1 (OEHHA, February 2015):

$$\text{Equation 1} \quad \text{Dose}_{\text{air}} = C_{\text{air}} * (\text{BR}/\text{BW}) * A * \text{EF} * (1 \times 10^{-6})$$

Dose _{air}	=	Dose through inhalation (mg/kg/d)
C _{air}	=	Concentration in air (µg/m ³) Annual average DPM concentration in µg/m ³
BR/BW	=	Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency (unitless, days/365 days)
1x10 ⁻⁶	=	Milligrams to micrograms conversion (10 ⁻³ mg/ µg), cubic meters to liters conversion (10 ⁻³ m ³ /l)

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. Specific factors as modeled are shown within the project models attached to this report. The worst case cancer risk calculation is defined in Equation 2 (OEHHA, 2015):

$$\text{Equation 2} \quad \text{RISK}_{\text{inh-res}} = \text{DOSE}_{\text{air}} \times \text{CPF} \times \text{ASF} \times \text{ED}/\text{AT} \times \text{FAH}$$

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

The California Office of Environmental Health Hazard Assessment (OEHHA) recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans. Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods. If a facility is notifying the public regarding cancer risk, the 9-and 70-year cancer risk estimates are useful for people who have resided in their current residence for periods shorter and longer than 30 years. Health risk calculations are shown in **Attachment C** to this report.

Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health Hazard Assessment (OEHHA, 2015). Diesel Exhaust has a REL of 5 $\mu\text{g}/\text{m}^3$ 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 point (1) represents the only sensitive residential receptors near the project located approximately one mile to the north of the project. This location was selected and AERMOD will calculate the air quality emission concentrations.

Figure 3-A: Construction Health Risk Model Setup



3.2 Construction Assumptions

The Project construction dates were estimated based on a construction kickoff starting 2021 with construction ending two years later. CalEEMod 2016.3.2 was utilized for all construction calculations. Table 3.1 shows the expected timeframes for the construction processes for all the project infrastructure, and structures at the site, as well as the expected number of pieces of equipment. Additionally, the project would implement a number of design features which are identified on the following page.

Table 3.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition	03/01/2021	03/12/2021	
Concrete/Industrial Saws			1
Excavators			3
Rubber Tired Dozers			2
Grading	03/01/2021	05/07/2021	
Graders			1
Off-Highway Trucks			7
Rollers			1
Rubber Tired Dozers			2
Scrapers			4
Tractors/Loaders/Backhoes			1
Building Construction	04/12/2021	04/07/2023	
Aerial Lifts			7
Air Compressors			4
Bore/Drill Rigs			1
Cranes			7
Excavators			2
Forklifts			7
Generator Sets			4
Off-Highway Trucks			1
Tractors/Loaders/Backhoes			13
Welders			1
Trenching	04/19/2021	10/08/2021	
Excavators			2
Off-Highway Trucks			3
Rollers			1
Skid Steer Loaders			1
Tractors/Loaders/Backhoes			3
Paving	09/30/2022	03/10/2023	
Graders			2
Pavers			1
Rollers			2
Rubber Tired Dozers			2
Tractors/Loaders/Backhoes			3
Architectural Coating	12/05/2022	03/31/2023	
Air Compressors			1

The PDFs included for construction were included in the CalEEMod program. The list is as follows:

1. Diesel equipment required which does not satisfy SDM 1 shall be rated Tier 4 per EPA requirements. All modeling assumes the use of this equipment and is therefore a condition to the project.
2. Access to the site will be via HWY 111 and McDonald Rd. All equipment workers, vendors and haul trucks will be required to utilize these roadways.
3. Operational On-Road trips will not operate on unpaved dirt roads.
4. An agreement between County of Imperial Public Works and the applicant has been established requiring the applicant to improve a 2-mile section of the unpaved portion of McDonald Road adjacent to the site by installing a 12-18" thick engineered Class II base section. In addition, at the request of the County, the applicant would utilize the improved section during construction and would wet the site continuously during construction activities. The road would be immediately paved after construction prior to operations of the plant to avoid damaging a new asphalt section.
5. During construction of the project, the project would be required to maintain daily dust suppression at the 2-mile section of McDonald Road using a water truck operating continuously while vehicles are using it.
6. The project will provide wheel shakers at both the exit of the construction site to minimize dust being tracked off the project site and onto the roadways.

3.3 Operational Emissions

Based on the projected traffic volumes estimated by the Project Traffic Engineer, the proposed project would generate as much as 104 regular employee and miscellaneous average daily trips (ADT) and as many as 30 ADT truck trips without correcting for passenger car equivalence (PCE) once fully operational (LLG Engineers, 2020). The first full year of operations is expected in 2024 which is used for the basis of this analysis.

As was noted earlier within the construction methodology section, CalEEMod include an assumption for roads within imperial county to be only 50% paved. Once construction is complete onsite, the project would provide asphalt over the engineered section identified earlier in this report. The roadways to and from the site would then be 100% paved. Based on this, the model was updated to reflect this reality.

Operational air quality emission sources would include area sources such as landscaping, consumer products and architectural coatings during maintenance, energy sources from electrical usage, mobile sources from vehicular traffic to include trucks and passenger vehicles, solid waste from trash generation, and water uses, which are calculated within CalEEMod. Additionally, the project would purchase and use two propane powered forklifts

each with rated less than 50 HP. These units were also modeled within CalEEMod. Area Sources include landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as electricity and natural gas usage though Natural Gas usage onsite is not expected or being delivered to the site.

The project operations are both energy and water intensive and would consume 51,840 Mega Watt Hours (MWH) of electricity and 3,400 Acre Feet of water as disclosed by the project applicant. The water will be then pumped back into the Geothermal wells. CalEEMod was manually updated to include these inputs.

The project description indicates that the project will emit 5.41 lb/day of particulate emissions from mineral extraction from various processes identified in Section 1.3 of this report. These emissions would increase the PM₁₀ emissions from operations calculated within the air quality modeling software and would be considered additive.

In addition to particulate matter emissions from mineral extraction from the geothermal brine, the extraction process will require the use of concentrated hydrochloric acid liquid. The hydrochloric acid would be injected into the brine to allow for mineral extraction. Some of the hydrochloric acid will evaporate and convert to an aerosol form otherwise known as Hydrogen Chloride (HCL). The project would utilize scrubbers to collect the aerosol however it is expected the Project would produce roughly 7,440 lbs per year of Hydrogen Chloride.

3.4 Manufacturing and Shipping and Receiving Operational Emissions

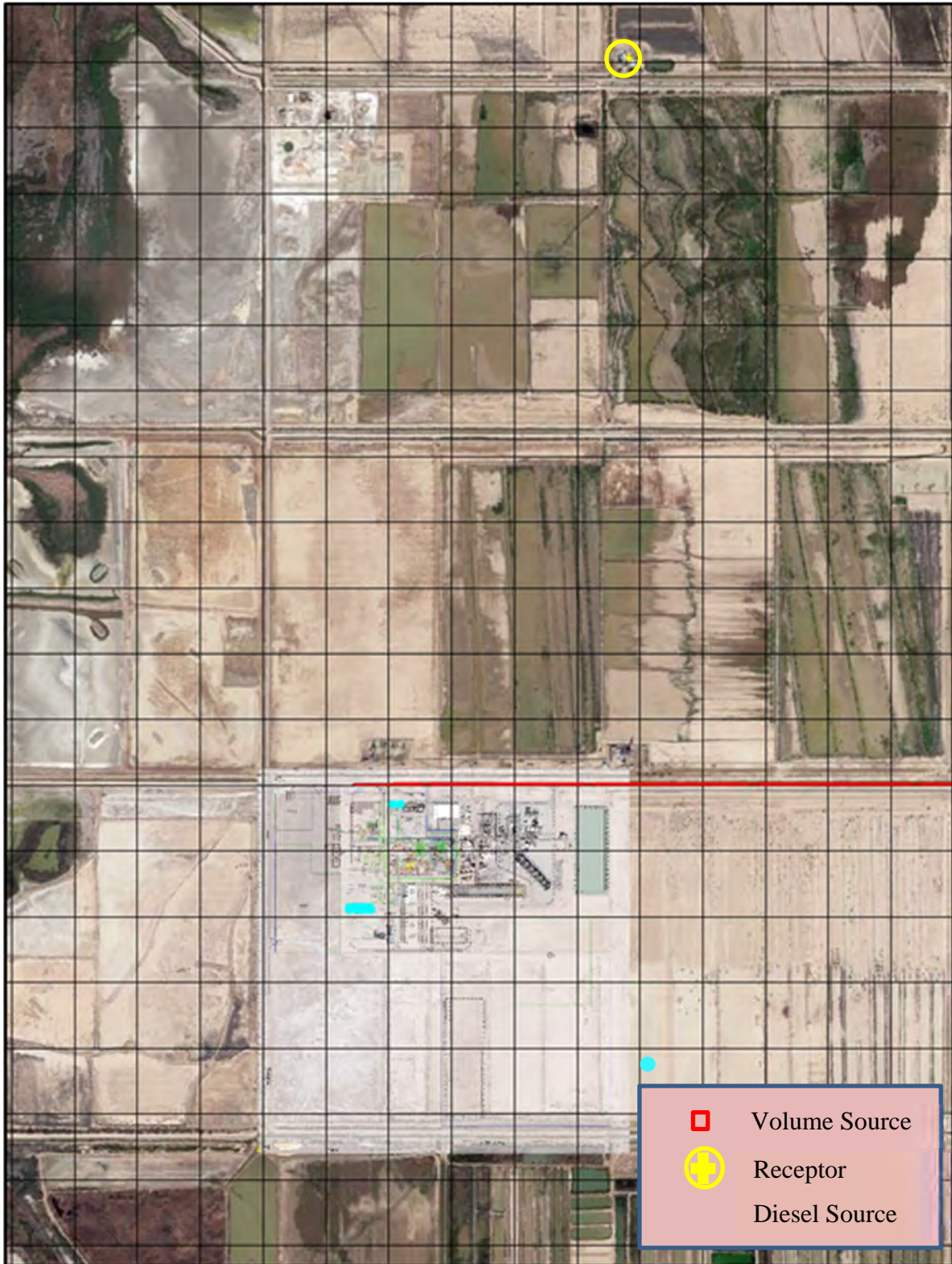
The proposed project was determined to generate 134 average daily trips (ADT) in total of which 30 trips (15 inbound and 15 outbound) would be from heavy-heavy duty trucks (HHD) or trucks over 26,000 lbs. CalEEMod includes mobile emissions reported within the EMFAC 2014 emission model in terms of both driving and idling emissions for each respective vehicle class from each scenario year and adjusted in units of grams per VMT. Similarly, evaporative, starting, and idling emissions were divided by the number of trips to derive emission factors in units of grams per trip. Evaporative emissions, starting and idling emissions are multiplied by the number of trips times the respective emission factor for each pollutant (CAPCOA, 2017). Based on CalEEMod, the following Emission Factors are used within this analysis. Table 3.2 on the following page shows that during truck movement PM₁₀ exhaust would be generated at a rate of 0.00526 grams/VMT and starting and Idling events would generate 0.00653 grams per trip.

Table 3.2: Operational Truck Emission Rates

EMFAC2014 Acronyms for Each Vehicle Emission	EMFAC2014 Description of Each Vehicle	EMFAC2014 Emission Rate Unit	CalEEMod Emission Factor Unit	HHD Emissions
PM10_RUNEX	Running Exhaust	grams/VMT	grams/VMT	0.005256
PM10_STREX	Start Exhaust	grams/trip	grams/trip	0.000053
PM10_IDLEX	Idle Exhaust	grams/vehicle/day	grams/trip	0.006474
Running Exhaust (grams/VMT)				0.00526
Starting and Idling Exhaust (PM10_RUNEX + PM10_IDLEX) (grams/trip)				0.00653

Cancer risks would be calculated in a similar fashion to those explained within Section 3.1 of this report. Air dispersion modeling utilizing AERMOD Version 19191 is the preferred dispersion modeling for projects with a high number of sources and will be used within the analysis. A screenshot graphical representation of the modeling locations is shown on an aerial in Figure 3-A. It is assumed that 15 trucks or only the outbound trips would include startup and idling. These are identified as light blue dots. Since the scale of the site is so large relative to the identification marker size, the blue dots appear as a blue line. All truck movement is represented as volume sources (identified as red dots) though these sources also appear like a line and includes trucks on McDonald Road for roughly a 1.8-mile section east of English Road and terminating at the Project driveway. The black grid represents a receptor matrix used by AERMOD to calculate emission contours. Also, a yellow identifier represents the only sensitive receptor near the site.

Figure 3-B: AERMOD Modeling Sources and Receptor - Onsite Operations



The Project also has two onsite generators that will operate approximately 50 hours per year each. For purposes of analysis, the generators were assumed to operate as many as 80 hours per year which would be conservative. Since these onsite point sources operate on diesel, generator locations were also modeled. The exact locations of the generators are not known so they were selected on the north side of the project site closest to the residential receptor or closes to McDonald Road.

Table 3.3 is a breakdown of project PM₁₀ diesel exhaust emissions generated onsite and near the sensitive residential receptors to the north across McDonald Road. These emissions also include the diesel emissions generated from the two onsite emergency diesel generators which were found to generate 0.00699 tons/year from CalEEMod outputs.

The daily emissions are then converted to a 24-hour (hr) emission rates, in grams/second, by dividing the daily emissions by 86,400 seconds or the number of seconds in a 24-hr day. These rates are then used as inputs to AERMOD as depicted in Figure 3-A above. This analysis assumes 365-day operations so in this case, the 24-hr exposure would be the same as an annual exposure. It should be noted that only HHD rates are assumed.

Table 3.3: Expected PM₁₀ Truck Operations Emissions Calculation

Activity (In + Out)	Truck Path from project (Miles)	24-hr Daily Trips (In /Out)	Total 24-hr Daily VMT	Emission Rate*	24-hr Daily Emissions (Grams)	Emission Rate (Gram/Second)
McDonald Road East of the Project Site to English Road	1.85	30	55.5	0.00526 Gram/VMT	0.29170	3.38E-06
Onsite Truck Starting and Idling	N/A	15	N/A	0.00653 Gram/Trip	0.097905	1.13E-06
Emergency Generator Usage	N/A	N/A	N/A	.00699 Tons/Year	17.37	2.01E-04

3.5 Odor Impacts (Onsite)

Projects that involve offensive odors may be a nuisance to neighboring uses, including businesses, residences, sensitive receptors, and public areas. Odor impacts are most often the result of industrial type projects, livestock or farming operations, or can even be from restaurant or commercial baking operations. If a project has a potential to expose a substantial number of sensitive receptors to objectionable odors the project could be deemed to have a significant odor impact. The proposed project is located over 1 mile from a single sensitive receptor. Based on this, no significant objectionable odors would be expected from the operation.

4.0 FINDINGS

4.1 Construction Findings

Construction emissions in pounds per day from the construction operations and equipment identified in Section 3.2 above is shown in Table 4.1 below. The project construction model includes project design features listed below:

1. Diesel equipment required which does not satisfy SDM 1 shall be rated Tier 4 per EPA requirements. All modeling assumes the use of this equipment and is therefore a condition to the project.
2. Access to the site will be via HWY 111 and McDonald Rd. All equipment workers, vendors and haul trucks will be required to utilize these roadways.
3. Operational On-Road trips will not operate on unpaved dirt roads.
4. An agreement between County of Imperial Public Works and the applicant has been established requiring the applicant to improve a 2-mile section of the unpaved portion of McDonald Road adjacent to the site by installing a 12-18" thick engineered Class II base section. In addition, at the request of the County, the applicant would utilize the improved section during construction and would wet the site continuously during construction activities. The road would be immediately paved after construction prior to operations of the plant to avoid damaging a new asphalt section.
5. During construction of the project, the project would be required to maintain daily dust suppression at the 2-mile section of McDonald Road using a water truck operating continuously while vehicles are using it.
6. The project will provide wheel shakers at both the exit of the construction site to minimize dust being tracked off the project site and onto the roadways.

Based on the modeling results, the project would not exceed ICAPCD standards and would have a less than significant construction impact. As noted earlier, since PDFs have been assumed within this analysis, PDFs would not be optional and will be a condition to this project.

Table 4.1: Expected Construction Emissions Summary – Pounds per Day

Year	ROG	NO_x	CO	PM₁₀ (Dust)	PM₁₀ (Exhaust)	PM₁₀ (Total)	PM_{2.5} (Dust)	PM_{2.5} (Exhaust)	PM_{2.5} (Total)
2021	10.71	55.46	272.30	14.10	0.79	14.88	4.99	0.78	5.77
2022	30.31	42.61	182.21	6.99	0.46	7.45	1.90	0.46	2.36
2023	29.86	36.68	178.72	6.99	0.43	7.42	1.90	0.42	2.33
Significance Threshold (lb/day)	75	100	550	-	-	150	-	-	150
ICAPCD Impact?	No	No	No	-	-	No	-	-	No

Potential onsite odor generators would include short term construction odors from activities such as paving and possibly painting as well as exhaust from construction equipment. Odors created during short term construction activities would most likely be from placing asphalt which has a slight odor from the bitumen and solvents used within hot asphalt. Since the nearest sensitive receptor is located just over one mile from the site, a less than significant odor impact from construction is expected.

4.2 Construction Health Risks

Based upon the annual air quality modeling results attached to this report, worst-case unmitigated PM₁₀ from exhaust emissions would cumulatively produce 0.0946 tons over the construction duration of 760-days or an average of 0.00131 grams/second. The average emission rate over the grading area is 8.72x10⁻⁹ g/m²/s, which was calculated as follows:

$$\frac{0.00946 \frac{\text{grams}}{\text{second}}}{37 \text{ acres} * 4,046 \frac{\text{meters}^2}{\text{acre}}} = 8.72 * 10^{-9} \frac{\text{grams}}{\text{meters}^2 \text{ second}}$$

Utilizing the AERMOD dispersion model, we find that the worst-case annual concentration at any of the residential receptors is 0.00048 µg/m³ during construction. Utilizing the risk equation identified above in Section 3.1, the inhalation cancer risk for the closest residential receptor was found to be 0.17 per one million exposed which would be considered a less than significant impact.

There are known acute and chronic health risks associated with diesel exhaust which are considered non-cancer risks. These risks are calculated based on methods identified in Section 3.1 of this report. From this we find that the annual concentration of 0.00048 µg/m³ divided by the Chronic REL of 5 µg/m³ yields a Health Hazard Index less than one. Therefore, no non-cancer risks are expected and all health risks are considered less than significant.

4.3 Operational Findings

Project Buildout is expected in 2023 and the first full year of operations are expected in 2024. The project traffic generation estimates roughly 134 trips per day and of that 30 trips would be from trucks (15 in and 15 out). Once a truck arrives onsite, the truck would drop off a trailer or pick one up. The truck would likely back up and connect to a trailer then drive out. For a worst-case analysis, it is assumed the trucks would stop the engine and then restart it each transfer. The Project air quality model was updated using these mix ratio projections and was run for both winter and summer scenarios.

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; CALLEEMOD 2016.3.2 performs this calculation. The daily pollutants calculated for summer and winter are shown in Tables 4.2 and 4.3, respectively.

Table 4.2: Expected Daily Pollutant Generation

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer Scenario						
Area Source Emission Estimates (Lb/Day)	3.03	0.00	0.01	0.00	0.00	0.00
Energy Source Emissions (Lb/Day)	0.00	0.00	0.00	0.00	0.00	0.00
Operational Vehicle Emissions (Lb/Day)	0.51	3.95	7.03	0.03	1.37	0.37
Offroad Equipment	0.24	1.42	1.79	0.00	0.07	0.07
Stationary Equipment (Lb/Day)	2.17	6.17	5.76	0.01	0.35	0.35
Total (Lb/Day)	5.96	11.54	14.60	0.04	1.79	0.79
ICAPCD Thresholds	55	55	550	150	150	150
Significant?	No	No	No	No	No	No
Daily pollutant generation assumes trip distances within CALLEEMOD 2016.3.2						

Table 4.3: Expected Daily Pollutant Generation

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer Scenario						
Area Source Emission Estimates (Lb/Day)	3.03	0.00	0.01	0.00	0.00	0.00
Energy Source Emissions (Lb/Day)	0.00	0.00	0.00	0.00	0.00	0.00
Operational Vehicle Emissions (Lb/Day)	0.38	3.94	5.25	0.02	1.37	0.37
Offroad Equipment	0.24	1.42	1.79	0.00	0.07	0.07
Stationary Equipment (Lb/Day)	2.17	6.17	5.76	0.01	0.35	0.35
Total (Lb/Day)	5.83	11.54	12.82	0.04	1.79	0.79
ICAPCD Thresholds	55	55	550	150	150	150
Significant?	No	No	No	No	No	No
Daily pollutant generation assumes trip distances within CALLEEMOD 2016.3.2						

In addition to emissions estimated by CalEEMod, the project will also emit 5.41 lb/day of particulate emissions from mineral extraction as was identified in Section 1.3 of this report. Based on emission projections in Tables 4.2 and 4.3 above, this would increase the PM₁₀ emissions from 1.79 to 7.2 lb/day. Therefore, the additional particulate emissions from mineral extraction would be less than significant. Finally, the mineral extraction process will require the use of concentrated liquid hydrochloric acid. Due to the offload operations, the

project would produce 7,440 lb of hydrogen chloride. Under HCl aerosol emissions from the storage tank(s). Based on this, the project would not be required to report hydrogen chloride under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (US EPA, 2012).

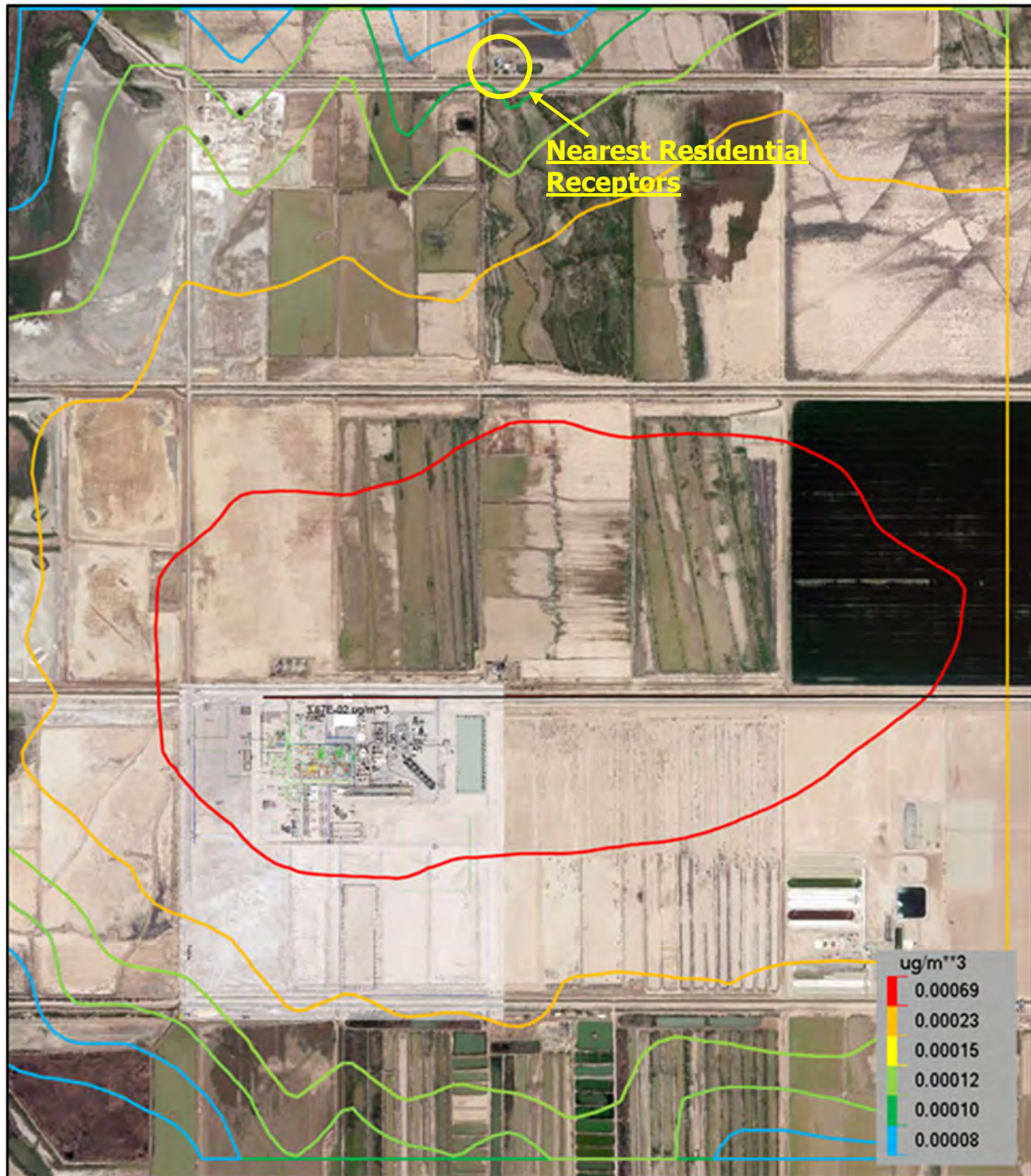
4.4 Operational Health Risks

The proposed project would manufacture process brine from the Geothermal plant and extract LI, Mn and Zn. The materials will then be sold offsite. The Traffic study indicates that 30 trips per day would be from trucks or 15 inbound and 15 outbound trips. All access will be via Project driveways along McDonald Road East of the project site.

Utilizing the AERMOD dispersion model, a visual representation of the dispersed emissions output was created and shown in Figure 4-A. Based on Figure 4-A and emission inputs shown in Table 3.4 above, we find that the annual concentration from the truck operations, including starting, idling and truck circulation on McDonald Road east of the Project driveway would produce a maximum of 0.00069 $\mu\text{g}/\text{m}^3$ PM_{10} exhaust onsite and approximately 0.00012 $\mu\text{g}/\text{m}^3$ offsite at the nearest residential receptor. McDonald Road and would not generate measurable emission concentrations at the nearest residential receptor located over one mile away. The AERMOD model outputs are shown in **Attachment D** to this report.

Similar to the construction health risk analysis shown above, cancer risks from operations can be established in Section 4.2 above. The primary difference however is the exposure duration is not just during construction but continuous through the lifecycle of the building. Based on the analysis, the inhalation cancer risk for a 70-year duration at the worst case location onsite (point of maximum exposure (PMI)) would have a cancer risk of 0.55 per one million exposed. Since this worst case concentration risk is less than 10 per one million exposed, significant health risks would not be expected. Since all emission concentrations beyond the PMI would be lower, all risks beyond the PMI would also be lower and would have a less than significant health risk impact associated to it. Calculations for the PMI risk are shown in **Attachment E** to this report.

Figure 4-A: PM10–Truck Operations Starting/Idling/Movement AERMOD Plot



4.5 Cumulative Impact Findings

Cumulative impacts would exist when either there are direct air quality impacts or when multiple construction projects occur within the same area simultaneously. To illustrate this, if a project were to produce air quality emissions simultaneous to a nearby construction project the addition of both project emissions to the environment could exceed significance thresholds. For this project, the construction emissions were found to be less than significant as shown in Table 4.1 above. If a nearby project was to be under construction at the same time, that project would need to produce an additive amount of emissions close to the project site such that emissions would exceed thresholds. Based on discussions with the project applicant, there are no cumulatively considerable construction projects within at least 1 mile of the site. Given this, a less than significant cumulative air quality impact would be expected during construction.

The proposed Project site is zoned industrial and the Project has been designed to be consistent with this zoning designation. The project would generate less than significant direct and cumulative air quality impacts. Given this, since the proposed project would not have any significant direct impacts and would not have any significant cumulative impacts, the project would not conflict with either the County's AQMP or SIP.

4.6 Conclusion of Findings

During construction, the proposed Project would not be expected to produce significant air quality impacts under the California Environmental Quality Act or exceed thresholds of significance established by the Imperial County Air Pollution Control District (ICAPCD).

The proposed Project would not generate significant operational impacts offsite either during construction or during post construction operations.

Finally, the project would not be expected to generate offensive objective odors during either the construction or operation of the project.

Per the requirements of ICAPCD, the project would be required to implement standard mitigation measures for both construction and operations and are identified below:

Standard Construction Site Design Measures:

- 1. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.*
- 2. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.*

3. *Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.*
4. *Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).*

Standard Operations Site Design Measures:

1. *Provide on-site bicycle lockers and/or racks.*
2. *Provide on-site eating, refrigeration and food vending facilities to reduce lunchtime trips.*
3. *Provide shower and locker facilities to encourage employees to bike and/or walk to work.*
4. *Provide for paving a minimum of 100 feet from the property line for commercial driveways that access County paved roads as per County Standard Commercial Driveway Detail 410B (formerly SW-131A). It should be noted that the project would also pave McDonald Road from HWY 111 to English Road.*
5. *Measures which meet mandatory, prescriptive/performance measures as required per Title 24.*

The project will include a number of design features during construction as follows:

1. Diesel equipment required which does not satisfy SDM 1 shall be rated Tier 4 per EPA requirements. All modeling assumes the use of this equipment and is therefore a condition to the project.
2. Access to the site will be via HWY 111 and McDonald Rd. All equipment workers, vendors and haul trucks will be required to utilize these roadways.
3. Operational On-Road trips will not operate on unpaved dirt roads.
4. An agreement between County of Imperial Public Works and the applicant has been established requiring the applicant to improve a 2-mile section of the unpaved portion of McDonald Road adjacent to the site by installing a 12-18" thick engineered Class II base section. In addition, at the request of the County, the applicant would utilize the improved section during construction and would wet the site continuously during construction activities. The road would be immediately paved after construction prior to operations of the plant to avoid damaging a new asphalt section.
5. During construction of the project, the project would be required to maintain daily dust suppression at the 2-mile section of McDonald Road using a water truck operating continuously while vehicles are using it.
6. The project will provide wheel shakers at both the exit of the construction site to minimize dust being tracked off the project site and onto the roadways.

An operational health risk analysis was performed which referenced the nearest residential receptor approximately 1 mile from the project site. Based on that analysis, less than significant PM₁₀ exhaust health risks would be expected from both onsite and offsite diesel truck operations from the project.

The proposed Project is consistent with the existing land use zoning designation which is designated as industrial. Also, since no direct or cumulative impacts are expected and the proposed project would be consistent with the AQMP and SIP. Given this, less than significant cumulative operational impacts would be expected.

5.0 REFERENCES

- ARB. (2020, February 28). *Air Quality Data Statistics*. Retrieved from <https://www.arb.ca.gov/adam>: <https://www.arb.ca.gov/adam>
- California Air Resources Board. (5/4/2016). *www.arb.ca.gov*. Retrieved from Ambient Air Quality Standards: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>
- CAPCOA. (2017). *Appendix A - Calculation Details for CalEEMod*. Retrieved from http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6
- Energy Source LLC. (2020). *Altis Project Site Layout*.
- Google. (2020). Retrieved 2020, from maps.google.com
- ICAPCD. (2017). *CEQA Air Quality Handbook*. Retrieved from <https://www.co.imperial.ca.us/AirPollution/PlanningDocs/CEQAHandbk.pdf>
- ICAPCD. (2018). *IMPERIAL COUNTY 2018 REDESIGNATION REQUEST AND MAINTENANCE PLAN FOR PARTICULATE MATTER LESS THAN 10 MICRONS IN DIAMETER*. Retrieved from <https://ww3.arb.ca.gov/planning/sip/planarea/imperial/sip.pdf>
- LLG Engineers. (2020). *TRANSPORTATION IMPACT ANALYSIS - HUDSON RANCH MINERAL RECOVERY*.
- OEHHA. (2015). *Air Toxics Hot Spots Program - Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments*. OEHHA.
- OEHHA. (February 2015). *Air Toxics Hot Spots Program - Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments*. OEHHA. Retrieved from <https://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>
- US EPA. (2012). *The Emergency Planning and Community Right-to-Know Act*. Retrieved from https://www.epa.gov/sites/production/files/2015-05/documents/epcra_fact_sheet.pdf

6.0 CERTIFICATIONS

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

DRAFT

Jeremy Loudon, Principal
Ldn Consulting, Inc.
(760) 473-1253
jloudon@ldnconsulting.net

Date June 17, 2021

ATTACHMENT A

CalEEMod

Hudson Ranch Minerals - Imperial County, Summer

**Hudson Ranch Minerals
Imperial County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	100.00	1000sqft	27.00	100,000.00	0
Other Asphalt Surfaces	10.00	Acre	10.00	435,600.00	0
Other Non-Asphalt Surfaces	15.00	Acre	15.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	12
Climate Zone	15			Operational Year	2024
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	593.76	CH4 Intensity (lb/MWhr)	0.014	N2O Intensity (lb/MWhr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - <https://www.iid.com/energy/renewable-energy> 2020 48.8% RPS since 2030. To meet 2030 60% requirement, IID will add 11.2% by 2030 (48.8+11.2=60) or 1.12% per year (1.12%*10 years = 11.2%. For 2024 the IID Renewable should be 53.3%

Land Use - 37 acre construction site and 15 acre laydown area

Construction Phase - Construction dates estimated by Project Engineer

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Hudson Ranch Minerals - Imperial County, Summer

Off-road Equipment - Equipment List provided by project applicant
 Off-road Equipment - Equipment List provided by project applicant

Trips and VMT -

On-road Fugitive Dust - Trips use 111 and McDonald all paved except 2 miles at McDonald. prior to const. this area will be improved with 12-18" base and would have dedicated water truck. The City wants to wait to pave McDonald till construction is complete.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Trip Gen for Operations per TS excludes PCE adjustments 134 ADT

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Roadways are paved

Woodstoves -

Area Coating -

Energy Use - Energy Use - Project would consume 51,840 MWH per year

Water And Wastewater - Project will use 3,400 afy of water from IID canals.

Construction Off-road Equipment Mitigation - T4 Equipment

Operational Off-Road Equipment - 2 forklifts less than 50HP will be used onsite

Fleet Mix - Truck Trips would be 22%. Remainder of vehicles would be Passenger Cars

Stationary Sources - Emergency Generators and Fire Pumps - 50 hours per year on average would be used 80 hours on average assumed

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Hudson Ranch Minerals - Imperial County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	70.00	10.00
tblConstructionPhase	NumDays	110.00	50.00
tblConstructionPhase	NumDays	1,110.00	520.00
tblConstructionPhase	NumDays	75.00	116.00
tblConstructionPhase	NumDays	75.00	85.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	518.40
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblFleetMix	HHD	0.12	0.22
tblFleetMix	LDA	0.52	0.38
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.16	0.10
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	4.6900e-003	0.00
tblFleetMix	MCY	5.2480e-003	0.00
tblFleetMix	MDV	0.11	0.15
tblFleetMix	MH	6.0000e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	3.6150e-003	0.00
tblFleetMix	SBUS	7.2500e-004	0.00
tblFleetMix	UBUS	1.2560e-003	0.00

Hudson Ranch Minerals - Imperial County, Summer

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	89.00	50.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.014
tblProjectCharacteristics	CO2IntensityFactor	1270.9	593.76
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	124.00	71.92
tblVehicleTrips	ST_TR	1.50	1.34
tblVehicleTrips	SU_TR	1.50	1.34
tblVehicleTrips	WD_TR	1.50	1.34
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	23,125,000.00	1,107,894,868.00

2.0 Emissions Summary

Hudson Ranch Minerals - Imperial County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	30.9792	281.4474	233.5338	0.5555	23.3444	11.5174	34.8618	8.9159	10.7013	19.6172	0.0000	54,306.5551	54,306.5551	13.0806	0.0000	54,633.5703
2022	41.4984	165.0358	162.7349	0.3638	6.9935	6.6560	13.6496	1.9036	6.2222	8.1258	0.0000	35,750.0601	35,750.0601	6.9035	0.0000	35,922.6468
2023	39.7848	144.0209	157.0512	0.3605	6.9935	5.6760	12.6695	1.9036	5.3070	7.2106	0.0000	35,416.9202	35,416.9202	6.7742	0.0000	35,586.2760
Maximum	41.4984	281.4474	233.5338	0.5555	23.3444	11.5174	34.8618	8.9159	10.7013	19.6172	0.0000	54,306.5551	54,306.5551	13.0806	0.0000	54,633.5703

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	10.7130	55.4621	272.3014	0.5555	14.0954	0.7864	14.8818	4.9912	0.7814	5.7726	0.0000	54,306.5551	54,306.5551	13.0806	0.0000	54,633.5703
2022	30.3120	42.6052	182.2139	0.3638	6.9935	0.4601	7.4536	1.9036	0.4554	2.3590	0.0000	35,750.0601	35,750.0601	6.9035	0.0000	35,922.6467
2023	29.8649	36.6769	178.7233	0.3605	6.9935	0.4254	7.4189	1.9036	0.4222	2.3258	0.0000	35,416.9202	35,416.9202	6.7742	0.0000	35,586.2760
Maximum	30.3120	55.4621	272.3014	0.5555	14.0954	0.7864	14.8818	4.9912	0.7814	5.7726	0.0000	54,306.5551	54,306.5551	13.0806	0.0000	54,633.5703

Hudson Ranch Minerals - Imperial County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	36.85	77.18	-14.44	0.00	24.78	92.99	51.37	30.85	92.54	70.08	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	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
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	0.5071	3.9493	7.0341	0.0257	1.3624	0.0102	1.3726	0.3642	9.5400e-003	0.3737		2,642.3363	2,642.3363	0.1236		2,645.4257
Offroad	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575
Stationary	2.1728	6.1676	5.7596	0.0104		0.3496	0.3496		0.3496	0.3496		1,111.5167	1,111.5167	0.1558		1,115.4126
Total	5.9564	11.5419	14.6014	0.0381	1.3624	0.4314	1.7938	0.3642	0.4250	0.7892		3,939.2392	3,939.2392	0.3394	0.0000	3,947.7249

Hudson Ranch Minerals - Imperial County, Summer

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	lb/day										lb/day					
Area	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
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	0.5071	3.9493	7.0341	0.0257	1.3624	0.0102	1.3726	0.3642	9.5400e-003	0.3737		2,642.3363	2,642.3363	0.1236		2,645.4257
Offroad	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575
Stationary	2.1728	6.1676	5.7596	0.0104		0.3496	0.3496		0.3496	0.3496		1,111.5167	1,111.5167	0.1558		1,115.4126
Total	5.9564	11.5419	14.6014	0.0381	1.3624	0.4314	1.7938	0.3642	0.4250	0.7892		3,939.2392	3,939.2392	0.3394	0.0000	3,947.7249

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

3.0 Construction Detail

Construction Phase

Hudson Ranch Minerals - Imperial County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2021	3/12/2021	5	10	
2	Grading	Grading	3/1/2021	5/7/2021	5	50	
3	Building Construction	Building Construction	4/12/2021	4/7/2023	5	520	
4	trenching	Trenching	4/19/2021	10/8/2021	5	125	
5	Paving	Paving	9/30/2022	3/10/2023	5	116	
6	Architectural Coating	Architectural Coating	12/5/2022	3/31/2023	5	85	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 225

Acres of Paving: 25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 65,340 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	7	8.00	402	0.38
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Aerial Lifts	7	8.00	63	0.31

Hudson Ranch Minerals - Imperial County, Summer

Building Construction	Air Compressors	4	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	7	7.00	231	0.29
Building Construction	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	7	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	15	0.74
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	13	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
trenching	Excavators	2	8.00	158	0.38
trenching	Off-Highway Trucks	3	8.00	402	0.38
trenching	Rollers	1	8.00	80	0.38
trenching	Skid Steer Loaders	1	8.00	65	0.37
trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Graders	2	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Rubber Tired Dozers	2	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Hudson Ranch Minerals - Imperial County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	68.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	50	499.00	195.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
trenching	10	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	100.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					1.5342	0.0000	1.5342	0.2323	0.0000	0.2323			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	1.5342	1.5513	3.0856	0.2323	1.4411	1.6734		3,747.9449	3,747.9449	1.0549		3,774.3174

Hudson Ranch Minerals - Imperial County, Summer

3.2 Demolition - 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	lb/day										lb/day					
Hauling	0.0339	1.4386	0.1925	5.2600e-003	0.1192	4.4600e-003	0.1237	0.0327	4.2700e-003	0.0370		551.6226	551.6226	0.0207		552.1411
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	0.1182	0.0786	0.9125	1.1500e-003	0.1164	7.2000e-004	0.1171	0.0309	6.7000e-004	0.0315		113.2627	113.2627	8.8800e-003		113.4846
Total	0.1520	1.5172	1.1051	6.4100e-003	0.2356	5.1800e-003	0.2408	0.0636	4.9400e-003	0.0685		664.8853	664.8853	0.0296		665.6257

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6904	0.0000	0.6904	0.1046	0.0000	0.1046			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	0.4623	2.0032	23.2798	0.0388	0.6904	0.0616	0.7520	0.1046	0.0616	0.1662	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Hudson Ranch Minerals - Imperial County, Summer

3.2 Demolition - 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	lb/day										lb/day					
Hauling	0.0339	1.4386	0.1925	5.2600e-003	0.1192	4.4600e-003	0.1237	0.0327	4.2700e-003	0.0370		551.6226	551.6226	0.0207		552.1411
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	0.1182	0.0786	0.9125	1.1500e-003	0.1164	7.2000e-004	0.1171	0.0309	6.7000e-004	0.0315		113.2627	113.2627	8.8800e-003		113.4846
Total	0.1520	1.5172	1.1051	6.4100e-003	0.2356	5.1800e-003	0.2408	0.0636	4.9400e-003	0.0685		664.8853	664.8853	0.0296		665.6257

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					16.8164	0.0000	16.8164	7.1358	0.0000	7.1358			0.0000			0.0000
Off-Road	10.8816	111.3419	67.2327	0.1825		4.4989	4.4989		4.1390	4.1390		17,672.6845	17,672.6845	5.7157		17,815.5771
Total	10.8816	111.3419	67.2327	0.1825	16.8164	4.4989	21.3154	7.1358	4.1390	11.2748		17,672.6845	17,672.6845	5.7157		17,815.5771

Hudson Ranch Minerals - Imperial County, Summer

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3152	0.2095	2.4335	3.0600e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		302.0339	302.0339	0.0237		302.6257
Total	0.3152	0.2095	2.4335	3.0600e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		302.0339	302.0339	0.0237		302.6257

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.5674	0.0000	7.5674	3.2111	0.0000	3.2111			0.0000			0.0000
Off-Road	2.2376	9.6964	83.8000	0.1825		0.2984	0.2984		0.2984	0.2984	0.0000	17,672.6845	17,672.6845	5.7157		17,815.5771
Total	2.2376	9.6964	83.8000	0.1825	7.5674	0.2984	7.8657	3.2111	0.2984	3.5094	0.0000	17,672.6845	17,672.6845	5.7157		17,815.5771

Hudson Ranch Minerals - Imperial County, Summer

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3152	0.2095	2.4335	3.0600e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		302.0339	302.0339	0.0237		302.6257
Total	0.3152	0.2095	2.4335	3.0600e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		302.0339	302.0339	0.0237		302.6257

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	11.6726	116.4001	98.5579	0.1875		5.6434	5.6434		5.2948	5.2948		17,991.5021	17,991.5021	4.6926		18,108.8174
Total	11.6726	116.4001	98.5579	0.1875		5.6434	5.6434		5.2948	5.2948		17,991.5021	17,991.5021	4.6926		18,108.8174

Hudson Ranch Minerals - Imperial County, Summer

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	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	0.8786	22.0391	6.0238	0.0784	2.1520	0.0661	2.2180	0.6194	0.0632	0.6825		8,190.7506	8,190.7506	0.3356			8,199.1403
Worker	3.9314	2.6138	30.3573	0.0381	3.8717	0.0240	3.8957	1.0270	0.0221	1.0491		3,767.8725	3,767.8725	0.2953			3,775.2553
Total	4.8100	24.6529	36.3811	0.1165	6.0237	0.0901	6.1138	1.6464	0.0853	1.7317		11,958.6231	11,958.6231	0.6309			11,974.3956

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.3442	16.3249	111.9685	0.1875		0.2903	0.2903		0.2903	0.2903	0.0000	17,991.5021	17,991.5021	4.6926			18,108.8174
Total	2.3442	16.3249	111.9685	0.1875		0.2903	0.2903		0.2903	0.2903	0.0000	17,991.5021	17,991.5021	4.6926			18,108.8174

Hudson Ranch Minerals - Imperial County, Summer

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	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	0.8786	22.0391	6.0238	0.0784	2.1520	0.0661	2.2180	0.6194	0.0632	0.6825		8,190.7506	8,190.7506	0.3356		8,199.1403
Worker	3.9314	2.6138	30.3573	0.0381	3.8717	0.0240	3.8957	1.0270	0.0221	1.0491		3,767.8725	3,767.8725	0.2953		3,775.2553
Total	4.8100	24.6529	36.3811	0.1165	6.0237	0.0901	6.1138	1.6464	0.0853	1.7317		11,958.6231	11,958.6231	0.6309		11,974.3956

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.4253	101.4279	96.7562	0.1876		4.7514	4.7514		4.4613	4.4613		17,996.8031	17,996.8031	4.6779		18,113.7502
Total	10.4253	101.4279	96.7562	0.1876		4.7514	4.7514		4.4613	4.4613		17,996.8031	17,996.8031	4.6779		18,113.7502

Hudson Ranch Minerals - Imperial County, Summer

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8140	20.5193	5.4649	0.0777	2.1519	0.0561	2.2080	0.6194	0.0536	0.6730		8,128.2740	8,128.2740	0.3165		8,136.1854
Worker	3.6686	2.3991	27.8083	0.0367	3.8717	0.0230	3.8947	1.0270	0.0212	1.0482		3,630.3242	3,630.3242	0.2696		3,637.0645
Total	4.4826	22.9184	33.2732	0.1144	6.0237	0.0790	6.1027	1.6464	0.0748	1.7211		11,758.5982	11,758.5982	0.5861		11,773.2499

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3442	16.3249	111.9685	0.1876		0.2903	0.2903		0.2903	0.2903	0.0000	17,996.8031	17,996.8031	4.6779		18,113.7502
Total	2.3442	16.3249	111.9685	0.1876		0.2903	0.2903		0.2903	0.2903	0.0000	17,996.8031	17,996.8031	4.6779		18,113.7502

Hudson Ranch Minerals - Imperial County, Summer

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8140	20.5193	5.4649	0.0777	2.1519	0.0561	2.2080	0.6194	0.0536	0.6730		8,128.2740	8,128.2740	0.3165		8,136.1854
Worker	3.6686	2.3991	27.8083	0.0367	3.8717	0.0230	3.8947	1.0270	0.0212	1.0482		3,630.3242	3,630.3242	0.2696		3,637.0645
Total	4.4826	22.9184	33.2732	0.1144	6.0237	0.0790	6.1027	1.6464	0.0748	1.7211		11,758.5982	11,758.5982	0.5861		11,773.2499

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	9.6198	91.8565	95.6120	0.1877		4.1186	4.1186		3.8677	3.8677		18,003.0426	18,003.0426	4.6608		18,119.5631
Total	9.6198	91.8565	95.6120	0.1877		4.1186	4.1186		3.8677	3.8677		18,003.0426	18,003.0426	4.6608		18,119.5631

Hudson Ranch Minerals - Imperial County, Summer

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.6601	14.8248	4.7724	0.0761	2.1520	0.0224	2.1744	0.6194	0.0214	0.6408		7,961.0976	7,961.0976	0.2341			7,966.9490
Worker	3.4342	2.2121	25.5707	0.0353	3.8717	0.0221	3.8938	1.0270	0.0203	1.0473		3,492.5666	3,492.5666	0.2470			3,498.7411
Total	4.0943	17.0369	30.3431	0.1114	6.0237	0.0445	6.0682	1.6464	0.0418	1.6881		11,453.6643	11,453.6643	0.4810			11,465.6901

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.3442	16.3249	111.9685	0.1877		0.2903	0.2903		0.2903	0.2903	0.0000	18,003.0426	18,003.0426	4.6608			18,119.5631
Total	2.3442	16.3249	111.9685	0.1877		0.2903	0.2903		0.2903	0.2903	0.0000	18,003.0426	18,003.0426	4.6608			18,119.5631

Hudson Ranch Minerals - Imperial County, Summer

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6601	14.8248	4.7724	0.0761	2.1520	0.0224	2.1744	0.6194	0.0214	0.6408		7,961.0976	7,961.0976	0.2341		7,966.9490
Worker	3.4342	2.2121	25.5707	0.0353	3.8717	0.0221	3.8938	1.0270	0.0203	1.0473		3,492.5666	3,492.5666	0.2470		3,498.7411
Total	4.0943	17.0369	30.3431	0.1114	6.0237	0.0445	6.0682	1.6464	0.0418	1.6881		11,453.6643	11,453.6643	0.4810		11,465.6901

3.5 trenching - 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	3.1029	28.7121	27.4078	0.0640		1.2818	1.2818		1.1793	1.1793		6,192.9404	6,192.9404	2.0029		6,243.0135
Total	3.1029	28.7121	27.4078	0.0640		1.2818	1.2818		1.1793	1.1793		6,192.9404	6,192.9404	2.0029		6,243.0135

Hudson Ranch Minerals - Imperial County, Summer

3.5 trenching - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1970	0.1310	1.5209	1.9100e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		188.7712	188.7712	0.0148		189.1411
Total	0.1970	0.1310	1.5209	1.9100e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		188.7712	188.7712	0.0148		189.1411

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	0.8090	4.4475	36.1974	0.0640		0.1045	0.1045		0.1045	0.1045	0.0000	6,192.9404	6,192.9404	2.0029		6,243.0135
Total	0.8090	4.4475	36.1974	0.0640		0.1045	0.1045		0.1045	0.1045	0.0000	6,192.9404	6,192.9404	2.0029		6,243.0135

Hudson Ranch Minerals - Imperial County, Summer

3.5 trenching - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1970	0.1310	1.5209	1.9100e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		188.7712	188.7712	0.0148		189.1411
Total	0.1970	0.1310	1.5209	1.9100e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		188.7712	188.7712	0.0148		189.1411

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5378	38.6801	23.9259	0.0496		1.7382	1.7382		1.5991	1.5991		4,803.8110	4,803.8110	1.5537		4,842.6522
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.7636	38.6801	23.9259	0.0496		1.7382	1.7382		1.5991	1.5991		4,803.8110	4,803.8110	1.5537		4,842.6522

Hudson Ranch Minerals - Imperial County, Summer

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1838	0.1202	1.3932	1.8400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		181.8800	181.8800	0.0135		182.2177
Total	0.1838	0.1202	1.3932	1.8400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		181.8800	181.8800	0.0135		182.2177

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	0.6074	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8110	4,803.8110	1.5537		4,842.6522
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8333	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8110	4,803.8110	1.5537		4,842.6522

Hudson Ranch Minerals - Imperial County, Summer

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1838	0.1202	1.3932	1.8400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		181.8800	181.8800	0.0135		182.2177
Total	0.1838	0.1202	1.3932	1.8400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		181.8800	181.8800	0.0135		182.2177

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0897	33.2704	22.8795	0.0496		1.4365	1.4365		1.3216	1.3216		4,803.8739	4,803.8739	1.5537		4,842.7157
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.3156	33.2704	22.8795	0.0496		1.4365	1.4365		1.3216	1.3216		4,803.8739	4,803.8739	1.5537		4,842.7157

Hudson Ranch Minerals - Imperial County, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1721	0.1108	1.2811	1.7700e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		174.9783	174.9783	0.0124			175.2876
Total	0.1721	0.1108	1.2811	1.7700e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		174.9783	174.9783	0.0124			175.2876

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	0.6074	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8739	4,803.8739	1.5537			4,842.7157
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.8333	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8739	4,803.8739	1.5537			4,842.7157

Hudson Ranch Minerals - Imperial County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1721	0.1108	1.2811	1.7700e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		174.9783	174.9783	0.0124		175.2876
Total	0.1721	0.1108	1.2811	1.7700e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		174.9783	174.9783	0.0124		175.2876

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	21.9078	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Hudson Ranch Minerals - Imperial County, Summer

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7352	0.4808	5.5728	7.3600e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		727.5199	727.5199	0.0540		728.8706
Total	0.7352	0.4808	5.5728	7.3600e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		727.5199	727.5199	0.0540		728.8706

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
Total	21.7330	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062

Hudson Ranch Minerals - Imperial County, Summer

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7352	0.4808	5.5728	7.3600e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		727.5199	727.5199	0.0540		728.8706
Total	0.7352	0.4808	5.5728	7.3600e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		727.5199	727.5199	0.0540		728.8706

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	21.8949	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Hudson Ranch Minerals - Imperial County, Summer

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6882	0.4433	5.1244	7.0700e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		699.9132	699.9132	0.0495		701.1505
Total	0.6882	0.4433	5.1244	7.0700e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		699.9132	699.9132	0.0495		701.1505

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0168		281.8690
Total	21.7330	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0168		281.8690

Hudson Ranch Minerals - Imperial County, Summer

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.6882	0.4433	5.1244	7.0700e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		699.9132	699.9132	0.0495			701.1505
Total	0.6882	0.4433	5.1244	7.0700e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		699.9132	699.9132	0.0495			701.1505

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Hudson Ranch Minerals - Imperial County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5071	3.9493	7.0341	0.0257	1.3624	0.0102	1.3726	0.3642	9.5400e-003	0.3737		2,642.3363	2,642.3363	0.1236		2,645.4257
Unmitigated	0.5071	3.9493	7.0341	0.0257	1.3624	0.0102	1.3726	0.3642	9.5400e-003	0.3737		2,642.3363	2,642.3363	0.1236		2,645.4257

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	134.00	134.00	134.00	631,595	631,595
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	134.00	134.00	134.00	631,595	631,595

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.40	9.50	11.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.40	9.50	11.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.40	9.50	11.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Hudson Ranch Minerals - Imperial County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.524989	0.030717	0.161165	0.112416	0.014580	0.004690	0.018794	0.121206	0.003615	0.001256	0.005248	0.000725	0.000600
General Heavy Industry	0.380000	0.150000	0.100000	0.150000	0.000000	0.000000	0.000000	0.220000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.524989	0.030717	0.161165	0.112416	0.014580	0.004690	0.018794	0.121206	0.003615	0.001256	0.005248	0.000725	0.000600

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

Hudson Ranch Minerals - Imperial County, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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

Hudson Ranch Minerals - Imperial County, Summer

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	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
Unmitigated	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291

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	0.5054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1800e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
Total	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291

Hudson Ranch Minerals - Imperial County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1800e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
Total	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291

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
Forklifts	2	8.00	365	50	0.20	CNG

Hudson Ranch Minerals - Imperial County, Summer

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575
Total	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	2	80	600	0.73	Diesel
Fire Pump	1	2	80	62	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

Hudson Ranch Minerals - Imperial County, Summer

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (600 - 750 HP)	1.9693	5.5041	5.0213	9.4600e-003		0.2897	0.2897		0.2897	0.2897		1,007.4170	1,007.4170	0.1412		1,010.9480
Fire Pump - Diesel (50 - 75 HP)	0.2035	0.6636	0.7384	9.8000e-004		0.0599	0.0599		0.0599	0.0599		104.0998	104.0998	0.0146		104.4646
Total	2.1728	6.1676	5.7596	0.0104		0.3496	0.3496		0.3496	0.3496		1,111.5167	1,111.5167	0.1558		1,115.4126

11.0 Vegetation

Hudson Ranch Minerals - Imperial County, Winter

**Hudson Ranch Minerals
Imperial County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	100.00	1000sqft	27.00	100,000.00	0
Other Asphalt Surfaces	10.00	Acre	10.00	435,600.00	0
Other Non-Asphalt Surfaces	15.00	Acre	15.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	12
Climate Zone	15			Operational Year	2024
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	593.76	CH4 Intensity (lb/MWhr)	0.014	N2O Intensity (lb/MWhr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - <https://www.iid.com/energy/renewable-energy> 2020 48.8% RPS since 2030. To meet 2030 60% requirement, IID will add 11.2% by 2030 (48.8+11.2=60) or 1.12% per year (1.12%*10 years = 11.2%. For 2024 the IID Renewable should be 53.3%

Land Use - 37 acre construction site and 15 acre laydown area

Construction Phase - Construction dates estimated by Project Engineer

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Hudson Ranch Minerals - Imperial County, Winter

Off-road Equipment - Equipment List provided by project applicant
 Off-road Equipment - Equipment List provided by project applicant

Trips and VMT -

On-road Fugitive Dust - Trips use 111 and McDonald all paved except 2 miles at McDonald. prior to const. this area will be improved with 12-18" base and would have dedicated water truck. The City wants to wait to pave McDonald till construction is complete.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Trip Gen for Operations per TS excludes PCE adjustments 134 ADT

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Roadways are paved

Woodstoves -

Area Coating -

Energy Use - Energy Use - Project would consume 51,840 MWH per year

Water And Wastewater - Project will use 3,400 afy of water from IID canals.

Construction Off-road Equipment Mitigation - T4 Equipment

Operational Off-Road Equipment - 2 forklifts less than 50HP will be used onsite

Fleet Mix - Truck Trips would be 22%. Remainder of vehicles would be Passenger Cars

Stationary Sources - Emergency Generators and Fire Pumps - 50 hours per year on average would be used 80 hours on average assumed

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Hudson Ranch Minerals - Imperial County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	70.00	10.00
tblConstructionPhase	NumDays	110.00	50.00
tblConstructionPhase	NumDays	1,110.00	520.00
tblConstructionPhase	NumDays	75.00	116.00
tblConstructionPhase	NumDays	75.00	85.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	518.40
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblFleetMix	HHD	0.12	0.22
tblFleetMix	LDA	0.52	0.38
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.16	0.10
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	4.6900e-003	0.00
tblFleetMix	MCY	5.2480e-003	0.00
tblFleetMix	MDV	0.11	0.15
tblFleetMix	MH	6.0000e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	3.6150e-003	0.00
tblFleetMix	SBUS	7.2500e-004	0.00
tblFleetMix	UBUS	1.2560e-003	0.00

Hudson Ranch Minerals - Imperial County, Winter

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	89.00	50.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.014
tblProjectCharacteristics	CO2IntensityFactor	1270.9	593.76
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	124.00	71.92
tblVehicleTrips	ST_TR	1.50	1.34
tblVehicleTrips	SU_TR	1.50	1.34
tblVehicleTrips	WD_TR	1.50	1.34
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	23,125,000.00	1,107,894,868.00

2.0 Emissions Summary

Hudson Ranch Minerals - Imperial County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	30.2907	282.0794	225.0053	0.5461	23.3444	11.5191	34.8635	8.9159	10.7029	19.6188	0.0000	53,377.52 49	53,377.52 49	13.0491	0.0000	53,703.75 25
2022	40.8037	165.5509	154.0058	0.3541	6.9935	6.6576	13.6511	1.9036	6.2237	8.1273	0.0000	34,775.06 63	34,775.06 63	6.8714	0.0000	34,946.85 13
2023	39.1431	144.2257	148.8780	0.3511	6.9935	5.6765	12.6700	1.9036	5.3075	7.2111	0.0000	34,476.47 25	34,476.47 25	6.7385	0.0000	34,644.93 61
Maximum	40.8037	282.0794	225.0053	0.5461	23.3444	11.5191	34.8635	8.9159	10.7029	19.6188	0.0000	53,377.52 49	53,377.52 49	13.0491	0.0000	53,703.75 25

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	10.0245	56.0941	263.7729	0.5461	14.0954	0.7881	14.8835	4.9912	0.7830	5.7742	0.0000	53,377.52 49	53,377.52 49	13.0491	0.0000	53,703.75 24
2022	29.6174	43.1203	173.4849	0.3541	6.9935	0.4617	7.4552	1.9036	0.4569	2.3605	0.0000	34,775.06 63	34,775.06 63	6.8714	0.0000	34,946.85 13
2023	29.2232	36.8817	170.5501	0.3511	6.9935	0.4259	7.4194	1.9036	0.4227	2.3263	0.0000	34,476.47 25	34,476.47 25	6.7385	0.0000	34,644.93 61
Maximum	29.6174	56.0941	263.7729	0.5461	14.0954	0.7881	14.8835	4.9912	0.7830	5.7742	0.0000	53,377.52 49	53,377.52 49	13.0491	0.0000	53,703.75 24

Hudson Ranch Minerals - Imperial County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	37.53	77.01	-15.14	0.00	24.78	92.98	51.36	30.85	92.52	70.07	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	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
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	0.3783	3.9437	5.2521	0.0235	1.3624	0.0103	1.3727	0.3642	9.6800e-003	0.3739		2,414.7629	2,414.7629	0.1177		2,417.7063
Offroad	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575
Stationary	2.1728	6.1676	5.7596	0.0104		0.3496	0.3496		0.3496	0.3496		1,111.5167	1,111.5167	0.1558		1,115.4126
Total	5.8275	11.5363	12.8193	0.0358	1.3624	0.4315	1.7939	0.3642	0.4252	0.7894		3,711.6657	3,711.6657	0.3336	0.0000	3,720.0055

Hudson Ranch Minerals - Imperial County, Winter

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	lb/day										lb/day					
Area	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
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	0.3783	3.9437	5.2521	0.0235	1.3624	0.0103	1.3727	0.3642	9.6800e-003	0.3739		2,414.7629	2,414.7629	0.1177		2,417.7063
Offroad	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575
Stationary	2.1728	6.1676	5.7596	0.0104		0.3496	0.3496		0.3496	0.3496		1,111.5167	1,111.5167	0.1558		1,115.4126
Total	5.8275	11.5363	12.8193	0.0358	1.3624	0.4315	1.7939	0.3642	0.4252	0.7894		3,711.6657	3,711.6657	0.3336	0.0000	3,720.0055

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

3.0 Construction Detail

Construction Phase

Hudson Ranch Minerals - Imperial County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2021	3/12/2021	5	10	
2	Grading	Grading	3/1/2021	5/7/2021	5	50	
3	Building Construction	Building Construction	4/12/2021	4/7/2023	5	520	
4	trenching	Trenching	4/19/2021	10/8/2021	5	125	
5	Paving	Paving	9/30/2022	3/10/2023	5	116	
6	Architectural Coating	Architectural Coating	12/5/2022	3/31/2023	5	85	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 225

Acres of Paving: 25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 65,340 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	7	8.00	402	0.38
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Aerial Lifts	7	8.00	63	0.31

Hudson Ranch Minerals - Imperial County, Winter

Building Construction	Air Compressors	4	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	7	7.00	231	0.29
Building Construction	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	7	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	15	0.74
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	13	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
trenching	Excavators	2	8.00	158	0.38
trenching	Off-Highway Trucks	3	8.00	402	0.38
trenching	Rollers	1	8.00	80	0.38
trenching	Skid Steer Loaders	1	8.00	65	0.37
trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Graders	2	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Rubber Tired Dozers	2	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Hudson Ranch Minerals - Imperial County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	68.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	50	499.00	195.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
trenching	10	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	100.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					1.5342	0.0000	1.5342	0.2323	0.0000	0.2323			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	1.5342	1.5513	3.0856	0.2323	1.4411	1.6734		3,747.9449	3,747.9449	1.0549		3,774.3174

Hudson Ranch Minerals - Imperial County, Winter

3.2 Demolition - 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	lb/day										lb/day					
Hauling	0.0360	1.4756	0.2315	5.1100e-003	0.1192	4.5700e-003	0.1238	0.0327	4.3700e-003	0.0371		535.4143	535.4143	0.0233		535.9966
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	0.0991	0.0825	0.6648	9.6000e-004	0.1164	7.2000e-004	0.1171	0.0309	6.7000e-004	0.0315		94.8483	94.8483	7.0400e-003		95.0242
Total	0.1350	1.5581	0.8963	6.0700e-003	0.2356	5.2900e-003	0.2409	0.0636	5.0400e-003	0.0686		630.2626	630.2626	0.0303		631.0208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6904	0.0000	0.6904	0.1046	0.0000	0.1046			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	0.4623	2.0032	23.2798	0.0388	0.6904	0.0616	0.7520	0.1046	0.0616	0.1662	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Hudson Ranch Minerals - Imperial County, Winter

3.2 Demolition - 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	lb/day										lb/day					
Hauling	0.0360	1.4756	0.2315	5.1100e-003	0.1192	4.5700e-003	0.1238	0.0327	4.3700e-003	0.0371		535.4143	535.4143	0.0233		535.9966
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	0.0991	0.0825	0.6648	9.6000e-004	0.1164	7.2000e-004	0.1171	0.0309	6.7000e-004	0.0315		94.8483	94.8483	7.0400e-003		95.0242
Total	0.1350	1.5581	0.8963	6.0700e-003	0.2356	5.2900e-003	0.2409	0.0636	5.0400e-003	0.0686		630.2626	630.2626	0.0303		631.0208

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					16.8164	0.0000	16.8164	7.1358	0.0000	7.1358			0.0000			0.0000
Off-Road	10.8816	111.3419	67.2327	0.1825		4.4989	4.4989		4.1390	4.1390		17,672.6845	17,672.6845	5.7157		17,815.5771
Total	10.8816	111.3419	67.2327	0.1825	16.8164	4.4989	21.3154	7.1358	4.1390	11.2748		17,672.6845	17,672.6845	5.7157		17,815.5771

Hudson Ranch Minerals - Imperial County, Winter

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2642	0.2200	1.7728	2.5500e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		252.9288	252.9288	0.0188		253.3979
Total	0.2642	0.2200	1.7728	2.5500e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		252.9288	252.9288	0.0188		253.3979

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.5674	0.0000	7.5674	3.2111	0.0000	3.2111			0.0000			0.0000
Off-Road	2.2376	9.6964	83.8000	0.1825		0.2984	0.2984		0.2984	0.2984	0.0000	17,672.6845	17,672.6845	5.7157		17,815.5771
Total	2.2376	9.6964	83.8000	0.1825	7.5674	0.2984	7.8657	3.2111	0.2984	3.5094	0.0000	17,672.6845	17,672.6845	5.7157		17,815.5771

Hudson Ranch Minerals - Imperial County, Winter

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2642	0.2200	1.7728	2.5500e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		252.9288	252.9288	0.0188		253.3979
Total	0.2642	0.2200	1.7728	2.5500e-003	0.3104	1.9300e-003	0.3123	0.0823	1.7700e-003	0.0841		252.9288	252.9288	0.0188		253.3979

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	11.6726	116.4001	98.5579	0.1875		5.6434	5.6434		5.2948	5.2948		17,991.5021	17,991.5021	4.6926		18,108.8174
Total	11.6726	116.4001	98.5579	0.1875		5.6434	5.6434		5.2948	5.2948		17,991.5021	17,991.5021	4.6926		18,108.8174

Hudson Ranch Minerals - Imperial County, Winter

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	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	0.9085	22.5236	6.8103	0.0761	2.1520	0.0677	2.2197	0.6194	0.0648	0.6841		7,954.1018	7,954.1018	0.3733		7,963.4343
Worker	3.2959	2.7443	22.1159	0.0319	3.8717	0.0240	3.8957	1.0270	0.0221	1.0491		3,155.2868	3,155.2868	0.2341		3,161.1387
Total	4.2044	25.2679	28.9262	0.1080	6.0237	0.0918	6.1154	1.6464	0.0869	1.7333		11,109.3886	11,109.3886	0.6074		11,124.5729

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3442	16.3249	111.9685	0.1875		0.2903	0.2903		0.2903	0.2903	0.0000	17,991.5021	17,991.5021	4.6926		18,108.8174
Total	2.3442	16.3249	111.9685	0.1875		0.2903	0.2903		0.2903	0.2903	0.0000	17,991.5021	17,991.5021	4.6926		18,108.8174

Hudson Ranch Minerals - Imperial County, Winter

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	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	0.9085	22.5236	6.8103	0.0761	2.1520	0.0677	2.2197	0.6194	0.0648	0.6841		7,954.1018	7,954.1018	0.3733		7,963.4343
Worker	3.2959	2.7443	22.1159	0.0319	3.8717	0.0240	3.8957	1.0270	0.0221	1.0491		3,155.2868	3,155.2868	0.2341		3,161.1387
Total	4.2044	25.2679	28.9262	0.1080	6.0237	0.0918	6.1154	1.6464	0.0869	1.7333		11,109.3886	11,109.3886	0.6074		11,124.5729

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.4253	101.4279	96.7562	0.1876		4.7514	4.7514		4.4613	4.4613		17,996.8031	17,996.8031	4.6779		18,113.7502
Total	10.4253	101.4279	96.7562	0.1876		4.7514	4.7514		4.4613	4.4613		17,996.8031	17,996.8031	4.6779		18,113.7502

Hudson Ranch Minerals - Imperial County, Winter

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8435	20.8899	6.2158	0.0755	2.1519	0.0576	2.2096	0.6194	0.0551	0.6745		7,891.354 4	7,891.354 4	0.3531		7,900.182 5
Worker	3.0896	2.5147	20.2274	0.0307	3.8717	0.0230	3.8947	1.0270	0.0212	1.0482		3,040.101 4	3,040.101 4	0.2147		3,045.467 6
Total	3.9330	23.4046	26.4431	0.1062	6.0237	0.0806	6.1042	1.6464	0.0763	1.7226		10,931.45 58	10,931.45 58	0.5678		10,945.65 01

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3442	16.3249	111.9685	0.1876		0.2903	0.2903		0.2903	0.2903	0.0000	17,996.80 31	17,996.80 31	4.6779		18,113.75 02
Total	2.3442	16.3249	111.9685	0.1876		0.2903	0.2903		0.2903	0.2903	0.0000	17,996.80 31	17,996.80 31	4.6779		18,113.75 02

Hudson Ranch Minerals - Imperial County, Winter

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8435	20.8899	6.2158	0.0755	2.1519	0.0576	2.2096	0.6194	0.0551	0.6745		7,891.354 4	7,891.354 4	0.3531		7,900.182 5
Worker	3.0896	2.5147	20.2274	0.0307	3.8717	0.0230	3.8947	1.0270	0.0212	1.0482		3,040.101 4	3,040.101 4	0.2147		3,045.467 6
Total	3.9330	23.4046	26.4431	0.1062	6.0237	0.0806	6.1042	1.6464	0.0763	1.7226		10,931.45 58	10,931.45 58	0.5678		10,945.65 01

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	9.6198	91.8565	95.6120	0.1877		4.1186	4.1186		3.8677	3.8677		18,003.04 26	18,003.04 26	4.6608		18,119.56 31
Total	9.6198	91.8565	95.6120	0.1877		4.1186	4.1186		3.8677	3.8677		18,003.04 26	18,003.04 26	4.6608		18,119.56 31

Hudson Ranch Minerals - Imperial County, Winter

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6814	14.9012	5.3484	0.0740	2.1520	0.0230	2.1749	0.6194	0.0220	0.6413		7,730.6376	7,730.6376	0.2602		7,737.1420
Worker	2.9039	2.3148	18.5741	0.0295	3.8717	0.0221	3.8938	1.0270	0.0203	1.0473		2,924.8040	2,924.8040	0.1976		2,929.7428
Total	3.5853	17.2160	23.9225	0.1035	6.0237	0.0451	6.0687	1.6464	0.0423	1.6887		10,655.4416	10,655.4416	0.4577		10,666.8848

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3442	16.3249	111.9685	0.1877		0.2903	0.2903		0.2903	0.2903	0.0000	18,003.0426	18,003.0426	4.6608		18,119.5631
Total	2.3442	16.3249	111.9685	0.1877		0.2903	0.2903		0.2903	0.2903	0.0000	18,003.0426	18,003.0426	4.6608		18,119.5631

Hudson Ranch Minerals - Imperial County, Winter

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6814	14.9012	5.3484	0.0740	2.1520	0.0230	2.1749	0.6194	0.0220	0.6413		7,730.6376	7,730.6376	0.2602		7,737.1420
Worker	2.9039	2.3148	18.5741	0.0295	3.8717	0.0221	3.8938	1.0270	0.0203	1.0473		2,924.8040	2,924.8040	0.1976		2,929.7428
Total	3.5853	17.2160	23.9225	0.1035	6.0237	0.0451	6.0687	1.6464	0.0423	1.6887		10,655.4416	10,655.4416	0.4577		10,666.8848

3.5 trenching - 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	3.1029	28.7121	27.4078	0.0640		1.2818	1.2818		1.1793	1.1793		6,192.9404	6,192.9404	2.0029		6,243.0135
Total	3.1029	28.7121	27.4078	0.0640		1.2818	1.2818		1.1793	1.1793		6,192.9404	6,192.9404	2.0029		6,243.0135

Hudson Ranch Minerals - Imperial County, Winter

3.5 trenching - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1651	0.1375	1.1080	1.6000e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		158.0805	158.0805	0.0117		158.3737
Total	0.1651	0.1375	1.1080	1.6000e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		158.0805	158.0805	0.0117		158.3737

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	0.8090	4.4475	36.1974	0.0640		0.1045	0.1045		0.1045	0.1045	0.0000	6,192.9404	6,192.9404	2.0029		6,243.0135
Total	0.8090	4.4475	36.1974	0.0640		0.1045	0.1045		0.1045	0.1045	0.0000	6,192.9404	6,192.9404	2.0029		6,243.0135

Hudson Ranch Minerals - Imperial County, Winter

3.5 trenching - 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1651	0.1375	1.1080	1.6000e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		158.0805	158.0805	0.0117		158.3737
Total	0.1651	0.1375	1.1080	1.6000e-003	0.1940	1.2000e-003	0.1952	0.0515	1.1100e-003	0.0526		158.0805	158.0805	0.0117		158.3737

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5378	38.6801	23.9259	0.0496		1.7382	1.7382		1.5991	1.5991		4,803.8110	4,803.8110	1.5537		4,842.6522
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.7636	38.6801	23.9259	0.0496		1.7382	1.7382		1.5991	1.5991		4,803.8110	4,803.8110	1.5537		4,842.6522

Hudson Ranch Minerals - Imperial County, Winter

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1548	0.1260	1.0134	1.5400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		152.3097	152.3097	0.0108		152.5785
Total	0.1548	0.1260	1.0134	1.5400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		152.3097	152.3097	0.0108		152.5785

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	0.6074	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8110	4,803.8110	1.5537		4,842.6522
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8333	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8110	4,803.8110	1.5537		4,842.6522

Hudson Ranch Minerals - Imperial County, Winter

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1548	0.1260	1.0134	1.5400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		152.3097	152.3097	0.0108			152.5785
Total	0.1548	0.1260	1.0134	1.5400e-003	0.1940	1.1500e-003	0.1951	0.0515	1.0600e-003	0.0525		152.3097	152.3097	0.0108			152.5785

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.0897	33.2704	22.8795	0.0496		1.4365	1.4365		1.3216	1.3216		4,803.8739	4,803.8739	1.5537			4,842.7157
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	3.3156	33.2704	22.8795	0.0496		1.4365	1.4365		1.3216	1.3216		4,803.8739	4,803.8739	1.5537			4,842.7157

Hudson Ranch Minerals - Imperial County, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1455	0.1160	0.9306	1.4800e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		146.5333	146.5333	9.9000e-003		146.7807
Total	0.1455	0.1160	0.9306	1.4800e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		146.5333	146.5333	9.9000e-003		146.7807

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	0.6074	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8739	4,803.8739	1.5537		4,842.7157
Paving	0.2259					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8333	2.6322	28.1738	0.0496		0.0810	0.0810		0.0810	0.0810	0.0000	4,803.8739	4,803.8739	1.5537		4,842.7157

Hudson Ranch Minerals - Imperial County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1455	0.1160	0.9306	1.4800e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		146.5333	146.5333	9.9000e-003		146.7807
Total	0.1455	0.1160	0.9306	1.4800e-003	0.1940	1.1100e-003	0.1951	0.0515	1.0200e-003	0.0525		146.5333	146.5333	9.9000e-003		146.7807

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	21.9078	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Hudson Ranch Minerals - Imperial County, Winter

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6192	0.5039	4.0536	6.1500e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		609.2388	609.2388	0.0430		610.3142
Total	0.6192	0.5039	4.0536	6.1500e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		609.2388	609.2388	0.0430		610.3142

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
Total	21.7330	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062

Hudson Ranch Minerals - Imperial County, Winter

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6192	0.5039	4.0536	6.1500e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		609.2388	609.2388	0.0430		610.3142
Total	0.6192	0.5039	4.0536	6.1500e-003	0.7759	4.6100e-003	0.7805	0.2058	4.2400e-003	0.2101		609.2388	609.2388	0.0430		610.3142

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	21.8949	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Hudson Ranch Minerals - Imperial County, Winter

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5820	0.4639	3.7223	5.9100e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		586.1331	586.1331	0.0396		587.1228
Total	0.5820	0.4639	3.7223	5.9100e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		586.1331	586.1331	0.0396		587.1228

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0168		281.8690
Total	21.7330	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0168		281.8690

Hudson Ranch Minerals - Imperial County, Winter

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5820	0.4639	3.7223	5.9100e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		586.1331	586.1331	0.0396		587.1228
Total	0.5820	0.4639	3.7223	5.9100e-003	0.7759	4.4200e-003	0.7803	0.2058	4.0700e-003	0.2099		586.1331	586.1331	0.0396		587.1228

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Hudson Ranch Minerals - Imperial County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3783	3.9437	5.2521	0.0235	1.3624	0.0103	1.3727	0.3642	9.6800e-003	0.3739		2,414.7629	2,414.7629	0.1177		2,417.7063
Unmitigated	0.3783	3.9437	5.2521	0.0235	1.3624	0.0103	1.3727	0.3642	9.6800e-003	0.3739		2,414.7629	2,414.7629	0.1177		2,417.7063

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	134.00	134.00	134.00	631,595	631,595
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	134.00	134.00	134.00	631,595	631,595

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.40	9.50	11.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.40	9.50	11.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.40	9.50	11.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Hudson Ranch Minerals - Imperial County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.524989	0.030717	0.161165	0.112416	0.014580	0.004690	0.018794	0.121206	0.003615	0.001256	0.005248	0.000725	0.000600
General Heavy Industry	0.380000	0.150000	0.100000	0.150000	0.000000	0.000000	0.000000	0.220000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.524989	0.030717	0.161165	0.112416	0.014580	0.004690	0.018794	0.121206	0.003615	0.001256	0.005248	0.000725	0.000600

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

Hudson Ranch Minerals - Imperial County, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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

Hudson Ranch Minerals - Imperial County, Winter

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	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
Unmitigated	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291

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	0.5054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1800e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
Total	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291

Hudson Ranch Minerals - Imperial County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5054					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1800e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291
Total	3.0323	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0274	0.0274	7.0000e-005		0.0291

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
Forklifts	2	8.00	365	50	0.20	CNG

Hudson Ranch Minerals - Imperial County, Winter

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575
Total	0.2442	1.4249	1.7949	1.9100e-003		0.0716	0.0716		0.0659	0.0659		185.3588	185.3588	0.0600		186.8575

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	2	80	600	0.73	Diesel
Fire Pump	1	2	80	62	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

Hudson Ranch Minerals - Imperial County, Winter

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (600 - 750 HP)	1.9693	5.5041	5.0213	9.4600e-003		0.2897	0.2897		0.2897	0.2897		1,007.4170	1,007.4170	0.1412		1,010.9480
Fire Pump - Diesel (50 - 75 HP)	0.2035	0.6636	0.7384	9.8000e-004		0.0599	0.0599		0.0599	0.0599		104.0998	104.0998	0.0146		104.4646
Total	2.1728	6.1676	5.7596	0.0104		0.3496	0.3496		0.3496	0.3496		1,111.5167	1,111.5167	0.1558		1,115.4126

11.0 Vegetation

Hudson Ranch Minerals - Imperial County, Annual

**Hudson Ranch Minerals
Imperial County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	100.00	1000sqft	27.00	100,000.00	0
Other Asphalt Surfaces	10.00	Acre	10.00	435,600.00	0
Other Non-Asphalt Surfaces	15.00	Acre	15.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	12
Climate Zone	15			Operational Year	2024
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	593.76	CH4 Intensity (lb/MWhr)	0.014	N2O Intensity (lb/MWhr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - <https://www.iid.com/energy/renewable-energy> 2020 48.8% RPS since 2030. To meet 2030 60% requirement, IID will add 11.2% by 2030 (48.8+11.2=60) or 1.12% per year (1.12%*10 years = 11.2%. For 2024 the IID Renewable should be 53.3%

Land Use - 37 acre construction site and 15 acre laydown area

Construction Phase - Construction dates estimated by Project Engineer

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Off-road Equipment - Equipment List provided by project applicant

Hudson Ranch Minerals - Imperial County, Annual

Off-road Equipment - Equipment List provided by project applicant
 Off-road Equipment - Equipment List provided by project applicant

Trips and VMT -

On-road Fugitive Dust - Trips use 111 and McDonald all paved except 2 miles at McDonald. prior to const. this area will be improved with 12-18" base and would have dedicated water truck. The City wants to wait to pave McDonald till construction is complete.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Trip Gen for Operations per TS excludes PCE adjustments 134 ADT

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Roadways are paved

Woodstoves -

Area Coating -

Energy Use - Energy Use - Project would consume 51,840 MWH per year

Water And Wastewater - Project will use 3,400 afy of water from IID canals.

Construction Off-road Equipment Mitigation - T4 Equipment

Operational Off-Road Equipment - 2 forklifts less than 50HP will be used onsite

Fleet Mix - Truck Trips would be 22%. Remainder of vehicles would be Passenger Cars

Stationary Sources - Emergency Generators and Fire Pumps - 50 hours per year on average would be used 80 hours on average assumed

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Hudson Ranch Minerals - Imperial County, Annual

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	70.00	10.00
tblConstructionPhase	NumDays	110.00	50.00
tblConstructionPhase	NumDays	1,110.00	520.00
tblConstructionPhase	NumDays	75.00	116.00
tblConstructionPhase	NumDays	75.00	85.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	518.40
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblFleetMix	HHD	0.12	0.22
tblFleetMix	LDA	0.52	0.38
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.16	0.10
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	4.6900e-003	0.00
tblFleetMix	MCY	5.2480e-003	0.00
tblFleetMix	MDV	0.11	0.15
tblFleetMix	MH	6.0000e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	3.6150e-003	0.00
tblFleetMix	SBUS	7.2500e-004	0.00
tblFleetMix	UBUS	1.2560e-003	0.00

Hudson Ranch Minerals - Imperial County, Annual

tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	89.00	50.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.014
tblProjectCharacteristics	CO2IntensityFactor	1270.9	593.76
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	50	100
tblSolidWaste	SolidWasteGenerationRate	124.00	71.92
tblVehicleTrips	ST_TR	1.50	1.34
tblVehicleTrips	SU_TR	1.50	1.34
tblVehicleTrips	WD_TR	1.50	1.34
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	23,125,000.00	1,107,894,868.00

2.0 Emissions Summary

Hudson Ranch Minerals - Imperial County, Annual

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	2.0102	18.2276	15.9194	0.0374	1.0174	0.7452	1.7627	0.3406	0.6957	1.0363	0.0000	3,329.278 1	3,329.278 1	0.7059	0.0000	3,346.926 3
2022	2.2233	17.5456	17.1288	0.0405	0.7919	0.6863	1.4782	0.2165	0.6434	0.8599	0.0000	3,613.709 4	3,613.709 4	0.6658	0.0000	3,630.353 5
2023	1.2800	4.7132	5.0332	0.0119	0.2393	0.1841	0.4234	0.0652	0.1723	0.2375	0.0000	1,061.102 6	1,061.102 6	0.1998	0.0000	1,066.098 2
Maximum	2.2233	18.2276	17.1288	0.0405	1.0174	0.7452	1.7627	0.3406	0.6957	1.0363	0.0000	3,613.709 4	3,613.709 4	0.7059	0.0000	3,630.353 5

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	0.7511	4.5156	18.1655	0.0374	0.7820	0.0507	0.8326	0.2418	0.0502	0.2920	0.0000	3,329.275 4	3,329.275 4	0.7059	0.0000	3,346.923 6
2022	1.0743	5.2798	19.2467	0.0405	0.7919	0.0509	0.8428	0.2165	0.0503	0.2668	0.0000	3,613.706 7	3,613.706 7	0.6658	0.0000	3,630.350 8
2023	0.9580	1.2655	5.7387	0.0119	0.2393	0.0141	0.2533	0.0652	0.0139	0.0791	0.0000	1,061.101 8	1,061.101 8	0.1998	0.0000	1,066.097 4
Maximum	1.0743	5.2798	19.2467	0.0405	0.7919	0.0509	0.8428	0.2418	0.0503	0.2920	0.0000	3,613.706 7	3,613.706 7	0.7059	0.0000	3,630.350 8

Hudson Ranch Minerals - Imperial County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	49.52	72.68	-13.31	0.00	11.49	92.84	47.36	15.87	92.43	70.10	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)
2	1-28-2021	4-27-2021	3.7013	0.5684
3	4-28-2021	7-27-2021	6.6029	1.7903
4	7-28-2021	10-27-2021	6.0142	1.7271
5	10-28-2021	1-27-2022	4.9995	1.5612
6	1-28-2022	4-27-2022	4.4746	1.4794
7	4-28-2022	7-27-2022	4.5258	1.4973
8	7-28-2022	10-27-2022	5.0021	1.5506
9	10-28-2022	1-27-2023	6.2269	2.0141
10	1-28-2023	4-27-2023	4.1560	1.5589
		Highest	6.6029	2.0141

Hudson Ranch Minerals - Imperial County, Annual

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	0.5533	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	13,961.8083	13,961.8083	0.3292	0.0705	13,991.0600
Mobile	0.0762	0.7252	1.0493	4.4600e-003	0.2462	1.8600e-003	0.2481	0.0659	1.7400e-003	0.0676	0.0000	415.5387	415.5387	0.0195	0.0000	416.0257
Offroad	0.0446	0.2600	0.3276	3.5000e-004		0.0131	0.0131		0.0120	0.0120	0.0000	30.6882	30.6882	9.9300e-003	0.0000	30.9364
Stationary	0.0435	0.1234	0.1152	2.1000e-004		6.9900e-003	6.9900e-003		6.9900e-003	6.9900e-003	0.0000	20.1670	20.1670	2.8300e-003	0.0000	20.2377
Waste						0.0000	0.0000		0.0000	0.0000	14.5991	0.0000	14.5991	0.8628	0.0000	36.1687
Water						0.0000	0.0000		0.0000	0.0000	351.4839	379.5442	731.0281	36.1097	0.8543	1,888.3629
Total	0.7175	1.1086	1.4932	5.0200e-003	0.2462	0.0219	0.2682	0.0659	0.0208	0.0866	366.0830	14,807.7486	15,173.8317	37.3340	0.9249	16,382.7938

Hudson Ranch Minerals - Imperial County, Annual

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	0.5533	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	13,961.8083	13,961.8083	0.3292	0.0705	13,991.0600
Mobile	0.0762	0.7252	1.0493	4.4600e-003	0.2462	1.8600e-003	0.2481	0.0659	1.7400e-003	0.0676	0.0000	415.5387	415.5387	0.0195	0.0000	416.0257
Offroad	0.0446	0.2600	0.3276	3.5000e-004		0.0131	0.0131		0.0120	0.0120	0.0000	30.6882	30.6882	9.9300e-003	0.0000	30.9364
Stationary	0.0435	0.1234	0.1152	2.1000e-004		6.9900e-003	6.9900e-003		6.9900e-003	6.9900e-003	0.0000	20.1670	20.1670	2.8300e-003	0.0000	20.2377
Waste						0.0000	0.0000		0.0000	0.0000	14.5991	0.0000	14.5991	0.8628	0.0000	36.1687
Water						0.0000	0.0000		0.0000	0.0000	351.4839	379.5442	731.0281	36.1097	0.8543	1,888.3629
Total	0.7175	1.1086	1.4932	5.0200e-003	0.2462	0.0219	0.2682	0.0659	0.0208	0.0866	366.0830	14,807.7486	15,173.8317	37.3340	0.9249	16,382.7938

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

3.0 Construction Detail

Construction Phase

Hudson Ranch Minerals - Imperial County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2021	3/12/2021	5	10	
2	Grading	Grading	3/1/2021	5/7/2021	5	50	
3	Building Construction	Building Construction	4/12/2021	4/7/2023	5	520	
4	trenching	Trenching	4/19/2021	10/8/2021	5	125	
5	Paving	Paving	9/30/2022	3/10/2023	5	116	
6	Architectural Coating	Architectural Coating	12/5/2022	3/31/2023	5	85	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 225

Acres of Paving: 25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 65,340 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	7	8.00	402	0.38
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Aerial Lifts	7	8.00	63	0.31

Hudson Ranch Minerals - Imperial County, Annual

Building Construction	Air Compressors	4	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	7	7.00	231	0.29
Building Construction	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	7	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	15	0.74
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	13	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
trenching	Excavators	2	8.00	158	0.38
trenching	Off-Highway Trucks	3	8.00	402	0.38
trenching	Rollers	1	8.00	80	0.38
trenching	Skid Steer Loaders	1	8.00	65	0.37
trenching	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Graders	2	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Rubber Tired Dozers	2	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Hudson Ranch Minerals - Imperial County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	68.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	50	499.00	195.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
trenching	10	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	100.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					7.6700e-003	0.0000	7.6700e-003	1.1600e-003	0.0000	1.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1572	0.1078	1.9000e-004		7.7600e-003	7.7600e-003		7.2100e-003	7.2100e-003	0.0000	17.0004	17.0004	4.7800e-003	0.0000	17.1200
Total	0.0158	0.1572	0.1078	1.9000e-004	7.6700e-003	7.7600e-003	0.0154	1.1600e-003	7.2100e-003	8.3700e-003	0.0000	17.0004	17.0004	4.7800e-003	0.0000	17.1200

Hudson Ranch Minerals - Imperial County, Annual

3.2 Demolition - 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	1.7000e-004	7.4400e-003	1.0400e-003	3.0000e-005	5.9000e-004	2.0000e-005	6.1000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.4712	2.4712	1.0000e-004	0.0000	2.4737
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	5.0000e-004	4.1000e-004	3.6800e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4646	0.4646	3.0000e-005	0.0000	0.4654
Total	6.7000e-004	7.8500e-003	4.7200e-003	4.0000e-005	1.1700e-003	2.0000e-005	1.1900e-003	3.1000e-004	2.0000e-005	3.4000e-004	0.0000	2.9358	2.9358	1.3000e-004	0.0000	2.9392

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					3.4500e-003	0.0000	3.4500e-003	5.2000e-004	0.0000	5.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0100	0.1164	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	17.0004	17.0004	4.7800e-003	0.0000	17.1200
Total	2.3100e-003	0.0100	0.1164	1.9000e-004	3.4500e-003	3.1000e-004	3.7600e-003	5.2000e-004	3.1000e-004	8.3000e-004	0.0000	17.0004	17.0004	4.7800e-003	0.0000	17.1200

Hudson Ranch Minerals - Imperial County, Annual

3.2 Demolition - 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	1.7000e-004	7.4400e-003	1.0400e-003	3.0000e-005	5.9000e-004	2.0000e-005	6.1000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.4712	2.4712	1.0000e-004	0.0000	2.4737
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	5.0000e-004	4.1000e-004	3.6800e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4646	0.4646	3.0000e-005	0.0000	0.4654
Total	6.7000e-004	7.8500e-003	4.7200e-003	4.0000e-005	1.1700e-003	2.0000e-005	1.1900e-003	3.1000e-004	2.0000e-005	3.4000e-004	0.0000	2.9358	2.9358	1.3000e-004	0.0000	2.9392

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					0.4204	0.0000	0.4204	0.1784	0.0000	0.1784	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2720	2.7836	1.6808	4.5600e-003		0.1125	0.1125		0.1035	0.1035	0.0000	400.8097	400.8097	0.1296	0.0000	404.0505
Total	0.2720	2.7836	1.6808	4.5600e-003	0.4204	0.1125	0.5329	0.1784	0.1035	0.2819	0.0000	400.8097	400.8097	0.1296	0.0000	404.0505

Hudson Ranch Minerals - Imperial County, Annual

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	0.0000	0.0000	0.0000	0.0000	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	6.7200e-003	5.4200e-003	0.0490	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	6.1942	6.1942	4.6000e-004	0.0000	6.2058
Total	6.7200e-003	5.4200e-003	0.0490	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	6.1942	6.1942	4.6000e-004	0.0000	6.2058

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					0.1892	0.0000	0.1892	0.0803	0.0000	0.0803	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0559	0.2424	2.0950	4.5600e-003		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	400.8093	400.8093	0.1296	0.0000	404.0500
Total	0.0559	0.2424	2.0950	4.5600e-003	0.1892	7.4600e-003	0.1966	0.0803	7.4600e-003	0.0877	0.0000	400.8093	400.8093	0.1296	0.0000	404.0500

Hudson Ranch Minerals - Imperial County, Annual

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	0.0000	0.0000	0.0000	0.0000	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	6.7200e-003	5.4200e-003	0.0490	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	6.1942	6.1942	4.6000e-004	0.0000	6.2058
Total	6.7200e-003	5.4200e-003	0.0490	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	6.1942	6.1942	4.6000e-004	0.0000	6.2058

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	1.1089	11.0580	9.3630	0.0178		0.5361	0.5361		0.5030	0.5030	0.0000	1,550.5535	1,550.5535	0.4044	0.0000	1,560.6641
Total	1.1089	11.0580	9.3630	0.0178		0.5361	0.5361		0.5030	0.5030	0.0000	1,550.5535	1,550.5535	0.4044	0.0000	1,560.6641

Hudson Ranch Minerals - Imperial County, Annual

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	0.0833	2.1556	0.6006	7.3500e-003	0.2032	6.3400e-003	0.2096	0.0586	6.0700e-003	0.0646	0.0000	697.3340	697.3340	0.0303	0.0000	698.0903
Worker	0.3184	0.2570	2.3239	3.2700e-003	0.3652	2.2800e-003	0.3675	0.0969	2.1000e-003	0.0990	0.0000	293.6381	293.6381	0.0220	0.0000	294.1870
Total	0.4017	2.4126	2.9245	0.0106	0.5684	8.6200e-003	0.5771	0.1555	8.1700e-003	0.1636	0.0000	990.9721	990.9721	0.0522	0.0000	992.2773

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	0.2227	1.5509	10.6370	0.0178		0.0276	0.0276		0.0276	0.0276	0.0000	1,550.5517	1,550.5517	0.4044	0.0000	1,560.6622
Total	0.2227	1.5509	10.6370	0.0178		0.0276	0.0276		0.0276	0.0276	0.0000	1,550.5517	1,550.5517	0.4044	0.0000	1,560.6622

Hudson Ranch Minerals - Imperial County, Annual

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	0.0833	2.1556	0.6006	7.3500e-003	0.2032	6.3400e-003	0.2096	0.0586	6.0700e-003	0.0646	0.0000	697.3340	697.3340	0.0303	0.0000	698.0903
Worker	0.3184	0.2570	2.3239	3.2700e-003	0.3652	2.2800e-003	0.3675	0.0969	2.1000e-003	0.0990	0.0000	293.6381	293.6381	0.0220	0.0000	294.1870
Total	0.4017	2.4126	2.9245	0.0106	0.5684	8.6200e-003	0.5771	0.1555	8.1700e-003	0.1636	0.0000	990.9721	990.9721	0.0522	0.0000	992.2773

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3553	13.1856	12.5783	0.0244		0.6177	0.6177		0.5800	0.5800	0.0000	2,122.4353	2,122.4353	0.5517	0.0000	2,136.2273
Total	1.3553	13.1856	12.5783	0.0244		0.6177	0.6177		0.5800	0.5800	0.0000	2,122.4353	2,122.4353	0.5517	0.0000	2,136.2273

Hudson Ranch Minerals - Imperial County, Annual

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1057	2.7378	0.7476	9.9800e-003	0.2781	7.3700e-003	0.2855	0.0801	7.0500e-003	0.0872	0.0000	946.8650	946.8650	0.0391	0.0000	947.8423
Worker	0.4076	0.3225	2.9132	4.3100e-003	0.4997	2.9900e-003	0.5027	0.1326	2.7500e-003	0.1354	0.0000	387.1519	387.1519	0.0275	0.0000	387.8404
Total	0.5133	3.0604	3.6608	0.0143	0.7778	0.0104	0.7882	0.2127	9.8000e-003	0.2225	0.0000	1,334.0169	1,334.0169	0.0666	0.0000	1,335.6827

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	0.3047	2.1222	14.5559	0.0244		0.0377	0.0377		0.0377	0.0377	0.0000	2,122.4327	2,122.4327	0.5517	0.0000	2,136.2248
Total	0.3047	2.1222	14.5559	0.0244		0.0377	0.0377		0.0377	0.0377	0.0000	2,122.4327	2,122.4327	0.5517	0.0000	2,136.2248

Hudson Ranch Minerals - Imperial County, Annual

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1057	2.7378	0.7476	9.9800e-003	0.2781	7.3700e-003	0.2855	0.0801	7.0500e-003	0.0872	0.0000	946.8650	946.8650	0.0391	0.0000	947.8423
Worker	0.4076	0.3225	2.9132	4.3100e-003	0.4997	2.9900e-003	0.5027	0.1326	2.7500e-003	0.1354	0.0000	387.1519	387.1519	0.0275	0.0000	387.8404
Total	0.5133	3.0604	3.6608	0.0143	0.7778	0.0104	0.7882	0.2127	9.8000e-003	0.2225	0.0000	1,334.0169	1,334.0169	0.0666	0.0000	1,335.6827

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3367	3.2150	3.3464	6.5700e-003		0.1442	0.1442		0.1354	0.1354	0.0000	571.6230	571.6230	0.1480	0.0000	575.3227
Total	0.3367	3.2150	3.3464	6.5700e-003		0.1442	0.1442		0.1354	0.1354	0.0000	571.6230	571.6230	0.1480	0.0000	575.3227

Hudson Ranch Minerals - Imperial County, Annual

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.5263	0.1745	2.6300e-003	0.0749	7.9000e-004	0.0757	0.0216	7.6000e-004	0.0223	0.0000	249.7032	249.7032	7.7700e-003	0.0000	249.8975
Worker	0.1030	0.0800	0.7214	1.1200e-003	0.1345	7.7000e-004	0.1353	0.0357	7.1000e-004	0.0364	0.0000	100.2791	100.2791	6.8200e-003	0.0000	100.4496
Total	0.1259	0.6063	0.8959	3.7500e-003	0.2094	1.5600e-003	0.2110	0.0573	1.4700e-003	0.0588	0.0000	349.9824	349.9824	0.0146	0.0000	350.3471

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	0.0821	0.5714	3.9189	6.5700e-003		0.0102	0.0102		0.0102	0.0102	0.0000	571.6223	571.6223	0.1480	0.0000	575.3220
Total	0.0821	0.5714	3.9189	6.5700e-003		0.0102	0.0102		0.0102	0.0102	0.0000	571.6223	571.6223	0.1480	0.0000	575.3220

Hudson Ranch Minerals - Imperial County, Annual

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.5263	0.1745	2.6300e-003	0.0749	7.9000e-004	0.0757	0.0216	7.6000e-004	0.0223	0.0000	249.7032	249.7032	7.7700e-003	0.0000	249.8975
Worker	0.1030	0.0800	0.7214	1.1200e-003	0.1345	7.7000e-004	0.1353	0.0357	7.1000e-004	0.0364	0.0000	100.2791	100.2791	6.8200e-003	0.0000	100.4496
Total	0.1259	0.6063	0.8959	3.7500e-003	0.2094	1.5600e-003	0.2110	0.0573	1.4700e-003	0.0588	0.0000	349.9824	349.9824	0.0146	0.0000	350.3471

3.5 trenching - 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	0.1939	1.7945	1.7130	4.0000e-003		0.0801	0.0801		0.0737	0.0737	0.0000	351.1338	351.1338	0.1136	0.0000	353.9729
Total	0.1939	1.7945	1.7130	4.0000e-003		0.0801	0.0801		0.0737	0.0737	0.0000	351.1338	351.1338	0.1136	0.0000	353.9729

Hudson Ranch Minerals - Imperial County, Annual

3.5 trenching - 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	0.0105	8.4700e-003	0.0766	1.1000e-004	0.0120	8.0000e-005	0.0121	3.1900e-003	7.0000e-005	3.2600e-003	0.0000	9.6785	9.6785	7.2000e-004	0.0000	9.6966
Total	0.0105	8.4700e-003	0.0766	1.1000e-004	0.0120	8.0000e-005	0.0121	3.1900e-003	7.0000e-005	3.2600e-003	0.0000	9.6785	9.6785	7.2000e-004	0.0000	9.6966

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	0.0506	0.2780	2.2623	4.0000e-003		6.5300e-003	6.5300e-003		6.5300e-003	6.5300e-003	0.0000	351.1334	351.1334	0.1136	0.0000	353.9725
Total	0.0506	0.2780	2.2623	4.0000e-003		6.5300e-003	6.5300e-003		6.5300e-003	6.5300e-003	0.0000	351.1334	351.1334	0.1136	0.0000	353.9725

Hudson Ranch Minerals - Imperial County, Annual

3.5 trenching - 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	0.0105	8.4700e-003	0.0766	1.1000e-004	0.0120	8.0000e-005	0.0121	3.1900e-003	7.0000e-005	3.2600e-003	0.0000	9.6785	9.6785	7.2000e-004	0.0000	9.6966
Total	0.0105	8.4700e-003	0.0766	1.1000e-004	0.0120	8.0000e-005	0.0121	3.1900e-003	7.0000e-005	3.2600e-003	0.0000	9.6785	9.6785	7.2000e-004	0.0000	9.6966

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1168	1.2764	0.7896	1.6400e-003		0.0574	0.0574		0.0528	0.0528	0.0000	143.8122	143.8122	0.0465	0.0000	144.9750
Paving	7.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1242	1.2764	0.7896	1.6400e-003		0.0574	0.0574		0.0528	0.0528	0.0000	143.8122	143.8122	0.0465	0.0000	144.9750

Hudson Ranch Minerals - Imperial County, Annual

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1800e-003	4.1000e-003	0.0371	5.0000e-005	6.3600e-003	4.0000e-005	6.3900e-003	1.6900e-003	3.0000e-005	1.7200e-003	0.0000	4.9237	4.9237	3.5000e-004	0.0000	4.9325
Total	5.1800e-003	4.1000e-003	0.0371	5.0000e-005	6.3600e-003	4.0000e-005	6.3900e-003	1.6900e-003	3.0000e-005	1.7200e-003	0.0000	4.9237	4.9237	3.5000e-004	0.0000	4.9325

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	0.0201	0.0869	0.9297	1.6400e-003		2.6700e-003	2.6700e-003		2.6700e-003	2.6700e-003	0.0000	143.8120	143.8120	0.0465	0.0000	144.9748
Paving	7.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0275	0.0869	0.9297	1.6400e-003		2.6700e-003	2.6700e-003		2.6700e-003	2.6700e-003	0.0000	143.8120	143.8120	0.0465	0.0000	144.9748

Hudson Ranch Minerals - Imperial County, Annual

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1800e-003	4.1000e-003	0.0371	5.0000e-005	6.3600e-003	4.0000e-005	6.3900e-003	1.6900e-003	3.0000e-005	1.7200e-003	0.0000	4.9237	4.9237	3.5000e-004	0.0000	4.9325
Total	5.1800e-003	4.1000e-003	0.0371	5.0000e-005	6.3600e-003	4.0000e-005	6.3900e-003	1.6900e-003	3.0000e-005	1.7200e-003	0.0000	4.9237	4.9237	3.5000e-004	0.0000	4.9325

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0772	0.8318	0.5720	1.2400e-003		0.0359	0.0359		0.0330	0.0330	0.0000	108.9500	108.9500	0.0352	0.0000	109.8309
Paving	5.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0829	0.8318	0.5720	1.2400e-003		0.0359	0.0359		0.0330	0.0330	0.0000	108.9500	108.9500	0.0352	0.0000	109.8309

Hudson Ranch Minerals - Imperial County, Annual

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6800e-003	2.8600e-003	0.0258	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3000e-003	0.0000	3.5886	3.5886	2.4000e-004	0.0000	3.5947
Total	3.6800e-003	2.8600e-003	0.0258	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3000e-003	0.0000	3.5886	3.5886	2.4000e-004	0.0000	3.5947

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	0.0152	0.0658	0.7043	1.2400e-003		2.0200e-003	2.0200e-003		2.0200e-003	2.0200e-003	0.0000	108.9499	108.9499	0.0352	0.0000	109.8308
Paving	5.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0208	0.0658	0.7043	1.2400e-003		2.0200e-003	2.0200e-003		2.0200e-003	2.0200e-003	0.0000	108.9499	108.9499	0.0352	0.0000	109.8308

Hudson Ranch Minerals - Imperial County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6800e-003	2.8600e-003	0.0258	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3000e-003	0.0000	3.5886	3.5886	2.4000e-004	0.0000	3.5947
Total	3.6800e-003	2.8600e-003	0.0258	4.0000e-005	4.8100e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3000e-003	0.0000	3.5886	3.5886	2.4000e-004	0.0000	3.5947

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.2191	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

Hudson Ranch Minerals - Imperial County, Annual

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2800e-003	4.9700e-003	0.0449	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	5.9681	5.9681	4.2000e-004	0.0000	5.9787
Total	6.2800e-003	4.9700e-003	0.0449	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	5.9681	5.9681	4.2000e-004	0.0000	5.9787

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	0.2170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.2173	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

Hudson Ranch Minerals - Imperial County, Annual

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2800e-003	4.9700e-003	0.0449	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	5.9681	5.9681	4.2000e-004	0.0000	5.9787
Total	6.2800e-003	4.9700e-003	0.0449	7.0000e-005	7.7000e-003	5.0000e-005	7.7500e-003	2.0400e-003	4.0000e-005	2.0900e-003	0.0000	5.9681	5.9681	4.2000e-004	0.0000	5.9787

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2300e-003	0.0424	0.0589	1.0000e-004		2.3000e-003	2.3000e-003		2.3000e-003	2.3000e-003	0.0000	8.2981	8.2981	5.0000e-004	0.0000	8.3105
Total	0.7116	0.0424	0.0589	1.0000e-004		2.3000e-003	2.3000e-003		2.3000e-003	2.3000e-003	0.0000	8.2981	8.2981	5.0000e-004	0.0000	8.3105

Hudson Ranch Minerals - Imperial County, Annual

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0192	0.0149	0.1342	2.1000e-004	0.0250	1.4000e-004	0.0252	6.6400e-003	1.3000e-004	6.7800e-003	0.0000	18.6606	18.6606	1.2700e-003	0.0000	18.6923
Total	0.0192	0.0149	0.1342	2.1000e-004	0.0250	1.4000e-004	0.0252	6.6400e-003	1.3000e-004	6.7800e-003	0.0000	18.6606	18.6606	1.2700e-003	0.0000	18.6923

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	0.7054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	4.1800e-003	0.0596	1.0000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	8.2981	8.2981	5.0000e-004	0.0000	8.3105
Total	0.7063	4.1800e-003	0.0596	1.0000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	8.2981	8.2981	5.0000e-004	0.0000	8.3105

Hudson Ranch Minerals - Imperial County, Annual

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0192	0.0149	0.1342	2.1000e-004	0.0250	1.4000e-004	0.0252	6.6400e-003	1.3000e-004	6.7800e-003	0.0000	18.6606	18.6606	1.2700e-003	0.0000	18.6923
Total	0.0192	0.0149	0.1342	2.1000e-004	0.0250	1.4000e-004	0.0252	6.6400e-003	1.3000e-004	6.7800e-003	0.0000	18.6606	18.6606	1.2700e-003	0.0000	18.6923

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Hudson Ranch Minerals - Imperial County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0762	0.7252	1.0493	4.4600e-003	0.2462	1.8600e-003	0.2481	0.0659	1.7400e-003	0.0676	0.0000	415.5387	415.5387	0.0195	0.0000	416.0257
Unmitigated	0.0762	0.7252	1.0493	4.4600e-003	0.2462	1.8600e-003	0.2481	0.0659	1.7400e-003	0.0676	0.0000	415.5387	415.5387	0.0195	0.0000	416.0257

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	134.00	134.00	134.00	631,595	631,595
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	134.00	134.00	134.00	631,595	631,595

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.40	9.50	11.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.40	9.50	11.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.40	9.50	11.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Hudson Ranch Minerals - Imperial County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	5.184e+007	13,961.8083	0.3292	0.0705	13,991.0600
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		13,961.8083	0.3292	0.0705	13,991.0600

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	5.184e+007	13,961.8083	0.3292	0.0705	13,991.0600
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		13,961.8083	0.3292	0.0705	13,991.0600

6.0 Area Detail

Hudson Ranch Minerals - Imperial County, Annual

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	0.5533	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Unmitigated	0.5533	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4609					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Total	0.5533	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003

Hudson Ranch Minerals - Imperial County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4609					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Total	0.5533	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Hudson Ranch Minerals - Imperial County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	731.0281	36.1097	0.8543	1,888.3629
Unmitigated	731.0281	36.1097	0.8543	1,888.3629

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	1107.89 / 0	731.0281	36.1097	0.8543	1,888.3629
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		731.0281	36.1097	0.8543	1,888.3629

Hudson Ranch Minerals - Imperial County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	1107.89 / 0	731.0281	36.1097	0.8543	1,888.3629
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		731.0281	36.1097	0.8543	1,888.3629

8.0 Waste Detail

8.1 Mitigation Measures Waste

Hudson Ranch Minerals - Imperial County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.5991	0.8628	0.0000	36.1687
Unmitigated	14.5991	0.8628	0.0000	36.1687

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	71.92	14.5991	0.8628	0.0000	36.1687
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		14.5991	0.8628	0.0000	36.1687

Hudson Ranch Minerals - Imperial County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	71.92	14.5991	0.8628	0.0000	36.1687
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		14.5991	0.8628	0.0000	36.1687

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	2	8.00	365	50	0.20	CNG

Hudson Ranch Minerals - Imperial County, Annual

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0446	0.2600	0.3276	3.5000e-004		0.0131	0.0131		0.0120	0.0120	0.0000	30.6882	30.6882	9.9300e-003	0.0000	30.9364
Total	0.0446	0.2600	0.3276	3.5000e-004		0.0131	0.0131		0.0120	0.0120	0.0000	30.6882	30.6882	9.9300e-003	0.0000	30.9364

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	2	80	600	0.73	Diesel
Fire Pump	1	2	80	62	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

Hudson Ranch Minerals - Imperial County, Annual

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (600 - 750 HP)	0.0394	0.1101	0.1004	1.9000e-004		5.7900e-003	5.7900e-003		5.7900e-003	5.7900e-003	0.0000	18.2783	18.2783	2.5600e-003	0.0000	18.3423
Fire Pump - Diesel (50 - 75 HP)	4.0700e-003	0.0133	0.0148	2.0000e-005		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003	0.0000	1.8888	1.8888	2.6000e-004	0.0000	1.8954
Total	0.0435	0.1234	0.1152	2.1000e-004		6.9900e-003	6.9900e-003		6.9900e-003	6.9900e-003	0.0000	20.1670	20.1670	2.8200e-003	0.0000	20.2377

11.0 Vegetation

ATTACHMENT B

AERMOD for Onsite Construction PM₁₀ - DPM

1 AERMOD PRIME - (DATED 19191)

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

Run Began on 3/17/2021 at 9:21:33

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

CO STARTING
CO TITLEONE Construction PM10
CO MODELOPT DEFAULT CONC NODRYDPLT NOWETDPLT
CO RUNORNOT RUN
CO AVERTIME ANNUAL
CO POLLUTID PM10
CO FINISHED

SO STARTING
SO ELEVUNIT METERS
SO LOCATION 5VOEK000 AREAPOLY 632396.9 3674961.3 0
** SRCDESCR Plant NW
SO LOCATION 5VOEK001 AREAPOLY 632941.7 3674667.5 0
** SRCDESCR Plant SE
SO SRCPARAM 5VOEK000 6.95E-09 3 9 1
SO SRCPARAM 5VOEK001 1.77E-09 3 5 1
SO AREAVERT 5VOEK000 632396.9 3674961.3 632389.4 3674597.6 632753.1 3674591.6 632754.2 3674750.2
SO AREAVERT 5VOEK000 632820.4 3674755.7 632816.7 3674882.5 632741.4 3674882.5 632741.4 3674967
SO AREAVERT 5VOEK000 632396.9 3674961.3
SO AREAVERT 5VOEK001 632941.7 3674667.5 632945.3 3674469 633125.4 3674472.7 633127.3 3674665.6
SO AREAVERT 5VOEK001 632941.7 3674667.5
SO SRCGROUP ALL
SO FINISHED

RE STARTING
RE ELEVUNIT METERS
RE DISCCART 633209.4 3676664.9 0 0
** SENSITIV
** RCPDESCR Residential Receptor 1
RE FINISHED

ME STARTING
ME SURFFILE "C:\USERS\RYAN~1.DES\ONEDRIVE\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.SFC"
** SURFFILE "C:\USERS\RYAN~1.DES\ONEDRIVE\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.SFC"
ME PROFFILE "C:\USERS\RYAN~1.DES\ONEDRIVE\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.PFL"
** PROFFILE "C:\USERS\RYAN~1.DES\ONEDRIVE\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.PFL"
ME SURFDATA 23199 2009
ME UAIRDATA 3190 2009
ME PROFBASE 0 METERS
ME FINISHED

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

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

** AMPATYPE
** AMPDATUM -1
** AMPZONE -1
** AMPHEMISPHERE

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.2572235

63],TOWGS84[0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0],PRIMEM["Greenwich",0],UNIT["Degree",0.0174532925199433],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",11],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION UTM
** DATUM WGE
** UNITS METER
** ZONE 11
** HEMISPHERE N
** ORIGINLON 0
** ORIGINLAT 0
** PARALLEL1 0
** PARALLEL2 0
** AZIMUTH 0
** SCALEFACT 0
** FALSEEAST 0
** FALSENORTH 0

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

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 19191 *** *** Construction PM10 ***
03/17/21
*** AERMET - VERSION 14134 *** ***
09:21:33 ***

PAGE 1
*** MODELOPTS: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** 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: 2 Source(s); 1 Source Group(s); and 1 Receptor(s)
with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)

and: 0 VOLUME source(s)
 and: 2 AREA type source(s)
 and: 0 LINE source(s)
 and: 0 RLINE/RLINEXT source(s)
 and: 0 OPENPIT source(s)
 and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:

Model Outputs Tables of ANNUAL Averages by Receptor
 Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

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

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 0.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC ; Emission Rate Unit Factor =

0.10000E+07

Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

▲ *** AERMOD - VERSION 19191 *** *** Construction PM10 ***
 03/17/21
 *** AERMET - VERSION 14134 *** ***
 09:21:33

PAGE 2

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
5VOEK000	0	0.69500E-08	632396.9	3674961.3	0.0	3.00	9	1.00	NO	
5VOEK001	0	0.17700E-08	632941.7	3674667.5	0.0	3.00	5	1.00	NO	

▲ *** AERMOD - VERSION 19191 *** *** Construction PM10 ***
 03/17/21
 *** AERMET - VERSION 14134 *** ***
 09:21:33

PAGE 3

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE IDs

ALL 5VOEK000 , 5VOEK001 ,
 ▲ *** AERMOD - VERSION 19191 *** *** Construction PM10 ***

09 01 01	1 05	-6.8	0.078	-9.000	-9.000	-999.	52.	6.3	0.02	0.78	1.00	2.36	213.	10.0	280.4
2.0															
09 01 01	1 06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	1.00	0.00	0.	10.0	277.5
2.0															
09 01 01	1 07	-6.8	0.078	-9.000	-9.000	-999.	52.	6.3	0.02	0.78	1.00	2.36	265.	10.0	279.2
2.0															
09 01 01	1 08	-9.3	0.152	-9.000	-9.000	-999.	142.	34.3	0.02	0.78	0.47	2.86	223.	10.0	282.0
2.0															
09 01 01	1 09	33.3	0.160	0.392	0.016	65.	154.	-11.2	0.04	0.78	0.29	1.76	317.	10.0	285.4
2.0															
09 01 01	1 10	75.5	-9.000	-9.000	-9.000	132.	-999.	-99999.0	0.06	0.78	0.23	0.00	0.	10.0	288.8
2.0															
09 01 01	1 11	103.9	-9.000	-9.000	-9.000	208.	-999.	-99999.0	0.06	0.78	0.21	0.00	0.	10.0	291.4
2.0															
09 01 01	1 12	116.7	0.201	0.961	0.010	276.	216.	-6.3	0.08	0.78	0.20	1.76	26.	10.0	293.1
2.0															
09 01 01	1 13	113.3	-9.000	-9.000	-9.000	376.	-999.	-99999.0	0.06	0.78	0.20	0.00	0.	10.0	293.8
2.0															
09 01 01	1 14	94.7	-9.000	-9.000	-9.000	445.	-999.	-99999.0	0.06	0.78	0.21	0.00	0.	10.0	295.4
2.0															
09 01 01	1 15	60.5	-9.000	-9.000	-9.000	482.	-999.	-99999.0	0.06	0.78	0.25	0.00	0.	10.0	295.4
2.0															
09 01 01	1 16	14.2	0.120	0.581	0.007	499.	100.	-10.9	0.02	0.78	0.35	1.50	284.	10.0	294.1
2.0															
09 01 01	1 17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	0.65	0.00	0.	10.0	292.1
2.0															
09 01 01	1 18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	1.00	0.00	0.	10.0	289.1
2.0															
09 01 01	1 19	-21.3	0.190	-9.000	-9.000	-999.	200.	29.3	0.08	0.78	1.00	3.10	24.	10.0	285.1
2.0															
09 01 01	1 20	-7.6	0.087	-9.000	-9.000	-999.	68.	8.0	0.08	0.78	1.00	2.10	17.	10.0	284.1
2.0															
09 01 01	1 21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	1.00	0.00	0.	10.0	284.1
2.0															
09 01 01	1 22	-8.2	0.086	-9.000	-9.000	-999.	60.	6.9	0.02	0.78	1.00	2.60	252.	10.0	282.1
2.0															
09 01 01	1 23	-8.2	0.086	-9.000	-9.000	-999.	60.	6.9	0.02	0.78	1.00	2.60	270.	10.0	281.1
2.0															
09 01 01	1 24	-8.2	0.086	-9.000	-9.000	-999.	60.	6.9	0.02	0.78	1.00	2.60	280.	10.0	280.1
2.0															

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB	TMP	sigmaA	sigmaW	sigmaV
09	01	01	01	10.0	1	251.	2.86	280.4	99.0	-99.00	-99.00	

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

▲ *** AERMOD - VERSION 19191 *** *** Construction PM10 ***
 03/17/21
 *** AERMET - VERSION 14134 *** ***
 09:21:33

PAGE 6

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): 5VOEK000 , 5VOEK001 ,

*** 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
-------------	-------------	------	-------------	-------------	------

633209.40	3676664.90	0.00048			
-----------	------------	---------	--	--	--

▲ *** AERMOD - VERSION 19191 *** *** Construction PM10 ***

03/17/21
*** AERMET - VERSION 14134 *** **
09:21:33

PAGE 7
*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

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

NETWORK
GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE
GRID-ID

ALL 1ST HIGHEST VALUE IS 0.00048 AT (633209.40, 3676664.90, 0.00, 0.00, 0.00) SR
2ND HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
7TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
8TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
9TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)
10TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)

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

▲ *** AERMOD - VERSION 19191 *** ** Construction PM10 **
03/17/21
*** AERMET - VERSION 14134 *** **
09:21:33

PAGE 8
*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

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

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

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 14777 Informational Message(s)

A Total of 51336 Hours Were Processed

A Total of 7189 Calm Hours Identified

A Total of 7588 Missing Hours Identified (14.78 Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory Applications.
See Section 5.3.2 of "Meteorological Monitoring Guidance
for Regulatory Modeling Applications" (EPA-454/R-99-005).

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

***** WARNING MESSAGES *****

MX W481 51337

MAIN: Data Remaining After End of Year. Number of Hours=

7512

*** AERMOD Finishes Successfully ***

ATTACHMENT C

Construction Health Risk Calculations

**Air Quality Health Risk Calculations (Worst-Case)
Hudson Ranch Tier IV Design Feature**

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	0.0946				
	Construction Start	3/1/2021				
	Construction Complete	3/31/2023				
	Days	760				
	Construction Emission per day (lb/day)	0.248947368				
	Annual Duration (Days)	365				
	Annualized Emission Rate (Grams/Second)	0.001305245				
	Project Site Size (Acres)	37				
	Project Site Size (meters^2)	149733.6876				
	Length of Smalles Side (meters)	386.9543741				
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	8.72E-09				
From AERMOD	Concentration Annual (Ug/M^3)	0.00048				
Duration	Days	Days to years				
	760	2.082191781				
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.00048	0.00048	0.00048	0.00048	0.00048	0.00048
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	0.00000017	0.00000050	0.00000040	0.00000034	0.00000015	0.00000013
Construction Days	760	2.082191781				
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	2.082191781	2.082191781	2.082191781	2.082191781	2.082191781
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	5.55486E-09	1.39693E-07	2.80404E-08	2.42626E-08	3.68719E-09	3.1919E-09
Risk per million Exposed	0.005554862	0.139692557	0.028040435	0.02426263	0.00368719	0.003191896
Cancer Risk Per Million 9-years	0.17					
Cancer Risk Per Million 30-years	0.17					
Cancer Risk Per Million 70-years	0.17					

ATTACHMENT D

AERMOD Onsite and Offsite Truck Operations

Run Began on 3/16/2021 at 18:39:47

** BREEZE AERMOD
** Trinity Consultants
** VERSION 9.0CO STARTING
CO TITLEONE Diesle PM (Trucks)
CO MODELOPT DFAULT CONC NODRYDPLT NOWETDPLT
CO RUNORNOT RUN
CO AVERTIME ANNUAL
CO POLLUTID PM10
CO FINISHEDSO STARTING
SO ELEVUNIT METERS
SO LOCATION DNOVX000 POINT 632611.6 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX001 POINT 632604.6 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX002 POINT 632592.7 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX003 POINT 632584.9 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX004 POINT 632573.7 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX005 POINT 632563.8 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX006 POINT 632599 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX007 POINT 632579.6 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX008 POINT 632568.6 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX009 POINT 632608.4 3674699.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX00A POINT 632612.6 3674693.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX00B POINT 632603.2 3674693.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX00C POINT 632591.7 3674693.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX00D POINT 632581.2 3674693.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX00E POINT 632563.9 3674693.7 0
** SRCDESCR Onsite Truck Starting and Idling
SO LOCATION DNOVX00M VOLUME 632575.6 3674985.4 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00N VOLUME 632580.6 3674985.4 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00O VOLUME 632585.6 3674985.4 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00P VOLUME 632590.6 3674985.4 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00Q VOLUME 632595.6 3674985.4 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00R VOLUME 632600.6 3674985.4 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00S VOLUME 632605.6 3674985.5 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00T VOLUME 632610.6 3674985.5 0
** SRCDESCR McDonald Road East of Project Site
SO LOCATION DNOVX00U VOLUME 632615.6 3674985.5 0
** SRCDESCR McDonald Road East of Project Site

SO LOCATION	DNOVX0G7	VOLUME	635380.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0G8	VOLUME	635385.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0G9	VOLUME	635390.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GA	VOLUME	635395.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GB	VOLUME	635400.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GC	VOLUME	635405.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GD	VOLUME	635410.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GE	VOLUME	635415.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GF	VOLUME	635420.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GG	VOLUME	635425.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GH	VOLUME	635430.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GI	VOLUME	635435.6	3674990.0	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GJ	VOLUME	635440.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GK	VOLUME	635445.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GL	VOLUME	635450.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GM	VOLUME	635455.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GN	VOLUME	635460.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GO	VOLUME	635465.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GP	VOLUME	635470.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GQ	VOLUME	635475.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GR	VOLUME	635480.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GS	VOLUME	635485.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GT	VOLUME	635490.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GU	VOLUME	635495.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GV	VOLUME	635500.6	3674990.1	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GW	VOLUME	635505.6	3674990.2	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GX	VOLUME	635510.6	3674990.2	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GY	VOLUME	635515.6	3674990.2	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0GZ	VOLUME	635520.6	3674990.2	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0H0	VOLUME	635525.6	3674990.2	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	DNOVX0H1	VOLUME	635530.6	3674990.2	0
** SRCDESCR	McDonald	Road East of Project Site			
SO LOCATION	VDB5H000	POINT	632664.1	3674938.2	0
** SRCDESCR	Emergency	Generator 1			
SO LOCATION	VDB5H001	POINT	632680.7	3674938.2	0
** SRCDESCR	Emergency	Generator 2			
SO SRCPARAM	DNOVX000	7.554E-08	3	325	0.001 0.1
SO SRCPARAM	DNOVX001	7.554E-08	3	325	0.001 0.1
SO SRCPARAM	DNOVX002	7.554E-08	3	325	0.001 0.1

SO SRCPARAM DNOVX0FM 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FN 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FO 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FP 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FQ 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FR 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FS 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FT 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FU 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FV 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FW 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FX 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FY 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0FZ 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G0 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G1 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G2 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G3 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G4 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G5 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G6 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G7 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G8 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0G9 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GA 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GB 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GC 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GD 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GE 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GF 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GG 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GH 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GI 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GJ 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GK 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GL 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GM 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GN 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GO 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GP 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GQ 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GR 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GS 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GT 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GU 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GV 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GW 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GX 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GY 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0GZ 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0H0 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM DNOVX0H1 5.70946E-09 3 2.325581 2.790698
 SO SRCPARAM VDB5H000 1.005E-04 3 325 0.001 0.1
 SO SRCPARAM VDB5H001 1.005E-04 3 325 0.001 0.1
 SO SRCGROUP ALL
 SO FINISHED

RE STARTING
 RE ELEVUNIT METERS
 RE GRIDCART DNOVX0H2 STA
 ** GRDDESCR Receptor Grid
 RE GRIDCART DNOVX0H2 XYINC 631636.2 21 145.3 3676809.5 21 -152.2
 RE GRIDCART DNOVX0H2 ELEV 1 0
 RE GRIDCART DNOVX0H2 ELEV 2 0
 RE GRIDCART DNOVX0H2 ELEV 3 0
 RE GRIDCART DNOVX0H2 ELEV 4 0
 RE GRIDCART DNOVX0H2 ELEV 5 0
 RE GRIDCART DNOVX0H2 ELEV 6 0
 RE GRIDCART DNOVX0H2 ELEV 7 0

```

RE GRIDCART DNOVX0H2 ELEV 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 19 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 ELEV 21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 19 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 HILL 21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RE GRIDCART DNOVX0H2 END
RE DISCCART 633209.4 3676664.9 0 0
** SENSITIV
** RCPDESCR Residential Receptor 1
RE FINISHED

```

```

ME STARTING
ME SURFFILE "C:\Users\RYAN~1.DES\OneDrive\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.SFC"
** SURFFILE "C:\Users\RYAN~1.DES\OneDrive\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.SFC"
ME PROFFILE "C:\Users\RYAN~1.DES\OneDrive\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.PFL"
** PROFFILE "C:\Users\RYAN~1.DES\OneDrive\LDNONE~1\COUNTY~4\20-30H~1\AERMOD\722810\722810.PFL"
ME SURFDATA 23199 2009
ME UAIRDATA 3190 2009
ME PROFBASE 0 METERS
ME STARTEND 2013 1 1 1 2013 12 31 24
ME FINISHED

```

```

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

```

```

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

```

```

** TAG NAM DNOVX00L
** TAG PRM 0 2 F F 1 255,0,0,0
** TAG CRD 632573.1,3674985.4,0,635532.3,3674990.2,0

** AMPATYPE
** AMPDATUM -1
** AMPZONE -1

```

```

** AMPHEMISPHERE

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.2572235
63],TOWGS84[0,0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transver
se_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 UNIFORM
** TEMPLATE USERDEFINED
** AERMODEXE AERMOD_BREEZE_19191_64.EXE
** AERMAPEXE AERMAP_EPA_18081_64.EXE

```

```

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

```

```

^ *** AERMOD - VERSION 19191 ***   *** Diesle PM (Trucks)           ***
   03/16/21
*** AERMET - VERSION 14134 ***   ***                               ***
   18:39:47

```

PAGE 1

```

*** MODELOPTs:   RegDEFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL

```

```

***           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: 609 Source(s); 1 Source Group(s); and 442 Receptor(s)

with: 17 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 592 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

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

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

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 0.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC ; Emission Rate Unit Factor =

0.10000E+07

Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.8 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

▲ *** AERMOD - VERSION 19191 *** ** Diesle PM (Trucks) ***
03/16/21
*** AERMET - VERSION 14134 *** **
18:39:47

PAGE 2

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** POINT SOURCE DATA ***

CAP/ HOR	EMIS RATE SOURCE SCALAR ID VARY BY	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X	Y	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE
-------------	--	--------------------------	------------------------------	---	---	---------------------------	-----------------------------	---------------------------	-------------------------------	-------------------------------	----------------	-----------------

DNOVX000 NO		0	0.75540E-07	632611.6	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
DNOVX001 NO		0	0.75540E-07	632604.6	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
DNOVX002 NO		0	0.75540E-07	632592.7	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
DNOVX003 NO		0	0.75540E-07	632584.9	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
DNOVX004 NO		0	0.75540E-07	632573.7	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
DNOVX005 NO		0	0.75540E-07	632563.8	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO

DNOVX006	0	0.75540E-07	632599.0	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX007	0	0.75540E-07	632579.6	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX008	0	0.75540E-07	632568.6	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX009	0	0.75540E-07	632608.4	3674699.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX00A	0	0.75540E-07	632612.6	3674693.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX00B	0	0.75540E-07	632603.2	3674693.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX00C	0	0.75540E-07	632591.7	3674693.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX00D	0	0.75540E-07	632581.2	3674693.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
DNOVX00E	0	0.75540E-07	632563.9	3674693.7	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
VDB5H000	0	0.10050E-03	632664.1	3674938.2	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
VDB5H001	0	0.10050E-03	632680.7	3674938.2	0.0	3.00	325.00	0.00	0.10	NO	NO
NO											
▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***											
03/16/21											
*** AERMET - VERSION 14134 *** ***											
18:39:47											

PAGE 3

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX00M	0	0.57095E-08	632575.6	3674985.4	0.0	3.00	2.33	2.79	NO	
DNOVX00N	0	0.57095E-08	632580.6	3674985.4	0.0	3.00	2.33	2.79	NO	
DNOVX00O	0	0.57095E-08	632585.6	3674985.4	0.0	3.00	2.33	2.79	NO	
DNOVX00P	0	0.57095E-08	632590.6	3674985.4	0.0	3.00	2.33	2.79	NO	
DNOVX00Q	0	0.57095E-08	632595.6	3674985.4	0.0	3.00	2.33	2.79	NO	
DNOVX00R	0	0.57095E-08	632600.6	3674985.4	0.0	3.00	2.33	2.79	NO	
DNOVX00S	0	0.57095E-08	632605.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX00T	0	0.57095E-08	632610.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX00U	0	0.57095E-08	632615.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX00V	0	0.57095E-08	632620.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX00W	0	0.57095E-08	632625.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX00X	0	0.57095E-08	632630.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX00Y	0	0.57095E-08	632635.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX00Z	0	0.57095E-08	632640.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX010	0	0.57095E-08	632645.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX011	0	0.57095E-08	632650.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX012	0	0.57095E-08	632655.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX013	0	0.57095E-08	632660.6	3674985.5	0.0	3.00	2.33	2.79	NO	
DNOVX014	0	0.57095E-08	632665.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX015	0	0.57095E-08	632670.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX016	0	0.57095E-08	632675.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX017	0	0.57095E-08	632680.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX018	0	0.57095E-08	632685.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX019	0	0.57095E-08	632690.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX01A	0	0.57095E-08	632695.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX01B	0	0.57095E-08	632700.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX01C	0	0.57095E-08	632705.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX01D	0	0.57095E-08	632710.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX01E	0	0.57095E-08	632715.6	3674985.6	0.0	3.00	2.33	2.79	NO	
DNOVX01F	0	0.57095E-08	632720.6	3674985.6	0.0	3.00	2.33	2.79	NO	

DNOVX01G	0	0.57095E-08	632725.6	3674985.6	0.0	3.00	2.33	2.79	NO
DNOVX01H	0	0.57095E-08	632730.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01I	0	0.57095E-08	632735.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01J	0	0.57095E-08	632740.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01K	0	0.57095E-08	632745.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01L	0	0.57095E-08	632750.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01M	0	0.57095E-08	632755.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01N	0	0.57095E-08	632760.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01O	0	0.57095E-08	632765.6	3674985.7	0.0	3.00	2.33	2.79	NO
DNOVX01P	0	0.57095E-08	632770.6	3674985.7	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 4

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX01Q	0	0.57095E-08	632775.6	3674985.7	0.0	3.00	2.33	2.79	NO	
DNOVX01R	0	0.57095E-08	632780.6	3674985.7	0.0	3.00	2.33	2.79	NO	
DNOVX01S	0	0.57095E-08	632785.6	3674985.7	0.0	3.00	2.33	2.79	NO	
DNOVX01T	0	0.57095E-08	632790.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX01U	0	0.57095E-08	632795.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX01V	0	0.57095E-08	632800.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX01W	0	0.57095E-08	632805.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX01X	0	0.57095E-08	632810.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX01Y	0	0.57095E-08	632815.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX01Z	0	0.57095E-08	632820.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX020	0	0.57095E-08	632825.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX021	0	0.57095E-08	632830.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX022	0	0.57095E-08	632835.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX023	0	0.57095E-08	632840.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX024	0	0.57095E-08	632845.6	3674985.8	0.0	3.00	2.33	2.79	NO	
DNOVX025	0	0.57095E-08	632850.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX026	0	0.57095E-08	632855.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX027	0	0.57095E-08	632860.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX028	0	0.57095E-08	632865.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX029	0	0.57095E-08	632870.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02A	0	0.57095E-08	632875.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02B	0	0.57095E-08	632880.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02C	0	0.57095E-08	632885.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02D	0	0.57095E-08	632890.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02E	0	0.57095E-08	632895.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02F	0	0.57095E-08	632900.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02G	0	0.57095E-08	632905.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02H	0	0.57095E-08	632910.6	3674985.9	0.0	3.00	2.33	2.79	NO	
DNOVX02I	0	0.57095E-08	632915.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02J	0	0.57095E-08	632920.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02K	0	0.57095E-08	632925.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02L	0	0.57095E-08	632930.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02M	0	0.57095E-08	632935.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02N	0	0.57095E-08	632940.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02O	0	0.57095E-08	632945.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02P	0	0.57095E-08	632950.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02Q	0	0.57095E-08	632955.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02R	0	0.57095E-08	632960.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02S	0	0.57095E-08	632965.6	3674986.0	0.0	3.00	2.33	2.79	NO	
DNOVX02T	0	0.57095E-08	632970.6	3674986.0	0.0	3.00	2.33	2.79	NO	

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21

*** AERMET - VERSION 14134 ***
 18:39:47

PAGE 5

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX02U	0	0.57095E-08	632975.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX02V	0	0.57095E-08	632980.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX02W	0	0.57095E-08	632985.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX02X	0	0.57095E-08	632990.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX02Y	0	0.57095E-08	632995.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX02Z	0	0.57095E-08	633000.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX030	0	0.57095E-08	633005.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX031	0	0.57095E-08	633010.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX032	0	0.57095E-08	633015.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX033	0	0.57095E-08	633020.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX034	0	0.57095E-08	633025.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX035	0	0.57095E-08	633030.6	3674986.1	0.0	3.00	2.33	2.79	NO	
DNOVX036	0	0.57095E-08	633035.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX037	0	0.57095E-08	633040.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX038	0	0.57095E-08	633045.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX039	0	0.57095E-08	633050.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03A	0	0.57095E-08	633055.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03B	0	0.57095E-08	633060.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03C	0	0.57095E-08	633065.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03D	0	0.57095E-08	633070.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03E	0	0.57095E-08	633075.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03F	0	0.57095E-08	633080.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03G	0	0.57095E-08	633085.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03H	0	0.57095E-08	633090.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03I	0	0.57095E-08	633095.6	3674986.2	0.0	3.00	2.33	2.79	NO	
DNOVX03J	0	0.57095E-08	633100.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03K	0	0.57095E-08	633105.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03L	0	0.57095E-08	633110.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03M	0	0.57095E-08	633115.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03N	0	0.57095E-08	633120.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03O	0	0.57095E-08	633125.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03P	0	0.57095E-08	633130.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03Q	0	0.57095E-08	633135.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03R	0	0.57095E-08	633140.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03S	0	0.57095E-08	633145.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03T	0	0.57095E-08	633150.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03U	0	0.57095E-08	633155.6	3674986.3	0.0	3.00	2.33	2.79	NO	
DNOVX03V	0	0.57095E-08	633160.6	3674986.4	0.0	3.00	2.33	2.79	NO	
DNOVX03W	0	0.57095E-08	633165.6	3674986.4	0.0	3.00	2.33	2.79	NO	
DNOVX03X	0	0.57095E-08	633170.6	3674986.4	0.0	3.00	2.33	2.79	NO	

▲ *** AERMOD - VERSION 19191 ***
 03/16/21

*** AERMET - VERSION 14134 ***
 18:39:47

PAGE 6

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
-----------	--------------------	---------------------------	------------	------------	---------------------	-------------------------	-------------------	-------------------	--------------	------------------------------

DNOVX03Y	0	0.57095E-08	633175.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX03Z	0	0.57095E-08	633180.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX040	0	0.57095E-08	633185.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX041	0	0.57095E-08	633190.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX042	0	0.57095E-08	633195.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX043	0	0.57095E-08	633200.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX044	0	0.57095E-08	633205.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX045	0	0.57095E-08	633210.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX046	0	0.57095E-08	633215.6	3674986.4	0.0	3.00	2.33	2.79	NO
DNOVX047	0	0.57095E-08	633220.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX048	0	0.57095E-08	633225.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX049	0	0.57095E-08	633230.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04A	0	0.57095E-08	633235.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04B	0	0.57095E-08	633240.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04C	0	0.57095E-08	633245.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04D	0	0.57095E-08	633250.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04E	0	0.57095E-08	633255.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04F	0	0.57095E-08	633260.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04G	0	0.57095E-08	633265.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04H	0	0.57095E-08	633270.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04I	0	0.57095E-08	633275.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04J	0	0.57095E-08	633280.6	3674986.5	0.0	3.00	2.33	2.79	NO
DNOVX04K	0	0.57095E-08	633285.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04L	0	0.57095E-08	633290.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04M	0	0.57095E-08	633295.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04N	0	0.57095E-08	633300.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04O	0	0.57095E-08	633305.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04P	0	0.57095E-08	633310.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04Q	0	0.57095E-08	633315.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04R	0	0.57095E-08	633320.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04S	0	0.57095E-08	633325.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04T	0	0.57095E-08	633330.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04U	0	0.57095E-08	633335.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04V	0	0.57095E-08	633340.6	3674986.6	0.0	3.00	2.33	2.79	NO
DNOVX04W	0	0.57095E-08	633345.6	3674986.7	0.0	3.00	2.33	2.79	NO
DNOVX04X	0	0.57095E-08	633350.6	3674986.7	0.0	3.00	2.33	2.79	NO
DNOVX04Y	0	0.57095E-08	633355.6	3674986.7	0.0	3.00	2.33	2.79	NO
DNOVX04Z	0	0.57095E-08	633360.6	3674986.7	0.0	3.00	2.33	2.79	NO
DNOVX050	0	0.57095E-08	633365.6	3674986.7	0.0	3.00	2.33	2.79	NO
DNOVX051	0	0.57095E-08	633370.6	3674986.7	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
03/16/21

*** AERMET - VERSION 14134 *** ***
18:39:47

PAGE 7

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX052	0	0.57095E-08	633375.6	3674986.7	0.0	3.00	2.33	2.79	NO	
DNOVX053	0	0.57095E-08	633380.6	3674986.7	0.0	3.00	2.33	2.79	NO	
DNOVX054	0	0.57095E-08	633385.6	3674986.7	0.0	3.00	2.33	2.79	NO	
DNOVX055	0	0.57095E-08	633390.6	3674986.7	0.0	3.00	2.33	2.79	NO	
DNOVX056	0	0.57095E-08	633395.6	3674986.7	0.0	3.00	2.33	2.79	NO	
DNOVX057	0	0.57095E-08	633400.6	3674986.7	0.0	3.00	2.33	2.79	NO	
DNOVX058	0	0.57095E-08	633405.6	3674986.8	0.0	3.00	2.33	2.79	NO	
DNOVX059	0	0.57095E-08	633410.6	3674986.8	0.0	3.00	2.33	2.79	NO	
DNOVX05A	0	0.57095E-08	633415.6	3674986.8	0.0	3.00	2.33	2.79	NO	

DNOVX05B	0	0.57095E-08	633420.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05C	0	0.57095E-08	633425.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05D	0	0.57095E-08	633430.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05E	0	0.57095E-08	633435.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05F	0	0.57095E-08	633440.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05G	0	0.57095E-08	633445.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05H	0	0.57095E-08	633450.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05I	0	0.57095E-08	633455.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05J	0	0.57095E-08	633460.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05K	0	0.57095E-08	633465.6	3674986.8	0.0	3.00	2.33	2.79	NO
DNOVX05L	0	0.57095E-08	633470.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05M	0	0.57095E-08	633475.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05N	0	0.57095E-08	633480.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05O	0	0.57095E-08	633485.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05P	0	0.57095E-08	633490.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05Q	0	0.57095E-08	633495.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05R	0	0.57095E-08	633500.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05S	0	0.57095E-08	633505.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05T	0	0.57095E-08	633510.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05U	0	0.57095E-08	633515.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05V	0	0.57095E-08	633520.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05W	0	0.57095E-08	633525.6	3674986.9	0.0	3.00	2.33	2.79	NO
DNOVX05X	0	0.57095E-08	633530.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX05Y	0	0.57095E-08	633535.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX05Z	0	0.57095E-08	633540.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX060	0	0.57095E-08	633545.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX061	0	0.57095E-08	633550.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX062	0	0.57095E-08	633555.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX063	0	0.57095E-08	633560.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX064	0	0.57095E-08	633565.6	3674987.0	0.0	3.00	2.33	2.79	NO
DNOVX065	0	0.57095E-08	633570.6	3674987.0	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***

03/16/21

*** AERMET - VERSION 14134 *** ***

18:39:47

PAGE 8

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX066	0	0.57095E-08	633575.6	3674987.0	0.0	3.00	2.33	2.79	NO	
DNOVX067	0	0.57095E-08	633580.6	3674987.0	0.0	3.00	2.33	2.79	NO	
DNOVX068	0	0.57095E-08	633585.6	3674987.0	0.0	3.00	2.33	2.79	NO	
DNOVX069	0	0.57095E-08	633590.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06A	0	0.57095E-08	633595.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06B	0	0.57095E-08	633600.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06C	0	0.57095E-08	633605.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06D	0	0.57095E-08	633610.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06E	0	0.57095E-08	633615.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06F	0	0.57095E-08	633620.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06G	0	0.57095E-08	633625.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06H	0	0.57095E-08	633630.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06I	0	0.57095E-08	633635.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06J	0	0.57095E-08	633640.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06K	0	0.57095E-08	633645.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06L	0	0.57095E-08	633650.6	3674987.1	0.0	3.00	2.33	2.79	NO	
DNOVX06M	0	0.57095E-08	633655.6	3674987.2	0.0	3.00	2.33	2.79	NO	
DNOVX06N	0	0.57095E-08	633660.6	3674987.2	0.0	3.00	2.33	2.79	NO	
DNOVX06O	0	0.57095E-08	633665.6	3674987.2	0.0	3.00	2.33	2.79	NO	
DNOVX06P	0	0.57095E-08	633670.6	3674987.2	0.0	3.00	2.33	2.79	NO	
DNOVX06Q	0	0.57095E-08	633675.6	3674987.2	0.0	3.00	2.33	2.79	NO	

DNOVX06R	0	0.57095E-08	633680.6	3674987.2	0.0	3.00	2.33	2.79	NO
DNOVX06S	0	0.57095E-08	633685.6	3674987.2	0.0	3.00	2.33	2.79	NO
DNOVX06T	0	0.57095E-08	633690.6	3674987.2	0.0	3.00	2.33	2.79	NO
DNOVX06U	0	0.57095E-08	633695.6	3674987.2	0.0	3.00	2.33	2.79	NO
DNOVX06V	0	0.57095E-08	633700.6	3674987.2	0.0	3.00	2.33	2.79	NO
DNOVX06W	0	0.57095E-08	633705.6	3674987.2	0.0	3.00	2.33	2.79	NO
DNOVX06X	0	0.57095E-08	633710.6	3674987.2	0.0	3.00	2.33	2.79	NO
DNOVX06Y	0	0.57095E-08	633715.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX06Z	0	0.57095E-08	633720.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX070	0	0.57095E-08	633725.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX071	0	0.57095E-08	633730.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX072	0	0.57095E-08	633735.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX073	0	0.57095E-08	633740.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX074	0	0.57095E-08	633745.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX075	0	0.57095E-08	633750.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX076	0	0.57095E-08	633755.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX077	0	0.57095E-08	633760.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX078	0	0.57095E-08	633765.6	3674987.3	0.0	3.00	2.33	2.79	NO
DNOVX079	0	0.57095E-08	633770.6	3674987.3	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
03/16/21
*** AERMET - VERSION 14134 *** ***
18:39:47

PAGE 9
*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX07A	0	0.57095E-08	633775.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07B	0	0.57095E-08	633780.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07C	0	0.57095E-08	633785.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07D	0	0.57095E-08	633790.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07E	0	0.57095E-08	633795.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07F	0	0.57095E-08	633800.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07G	0	0.57095E-08	633805.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07H	0	0.57095E-08	633810.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07I	0	0.57095E-08	633815.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07J	0	0.57095E-08	633820.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07K	0	0.57095E-08	633825.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07L	0	0.57095E-08	633830.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07M	0	0.57095E-08	633835.6	3674987.4	0.0	3.00	2.33	2.79	NO	
DNOVX07N	0	0.57095E-08	633840.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07O	0	0.57095E-08	633845.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07P	0	0.57095E-08	633850.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07Q	0	0.57095E-08	633855.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07R	0	0.57095E-08	633860.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07S	0	0.57095E-08	633865.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07T	0	0.57095E-08	633870.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07U	0	0.57095E-08	633875.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07V	0	0.57095E-08	633880.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07W	0	0.57095E-08	633885.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07X	0	0.57095E-08	633890.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07Y	0	0.57095E-08	633895.6	3674987.5	0.0	3.00	2.33	2.79	NO	
DNOVX07Z	0	0.57095E-08	633900.6	3674987.6	0.0	3.00	2.33	2.79	NO	
DNOVX080	0	0.57095E-08	633905.6	3674987.6	0.0	3.00	2.33	2.79	NO	
DNOVX081	0	0.57095E-08	633910.6	3674987.6	0.0	3.00	2.33	2.79	NO	
DNOVX082	0	0.57095E-08	633915.6	3674987.6	0.0	3.00	2.33	2.79	NO	
DNOVX083	0	0.57095E-08	633920.6	3674987.6	0.0	3.00	2.33	2.79	NO	
DNOVX084	0	0.57095E-08	633925.6	3674987.6	0.0	3.00	2.33	2.79	NO	
DNOVX085	0	0.57095E-08	633930.6	3674987.6	0.0	3.00	2.33	2.79	NO	
DNOVX086	0	0.57095E-08	633935.6	3674987.6	0.0	3.00	2.33	2.79	NO	

DNOVX087	0	0.57095E-08	633940.6	3674987.6	0.0	3.00	2.33	2.79	NO
DNOVX088	0	0.57095E-08	633945.6	3674987.6	0.0	3.00	2.33	2.79	NO
DNOVX089	0	0.57095E-08	633950.6	3674987.6	0.0	3.00	2.33	2.79	NO
DNOVX08A	0	0.57095E-08	633955.6	3674987.6	0.0	3.00	2.33	2.79	NO
DNOVX08B	0	0.57095E-08	633960.6	3674987.7	0.0	3.00	2.33	2.79	NO
DNOVX08C	0	0.57095E-08	633965.6	3674987.7	0.0	3.00	2.33	2.79	NO
DNOVX08D	0	0.57095E-08	633970.6	3674987.7	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
03/16/21

*** AERMET - VERSION 14134 *** ***
18:39:47

PAGE 10

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX08E	0	0.57095E-08	633975.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08F	0	0.57095E-08	633980.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08G	0	0.57095E-08	633985.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08H	0	0.57095E-08	633990.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08I	0	0.57095E-08	633995.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08J	0	0.57095E-08	634000.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08K	0	0.57095E-08	634005.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08L	0	0.57095E-08	634010.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08M	0	0.57095E-08	634015.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08N	0	0.57095E-08	634020.6	3674987.7	0.0	3.00	2.33	2.79	NO	
DNOVX08O	0	0.57095E-08	634025.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08P	0	0.57095E-08	634030.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08Q	0	0.57095E-08	634035.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08R	0	0.57095E-08	634040.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08S	0	0.57095E-08	634045.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08T	0	0.57095E-08	634050.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08U	0	0.57095E-08	634055.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08V	0	0.57095E-08	634060.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08W	0	0.57095E-08	634065.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08X	0	0.57095E-08	634070.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08Y	0	0.57095E-08	634075.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX08Z	0	0.57095E-08	634080.6	3674987.8	0.0	3.00	2.33	2.79	NO	
DNOVX090	0	0.57095E-08	634085.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX091	0	0.57095E-08	634090.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX092	0	0.57095E-08	634095.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX093	0	0.57095E-08	634100.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX094	0	0.57095E-08	634105.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX095	0	0.57095E-08	634110.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX096	0	0.57095E-08	634115.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX097	0	0.57095E-08	634120.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX098	0	0.57095E-08	634125.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX099	0	0.57095E-08	634130.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX09A	0	0.57095E-08	634135.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX09B	0	0.57095E-08	634140.6	3674987.9	0.0	3.00	2.33	2.79	NO	
DNOVX09C	0	0.57095E-08	634145.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09D	0	0.57095E-08	634150.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09E	0	0.57095E-08	634155.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09F	0	0.57095E-08	634160.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09G	0	0.57095E-08	634165.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09H	0	0.57095E-08	634170.6	3674988.0	0.0	3.00	2.33	2.79	NO	

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
03/16/21

*** AERMET - VERSION 14134 *** ***
18:39:47

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX09I	0	0.57095E-08	634175.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09J	0	0.57095E-08	634180.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09K	0	0.57095E-08	634185.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09L	0	0.57095E-08	634190.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09M	0	0.57095E-08	634195.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09N	0	0.57095E-08	634200.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09O	0	0.57095E-08	634205.6	3674988.0	0.0	3.00	2.33	2.79	NO	
DNOVX09P	0	0.57095E-08	634210.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09Q	0	0.57095E-08	634215.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09R	0	0.57095E-08	634220.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09S	0	0.57095E-08	634225.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09T	0	0.57095E-08	634230.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09U	0	0.57095E-08	634235.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09V	0	0.57095E-08	634240.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09W	0	0.57095E-08	634245.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09X	0	0.57095E-08	634250.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09Y	0	0.57095E-08	634255.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX09Z	0	0.57095E-08	634260.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX0A0	0	0.57095E-08	634265.6	3674988.1	0.0	3.00	2.33	2.79	NO	
DNOVX0A1	0	0.57095E-08	634270.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A2	0	0.57095E-08	634275.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A3	0	0.57095E-08	634280.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A4	0	0.57095E-08	634285.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A5	0	0.57095E-08	634290.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A6	0	0.57095E-08	634295.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A7	0	0.57095E-08	634300.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A8	0	0.57095E-08	634305.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0A9	0	0.57095E-08	634310.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0AA	0	0.57095E-08	634315.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0AB	0	0.57095E-08	634320.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0AC	0	0.57095E-08	634325.6	3674988.2	0.0	3.00	2.33	2.79	NO	
DNOVX0AD	0	0.57095E-08	634330.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AE	0	0.57095E-08	634335.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AF	0	0.57095E-08	634340.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AG	0	0.57095E-08	634345.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AH	0	0.57095E-08	634350.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AI	0	0.57095E-08	634355.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AJ	0	0.57095E-08	634360.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AK	0	0.57095E-08	634365.6	3674988.3	0.0	3.00	2.33	2.79	NO	
DNOVX0AL	0	0.57095E-08	634370.6	3674988.3	0.0	3.00	2.33	2.79	NO	

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***

03/16/21

*** AERMET - VERSION 14134 *** ***

18:39:47

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
-----------	--------------------	---------------------------	------------	------------	---------------------	-------------------------	-------------------	-------------------	--------------	------------------------------

DNOVX0AM	0	0.57095E-08	634375.6	3674988.3	0.0	3.00	2.33	2.79	NO
DNOVX0AN	0	0.57095E-08	634380.6	3674988.3	0.0	3.00	2.33	2.79	NO
DNOVX0AO	0	0.57095E-08	634385.6	3674988.3	0.0	3.00	2.33	2.79	NO
DNOVX0AP	0	0.57095E-08	634390.6	3674988.3	0.0	3.00	2.33	2.79	NO
DNOVX0AQ	0	0.57095E-08	634395.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AR	0	0.57095E-08	634400.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AS	0	0.57095E-08	634405.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AT	0	0.57095E-08	634410.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AU	0	0.57095E-08	634415.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AV	0	0.57095E-08	634420.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AW	0	0.57095E-08	634425.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AX	0	0.57095E-08	634430.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AY	0	0.57095E-08	634435.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0AZ	0	0.57095E-08	634440.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0B0	0	0.57095E-08	634445.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0B1	0	0.57095E-08	634450.6	3674988.4	0.0	3.00	2.33	2.79	NO
DNOVX0B2	0	0.57095E-08	634455.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0B3	0	0.57095E-08	634460.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0B4	0	0.57095E-08	634465.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0B5	0	0.57095E-08	634470.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0B6	0	0.57095E-08	634475.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0B7	0	0.57095E-08	634480.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0B8	0	0.57095E-08	634485.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0B9	0	0.57095E-08	634490.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0BA	0	0.57095E-08	634495.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0BB	0	0.57095E-08	634500.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0BC	0	0.57095E-08	634505.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0BD	0	0.57095E-08	634510.6	3674988.5	0.0	3.00	2.33	2.79	NO
DNOVX0BE	0	0.57095E-08	634515.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BF	0	0.57095E-08	634520.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BG	0	0.57095E-08	634525.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BH	0	0.57095E-08	634530.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BI	0	0.57095E-08	634535.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BJ	0	0.57095E-08	634540.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BK	0	0.57095E-08	634545.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BL	0	0.57095E-08	634550.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BM	0	0.57095E-08	634555.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BN	0	0.57095E-08	634560.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BO	0	0.57095E-08	634565.6	3674988.6	0.0	3.00	2.33	2.79	NO
DNOVX0BP	0	0.57095E-08	634570.6	3674988.6	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
03/16/21

*** AERMET - VERSION 14134 *** ***
18:39:47

PAGE 13

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX0BQ	0	0.57095E-08	634575.6	3674988.6	0.0	3.00	2.33	2.79	NO	
DNOVX0BR	0	0.57095E-08	634580.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BS	0	0.57095E-08	634585.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BT	0	0.57095E-08	634590.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BU	0	0.57095E-08	634595.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BV	0	0.57095E-08	634600.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BW	0	0.57095E-08	634605.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BX	0	0.57095E-08	634610.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BY	0	0.57095E-08	634615.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0BZ	0	0.57095E-08	634620.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0C0	0	0.57095E-08	634625.6	3674988.7	0.0	3.00	2.33	2.79	NO	
DNOVX0C1	0	0.57095E-08	634630.6	3674988.7	0.0	3.00	2.33	2.79	NO	

DNOVX0C2	0	0.57095E-08	634635.6	3674988.7	0.0	3.00	2.33	2.79	NO
DNOVX0C3	0	0.57095E-08	634640.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0C4	0	0.57095E-08	634645.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0C5	0	0.57095E-08	634650.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0C6	0	0.57095E-08	634655.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0C7	0	0.57095E-08	634660.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0C8	0	0.57095E-08	634665.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0C9	0	0.57095E-08	634670.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0CA	0	0.57095E-08	634675.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0CB	0	0.57095E-08	634680.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0CC	0	0.57095E-08	634685.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0CD	0	0.57095E-08	634690.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0CE	0	0.57095E-08	634695.6	3674988.8	0.0	3.00	2.33	2.79	NO
DNOVX0CF	0	0.57095E-08	634700.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CG	0	0.57095E-08	634705.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CH	0	0.57095E-08	634710.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CI	0	0.57095E-08	634715.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CJ	0	0.57095E-08	634720.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CK	0	0.57095E-08	634725.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CL	0	0.57095E-08	634730.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CM	0	0.57095E-08	634735.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CN	0	0.57095E-08	634740.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CO	0	0.57095E-08	634745.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CP	0	0.57095E-08	634750.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CQ	0	0.57095E-08	634755.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CR	0	0.57095E-08	634760.6	3674988.9	0.0	3.00	2.33	2.79	NO
DNOVX0CS	0	0.57095E-08	634765.6	3674989.0	0.0	3.00	2.33	2.79	NO
DNOVX0CT	0	0.57095E-08	634770.6	3674989.0	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX0CU	0	0.57095E-08	634775.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0CV	0	0.57095E-08	634780.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0CW	0	0.57095E-08	634785.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0CX	0	0.57095E-08	634790.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0CY	0	0.57095E-08	634795.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0CZ	0	0.57095E-08	634800.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0D0	0	0.57095E-08	634805.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0D1	0	0.57095E-08	634810.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0D2	0	0.57095E-08	634815.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0D3	0	0.57095E-08	634820.6	3674989.0	0.0	3.00	2.33	2.79	NO	
DNOVX0D4	0	0.57095E-08	634825.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0D5	0	0.57095E-08	634830.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0D6	0	0.57095E-08	634835.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0D7	0	0.57095E-08	634840.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0D8	0	0.57095E-08	634845.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0D9	0	0.57095E-08	634850.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0DA	0	0.57095E-08	634855.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0DB	0	0.57095E-08	634860.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0DC	0	0.57095E-08	634865.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0DD	0	0.57095E-08	634870.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0DE	0	0.57095E-08	634875.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0DF	0	0.57095E-08	634880.6	3674989.1	0.0	3.00	2.33	2.79	NO	
DNOVX0DG	0	0.57095E-08	634885.6	3674989.2	0.0	3.00	2.33	2.79	NO	
DNOVX0DH	0	0.57095E-08	634890.6	3674989.2	0.0	3.00	2.33	2.79	NO	

DNOVX0DI	0	0.57095E-08	634895.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DJ	0	0.57095E-08	634900.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DK	0	0.57095E-08	634905.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DL	0	0.57095E-08	634910.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DM	0	0.57095E-08	634915.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DN	0	0.57095E-08	634920.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DO	0	0.57095E-08	634925.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DP	0	0.57095E-08	634930.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DQ	0	0.57095E-08	634935.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DR	0	0.57095E-08	634940.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DS	0	0.57095E-08	634945.6	3674989.2	0.0	3.00	2.33	2.79	NO
DNOVX0DT	0	0.57095E-08	634950.6	3674989.3	0.0	3.00	2.33	2.79	NO
DNOVX0DU	0	0.57095E-08	634955.6	3674989.3	0.0	3.00	2.33	2.79	NO
DNOVX0DV	0	0.57095E-08	634960.6	3674989.3	0.0	3.00	2.33	2.79	NO
DNOVX0DW	0	0.57095E-08	634965.6	3674989.3	0.0	3.00	2.33	2.79	NO
DNOVX0DX	0	0.57095E-08	634970.6	3674989.3	0.0	3.00	2.33	2.79	NO

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***

03/16/21

*** AERMET - VERSION 14134 *** ***

18:39:47

PAGE 15

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX0DY	0	0.57095E-08	634975.6	3674989.3	0.0	3.00	2.33	2.79	NO	
DNOVX0DZ	0	0.57095E-08	634980.6	3674989.3	0.0	3.00	2.33	2.79	NO	
DNOVX0E0	0	0.57095E-08	634985.6	3674989.3	0.0	3.00	2.33	2.79	NO	
DNOVX0E1	0	0.57095E-08	634990.6	3674989.3	0.0	3.00	2.33	2.79	NO	
DNOVX0E2	0	0.57095E-08	634995.6	3674989.3	0.0	3.00	2.33	2.79	NO	
DNOVX0E3	0	0.57095E-08	635000.6	3674989.3	0.0	3.00	2.33	2.79	NO	
DNOVX0E4	0	0.57095E-08	635005.6	3674989.3	0.0	3.00	2.33	2.79	NO	
DNOVX0E5	0	0.57095E-08	635010.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0E6	0	0.57095E-08	635015.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0E7	0	0.57095E-08	635020.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0E8	0	0.57095E-08	635025.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0E9	0	0.57095E-08	635030.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0EA	0	0.57095E-08	635035.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0EB	0	0.57095E-08	635040.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0EC	0	0.57095E-08	635045.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0ED	0	0.57095E-08	635050.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0EE	0	0.57095E-08	635055.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0EF	0	0.57095E-08	635060.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0EG	0	0.57095E-08	635065.6	3674989.4	0.0	3.00	2.33	2.79	NO	
DNOVX0EH	0	0.57095E-08	635070.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EI	0	0.57095E-08	635075.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EJ	0	0.57095E-08	635080.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EK	0	0.57095E-08	635085.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EL	0	0.57095E-08	635090.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EM	0	0.57095E-08	635095.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EN	0	0.57095E-08	635100.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EO	0	0.57095E-08	635105.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EP	0	0.57095E-08	635110.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EQ	0	0.57095E-08	635115.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0ER	0	0.57095E-08	635120.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0ES	0	0.57095E-08	635125.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0ET	0	0.57095E-08	635130.6	3674989.5	0.0	3.00	2.33	2.79	NO	
DNOVX0EU	0	0.57095E-08	635135.6	3674989.6	0.0	3.00	2.33	2.79	NO	
DNOVX0EV	0	0.57095E-08	635140.6	3674989.6	0.0	3.00	2.33	2.79	NO	
DNOVX0EW	0	0.57095E-08	635145.6	3674989.6	0.0	3.00	2.33	2.79	NO	
DNOVX0EX	0	0.57095E-08	635150.6	3674989.6	0.0	3.00	2.33	2.79	NO	

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
DNOVX0G6	0	0.57095E-08	635375.6	3674989.9	0.0	3.00	2.33	2.79	NO	
DNOVX0G7	0	0.57095E-08	635380.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0G8	0	0.57095E-08	635385.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0G9	0	0.57095E-08	635390.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GA	0	0.57095E-08	635395.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GB	0	0.57095E-08	635400.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GC	0	0.57095E-08	635405.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GD	0	0.57095E-08	635410.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GE	0	0.57095E-08	635415.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GF	0	0.57095E-08	635420.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GG	0	0.57095E-08	635425.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GH	0	0.57095E-08	635430.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GI	0	0.57095E-08	635435.6	3674990.0	0.0	3.00	2.33	2.79	NO	
DNOVX0GJ	0	0.57095E-08	635440.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GK	0	0.57095E-08	635445.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GL	0	0.57095E-08	635450.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GM	0	0.57095E-08	635455.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GN	0	0.57095E-08	635460.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GO	0	0.57095E-08	635465.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GP	0	0.57095E-08	635470.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GQ	0	0.57095E-08	635475.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GR	0	0.57095E-08	635480.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GS	0	0.57095E-08	635485.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GT	0	0.57095E-08	635490.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GU	0	0.57095E-08	635495.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GV	0	0.57095E-08	635500.6	3674990.1	0.0	3.00	2.33	2.79	NO	
DNOVX0GW	0	0.57095E-08	635505.6	3674990.2	0.0	3.00	2.33	2.79	NO	
DNOVX0GX	0	0.57095E-08	635510.6	3674990.2	0.0	3.00	2.33	2.79	NO	
DNOVX0GY	0	0.57095E-08	635515.6	3674990.2	0.0	3.00	2.33	2.79	NO	
DNOVX0GZ	0	0.57095E-08	635520.6	3674990.2	0.0	3.00	2.33	2.79	NO	
DNOVX0H0	0	0.57095E-08	635525.6	3674990.2	0.0	3.00	2.33	2.79	NO	
DNOVX0H1	0	0.57095E-08	635530.6	3674990.2	0.0	3.00	2.33	2.79	NO	

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 18
 *** MODELOPTS: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL DNOVX007	DNOVX000 , DNOVX001 , DNOVX002 , DNOVX003 , DNOVX004 , DNOVX005 , DNOVX006 ,
DNOVX00M	DNOVX008 , DNOVX009 , DNOVX00A , DNOVX00B , DNOVX00C , DNOVX00D , DNOVX00E ,
DNOVX00U	DNOVX00N , DNOVX00O , DNOVX00P , DNOVX00Q , DNOVX00R , DNOVX00S , DNOVX00T ,
DNOVX012	DNOVX00V , DNOVX00W , DNOVX00X , DNOVX00Y , DNOVX00Z , DNOVX010 , DNOVX011 ,
	DNOVX013 , DNOVX014 , DNOVX015 , DNOVX016 , DNOVX017 , DNOVX018 , DNOVX019 ,

DNOVX01A ,
 DNOVX01B , DNOVX01C , DNOVX01D , DNOVX01E , DNOVX01F , DNOVX01G , DNOVX01H ,
 DNOVX01I ,
 DNOVX01J , DNOVX01K , DNOVX01L , DNOVX01M , DNOVX01N , DNOVX01O , DNOVX01P ,
 DNOVX01Q ,
 DNOVX01R , DNOVX01S , DNOVX01T , DNOVX01U , DNOVX01V , DNOVX01W , DNOVX01X ,
 DNOVX01Y ,
 DNOVX01Z , DNOVX020 , DNOVX021 , DNOVX022 , DNOVX023 , DNOVX024 , DNOVX025 ,
 DNOVX026 ,
 DNOVX027 , DNOVX028 , DNOVX029 , DNOVX02A , DNOVX02B , DNOVX02C , DNOVX02D ,
 DNOVX02E ,
 DNOVX02F , DNOVX02G , DNOVX02H , DNOVX02I , DNOVX02J , DNOVX02K , DNOVX02L ,
 DNOVX02M ,
 DNOVX02N , DNOVX02O , DNOVX02P , DNOVX02Q , DNOVX02R , DNOVX02S , DNOVX02T ,
 DNOVX02U ,
 DNOVX02V , DNOVX02W , DNOVX02X , DNOVX02Y , DNOVX02Z , DNOVX030 , DNOVX031 ,
 DNOVX032 ,
 DNOVX033 , DNOVX034 , DNOVX035 , DNOVX036 , DNOVX037 , DNOVX038 , DNOVX039 ,
 DNOVX03A ,
 DNOVX03B , DNOVX03C , DNOVX03D , DNOVX03E , DNOVX03F , DNOVX03G , DNOVX03H ,
 DNOVX03I ,
 DNOVX03J , DNOVX03K , DNOVX03L , DNOVX03M , DNOVX03N , DNOVX03O , DNOVX03P ,
 DNOVX03Q ,
 DNOVX03R , DNOVX03S , DNOVX03T , DNOVX03U , DNOVX03V , DNOVX03W , DNOVX03X ,
 DNOVX03Y ,
 DNOVX03Z , DNOVX040 , DNOVX041 , DNOVX042 , DNOVX043 , DNOVX044 , DNOVX045 ,
 DNOVX046 ,
 DNOVX047 , DNOVX048 , DNOVX049 , DNOVX04A , DNOVX04B , DNOVX04C , DNOVX04D ,
 DNOVX04E ,
 DNOVX04F , DNOVX04G , DNOVX04H , DNOVX04I , DNOVX04J , DNOVX04K , DNOVX04L ,
 DNOVX04M ,

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 19
 *** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
DNOVX04U ,	DNOVX04N , DNOVX04O , DNOVX04P , DNOVX04Q , DNOVX04R , DNOVX04S , DNOVX04T ,
DNOVX052 ,	DNOVX04V , DNOVX04W , DNOVX04X , DNOVX04Y , DNOVX04Z , DNOVX050 , DNOVX051 ,
DNOVX05A ,	DNOVX053 , DNOVX054 , DNOVX055 , DNOVX056 , DNOVX057 , DNOVX058 , DNOVX059 ,

DNOVX05I , DNOVX05B , DNOVX05C , DNOVX05D , DNOVX05E , DNOVX05F , DNOVX05G , DNOVX05H ,
 DNOVX05Q , DNOVX05J , DNOVX05K , DNOVX05L , DNOVX05M , DNOVX05N , DNOVX05O , DNOVX05P ,
 DNOVX05Y , DNOVX05R , DNOVX05S , DNOVX05T , DNOVX05U , DNOVX05V , DNOVX05W , DNOVX05X ,
 DNOVX066 , DNOVX05Z , DNOVX060 , DNOVX061 , DNOVX062 , DNOVX063 , DNOVX064 , DNOVX065 ,
 DNOVX06E , DNOVX067 , DNOVX068 , DNOVX069 , DNOVX06A , DNOVX06B , DNOVX06C , DNOVX06D ,
 DNOVX06M , DNOVX06F , DNOVX06G , DNOVX06H , DNOVX06I , DNOVX06J , DNOVX06K , DNOVX06L ,
 DNOVX06U , DNOVX06N , DNOVX06O , DNOVX06P , DNOVX06Q , DNOVX06R , DNOVX06S , DNOVX06T ,
 DNOVX072 , DNOVX06V , DNOVX06W , DNOVX06X , DNOVX06Y , DNOVX06Z , DNOVX070 , DNOVX071 ,
 DNOVX07A , DNOVX073 , DNOVX074 , DNOVX075 , DNOVX076 , DNOVX077 , DNOVX078 , DNOVX079 ,
 DNOVX07I , DNOVX07B , DNOVX07C , DNOVX07D , DNOVX07E , DNOVX07F , DNOVX07G , DNOVX07H ,
 DNOVX07Q , DNOVX07J , DNOVX07K , DNOVX07L , DNOVX07M , DNOVX07N , DNOVX07O , DNOVX07P ,
 DNOVX07Y , DNOVX07R , DNOVX07S , DNOVX07T , DNOVX07U , DNOVX07V , DNOVX07W , DNOVX07X ,
 DNOVX086 , DNOVX07Z , DNOVX080 , DNOVX081 , DNOVX082 , DNOVX083 , DNOVX084 , DNOVX085 ,
 DNOVX08E , DNOVX087 , DNOVX088 , DNOVX089 , DNOVX08A , DNOVX08B , DNOVX08C , DNOVX08D ,
 DNOVX08M , DNOVX08F , DNOVX08G , DNOVX08H , DNOVX08I , DNOVX08J , DNOVX08K , DNOVX08L ,
 DNOVX08U , DNOVX08N , DNOVX08O , DNOVX08P , DNOVX08Q , DNOVX08R , DNOVX08S , DNOVX08T ,
 DNOVX092 , DNOVX08V , DNOVX08W , DNOVX08X , DNOVX08Y , DNOVX08Z , DNOVX090 , DNOVX091 ,

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 20
 *** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
DNOVX09A ,	DNOVX093 , DNOVX094 , DNOVX095 , DNOVX096 , DNOVX097 , DNOVX098 , DNOVX099 ,

DNOVX09I , DNOVX09B , DNOVX09C , DNOVX09D , DNOVX09E , DNOVX09F , DNOVX09G , DNOVX09H ,
 DNOVX09Q , DNOVX09J , DNOVX09K , DNOVX09L , DNOVX09M , DNOVX09N , DNOVX09O , DNOVX09P ,
 DNOVX09Y , DNOVX09R , DNOVX09S , DNOVX09T , DNOVX09U , DNOVX09V , DNOVX09W , DNOVX09X ,
 DNOVX0A6 , DNOVX09Z , DNOVX0A0 , DNOVX0A1 , DNOVX0A2 , DNOVX0A3 , DNOVX0A4 , DNOVX0A5 ,
 DNOVX0AE , DNOVX0A7 , DNOVX0A8 , DNOVX0A9 , DNOVX0AA , DNOVX0AB , DNOVX0AC , DNOVX0AD ,
 DNOVX0AM , DNOVX0AF , DNOVX0AG , DNOVX0AH , DNOVX0AI , DNOVX0AJ , DNOVX0AK , DNOVX0AL ,
 DNOVX0AU , DNOVX0AN , DNOVX0AO , DNOVX0AP , DNOVX0AQ , DNOVX0AR , DNOVX0AS , DNOVX0AT ,
 DNOVX0B2 , DNOVX0AV , DNOVX0AW , DNOVX0AX , DNOVX0AY , DNOVX0AZ , DNOVX0B0 , DNOVX0B1 ,
 DNOVX0BA , DNOVX0B3 , DNOVX0B4 , DNOVX0B5 , DNOVX0B6 , DNOVX0B7 , DNOVX0B8 , DNOVX0B9 ,
 DNOVX0BI , DNOVX0BB , DNOVX0BC , DNOVX0BD , DNOVX0BE , DNOVX0BF , DNOVX0BG , DNOVX0BH ,
 DNOVX0BQ , DNOVX0BJ , DNOVX0BK , DNOVX0BL , DNOVX0BM , DNOVX0BN , DNOVX0BO , DNOVX0BP ,
 DNOVX0BY , DNOVX0BR , DNOVX0BS , DNOVX0BT , DNOVX0BU , DNOVX0BV , DNOVX0BW , DNOVX0BX ,
 DNOVX0C6 , DNOVX0BZ , DNOVX0C0 , DNOVX0C1 , DNOVX0C2 , DNOVX0C3 , DNOVX0C4 , DNOVX0C5 ,
 DNOVX0CE , DNOVX0C7 , DNOVX0C8 , DNOVX0C9 , DNOVX0CA , DNOVX0CB , DNOVX0CC , DNOVX0CD ,
 DNOVX0CM , DNOVX0CF , DNOVX0CG , DNOVX0CH , DNOVX0CI , DNOVX0CJ , DNOVX0CK , DNOVX0CL ,
 DNOVX0CU , DNOVX0CN , DNOVX0CO , DNOVX0CP , DNOVX0CQ , DNOVX0CR , DNOVX0CS , DNOVX0CT ,
 DNOVX0D2 , DNOVX0CV , DNOVX0CW , DNOVX0CX , DNOVX0CY , DNOVX0CZ , DNOVX0D0 , DNOVX0D1 ,
 DNOVX0DA , DNOVX0D3 , DNOVX0D4 , DNOVX0D5 , DNOVX0D6 , DNOVX0D7 , DNOVX0D8 , DNOVX0D9 ,
 DNOVX0DI , DNOVX0DB , DNOVX0DC , DNOVX0DD , DNOVX0DE , DNOVX0DF , DNOVX0DG , DNOVX0DH ,

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 21
 *** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

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

DNOVX0DQ , DNOVX0DJ , DNOVX0DK , DNOVX0DL , DNOVX0DM , DNOVX0DN , DNOVX0DO , DNOVX0DP ,
 DNOVX0DY , DNOVX0DR , DNOVX0DS , DNOVX0DT , DNOVX0DU , DNOVX0DV , DNOVX0DW , DNOVX0DX ,
 DNOVX0E6 , DNOVX0DZ , DNOVX0E0 , DNOVX0E1 , DNOVX0E2 , DNOVX0E3 , DNOVX0E4 , DNOVX0E5 ,
 DNOVX0EE , DNOVX0E7 , DNOVX0E8 , DNOVX0E9 , DNOVX0EA , DNOVX0EB , DNOVX0EC , DNOVX0ED ,
 DNOVX0EM , DNOVX0EF , DNOVX0EG , DNOVX0EH , DNOVX0EI , DNOVX0EJ , DNOVX0EK , DNOVX0EL ,
 DNOVX0EU , DNOVX0EN , DNOVX0EO , DNOVX0EP , DNOVX0EQ , DNOVX0ER , DNOVX0ES , DNOVX0ET ,
 DNOVX0F2 , DNOVX0EV , DNOVX0EW , DNOVX0EX , DNOVX0EY , DNOVX0EZ , DNOVX0F0 , DNOVX0F1 ,
 DNOVX0FA , DNOVX0F3 , DNOVX0F4 , DNOVX0F5 , DNOVX0F6 , DNOVX0F7 , DNOVX0F8 , DNOVX0F9 ,
 DNOVX0FI , DNOVX0FB , DNOVX0FC , DNOVX0FD , DNOVX0FE , DNOVX0FF , DNOVX0FG , DNOVX0FH ,
 DNOVX0FQ , DNOVX0FJ , DNOVX0FK , DNOVX0FL , DNOVX0FM , DNOVX0FN , DNOVX0FO , DNOVX0FP ,
 DNOVX0FY , DNOVX0FR , DNOVX0FS , DNOVX0FT , DNOVX0FU , DNOVX0FV , DNOVX0FW , DNOVX0FX ,
 DNOVX0G6 , DNOVX0FZ , DNOVX0G0 , DNOVX0G1 , DNOVX0G2 , DNOVX0G3 , DNOVX0G4 , DNOVX0G5 ,
 DNOVX0GE , DNOVX0G7 , DNOVX0G8 , DNOVX0G9 , DNOVX0GA , DNOVX0GB , DNOVX0GC , DNOVX0GD ,
 DNOVX0GM , DNOVX0GF , DNOVX0GG , DNOVX0GH , DNOVX0GI , DNOVX0GJ , DNOVX0GK , DNOVX0GL ,
 DNOVX0GU , DNOVX0GN , DNOVX0GO , DNOVX0GP , DNOVX0GQ , DNOVX0GR , DNOVX0GS , DNOVX0GT ,
 VDB5H000 , DNOVX0GV , DNOVX0GW , DNOVX0GX , DNOVX0GY , DNOVX0GZ , DNOVX0H0 , DNOVX0H1 ,

VDB5H001 ,
 *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 22
 *** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

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

631636.2, 631781.5, 631926.8, 632072.1, 632217.4, 632362.7, 632508.0, 632653.3, 632798.6, 632943.9,
 633089.2, 633234.5, 633379.8, 633525.1, 633670.4, 633815.7, 633961.0, 634106.3, 634251.6, 634396.9,
 634542.2,

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

3676809.5, 3676657.3, 3676505.1, 3676352.9, 3676200.7, 3676048.5, 3675896.3, 3675744.1, 3675591.9, 3675439.7,
3675287.5, 3675135.3, 3674983.1, 3674830.9, 3674678.7, 3674526.5, 3674374.3, 3674222.1, 3674069.9, 3673917.7,
3673765.5,

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
03/16/21
*** AERMET - VERSION 14134 *** ***
18:39:47

PAGE 23

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	631636.20	631781.50	631926.80	X-COORD (METERS)	632072.10	632217.40	632362.70	632508.00
632653.30	632798.60							

3673765.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3673917.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3674069.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3674222.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3674374.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3674526.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3674678.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3674830.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3674983.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3675135.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3675287.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3675439.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3675591.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3675744.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3675896.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676048.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676200.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676352.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676505.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676657.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676809.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
03/16/21

*** AERMET - VERSION 14134 ***
18:39:47

PAGE 24

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)				X-COORD (METERS)			
633961.00	634106.30	632943.90	633089.20	633234.50	633379.80	633525.10	633670.40 633815.70

3673765.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3673917.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674069.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674222.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674374.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674526.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674678.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674830.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674983.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675135.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675287.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675439.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675591.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675744.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675896.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3676048.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3676200.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3676352.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3676505.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3676657.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3676809.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						

▲ *** AERMOD - VERSION 19191 ***
03/16/21

*** Diesle PM (Trucks) ***

*** AERMET - VERSION 14134 ***
18:39:47

PAGE 25

*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	634251.60	634396.90	634542.20	X-COORD (METERS)
3673765.50	0.00	0.00	0.00	
3673917.70	0.00	0.00	0.00	
3674069.90	0.00	0.00	0.00	
3674222.10	0.00	0.00	0.00	
3674374.30	0.00	0.00	0.00	
3674526.50	0.00	0.00	0.00	
3674678.70	0.00	0.00	0.00	
3674830.90	0.00	0.00	0.00	
3674983.10	0.00	0.00	0.00	
3675135.30	0.00	0.00	0.00	
3675287.50	0.00	0.00	0.00	
3675439.70	0.00	0.00	0.00	
3675591.90	0.00	0.00	0.00	
3675744.10	0.00	0.00	0.00	
3675896.30	0.00	0.00	0.00	
3676048.50	0.00	0.00	0.00	
3676200.70	0.00	0.00	0.00	
3676352.90	0.00	0.00	0.00	
3676505.10	0.00	0.00	0.00	
3676657.30	0.00	0.00	0.00	
3676809.50	0.00	0.00	0.00	
▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks)				***
03/16/21				
*** AERMET - VERSION 14134 *** ***				***
18:39:47				

PAGE 26

*** MODELOPTS: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	631636.20	631781.50	631926.80	632072.10	632217.40	632362.70	632508.00
632653.30	632798.60						
3673765.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3673917.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674069.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674222.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674374.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674526.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674678.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674830.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3674983.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675135.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675287.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3675439.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						

0.00	0.00							
3676352.90		0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676505.10		0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676657.30		0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
3676809.50		0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 28

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD					X-COORD (METERS)
(METERS)		634251.60	634396.90	634542.20	

3673765.50		0.00	0.00	0.00
3673917.70		0.00	0.00	0.00
3674069.90		0.00	0.00	0.00
3674222.10		0.00	0.00	0.00
3674374.30		0.00	0.00	0.00
3674526.50		0.00	0.00	0.00
3674678.70		0.00	0.00	0.00
3674830.90		0.00	0.00	0.00
3674983.10		0.00	0.00	0.00
3675135.30		0.00	0.00	0.00
3675287.50		0.00	0.00	0.00
3675439.70		0.00	0.00	0.00
3675591.90		0.00	0.00	0.00
3675744.10		0.00	0.00	0.00
3675896.30		0.00	0.00	0.00
3676048.50		0.00	0.00	0.00
3676200.70		0.00	0.00	0.00
3676352.90		0.00	0.00	0.00
3676505.10		0.00	0.00	0.00
3676657.30		0.00	0.00	0.00
3676809.50		0.00	0.00	0.00

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 29

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
 LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

SOURCE ID	- - RECEPTOR LOCATION - -	DISTANCE (METERS)
	XR (METERS) YR (METERS)	
DNOVX011	632653.3 3674983.1	-1.39
DNOVX012	632653.3 3674983.1	-1.68
DNOVX01U	632798.6 3674983.1	-0.96
DNOVX01V	632798.6 3674983.1	-1.64
DNOVX02N	632943.9 3674983.1	-0.61
DNOVX02O	632943.9 3674983.1	-1.64

Profile format: FREE

Surface station no.: 23199
Name: UNKNOWN
Year: 2009

Upper air station no.: 3190
Name: UNKNOWN
Year: 2009

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
09	01	01	1	01	-9.9	0.094	-9.000	-9.000	-999.	69.	7.6	0.02	0.78	1.00	2.86	251.	10.0	280.4	2.0		
09	01	01	1	02	-9.9	0.094	-9.000	-9.000	-999.	69.	7.6	0.02	0.78	1.00	2.86	268.	10.0	279.9	2.0		
09	01	01	1	03	-10.0	0.094	-9.000	-9.000	-999.	69.	7.6	0.02	0.78	1.00	2.86	264.	10.0	279.2	2.0		
09	01	01	1	04	-6.8	0.078	-9.000	-9.000	-999.	52.	6.3	0.02	0.78	1.00	2.36	283.	10.0	279.2	2.0		
09	01	01	1	05	-6.8	0.078	-9.000	-9.000	-999.	52.	6.3	0.02	0.78	1.00	2.36	213.	10.0	280.4	2.0		
09	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	1.00	0.00	0.	10.0	277.5	2.0		
09	01	01	1	07	-6.8	0.078	-9.000	-9.000	-999.	52.	6.3	0.02	0.78	1.00	2.36	265.	10.0	279.2	2.0		
09	01	01	1	08	-9.3	0.152	-9.000	-9.000	-999.	142.	34.3	0.02	0.78	0.47	2.86	223.	10.0	282.0	2.0		
09	01	01	1	09	33.3	0.160	0.392	0.016	65.	154.	-11.2	0.04	0.78	0.29	1.76	317.	10.0	285.4	2.0		
09	01	01	1	10	75.5	-9.000	-9.000	-9.000	132.	-999.	-99999.0	0.06	0.78	0.23	0.00	0.	10.0	288.8	2.0		
09	01	01	1	11	103.9	-9.000	-9.000	-9.000	208.	-999.	-99999.0	0.06	0.78	0.21	0.00	0.	10.0	291.4	2.0		
09	01	01	1	12	116.7	0.201	0.961	0.010	276.	216.	-6.3	0.08	0.78	0.20	1.76	26.	10.0	293.1	2.0		
09	01	01	1	13	113.3	-9.000	-9.000	-9.000	376.	-999.	-99999.0	0.06	0.78	0.20	0.00	0.	10.0	293.8	2.0		
09	01	01	1	14	94.7	-9.000	-9.000	-9.000	445.	-999.	-99999.0	0.06	0.78	0.21	0.00	0.	10.0	295.4	2.0		
09	01	01	1	15	60.5	-9.000	-9.000	-9.000	482.	-999.	-99999.0	0.06	0.78	0.25	0.00	0.	10.0	295.4	2.0		
09	01	01	1	16	14.2	0.120	0.581	0.007	499.	100.	-10.9	0.02	0.78	0.35	1.50	284.	10.0	294.1	2.0		
09	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	0.65	0.00	0.	10.0	292.1	2.0		
09	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	1.00	0.00	0.	10.0	289.1	2.0		
09	01	01	1	19	-21.3	0.190	-9.000	-9.000	-999.	200.	29.3	0.08	0.78	1.00	3.10	24.	10.0	285.1	2.0		
09	01	01	1	20	-7.6	0.087	-9.000	-9.000	-999.	68.	8.0	0.08	0.78	1.00	2.10	17.	10.0	284.1	2.0		
09	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.06	0.78	1.00	0.00	0.	10.0	284.1	2.0		
09	01	01	1	22	-8.2	0.086	-9.000	-9.000	-999.	60.	6.9	0.02	0.78	1.00	2.60	252.	10.0	282.1	2.0		
09	01	01	1	23	-8.2	0.086	-9.000	-9.000	-999.	60.	6.9	0.02	0.78	1.00	2.60	270.	10.0	281.1	2.0		
09	01	01	1	24	-8.2	0.086	-9.000	-9.000	-999.	60.	6.9	0.02	0.78	1.00	2.60	280.	10.0	280.1	2.0		

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
09	01	01	01	10.0	1	251.	2.86	280.4	99.0	-99.00	-99.00

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

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***

18:39:47

PAGE 32

*** MODELOPTS: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

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

INCLUDING SOURCE(S): DNOVX000 , DNOVX001 , DNOVX002 , DNOVX003 ,
DNOVX004 , DNOVX005 , DNOVX006 , DNOVX007 , DNOVX008 , DNOVX009 , DNOVX00A , DNOVX00B ,
DNOVX00C , DNOVX00D , DNOVX00E , DNOVX00M , DNOVX00N , DNOVX00O , DNOVX00P , DNOVX00Q ,
DNOVX00R , DNOVX00S , DNOVX00T , DNOVX00U , DNOVX00V , DNOVX00W , DNOVX00X , DNOVX00Y ,
. . . ,

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

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

Y-COORD (METERS)	631636.20	631781.50	631926.80	X-COORD (METERS)	632072.10	632217.40	632362.70	632508.00
632653.30	632798.60							

3673765.50	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00007	0.00010
0.00012	0.00010							
3673917.70	0.00005	0.00007	0.00007	0.00007	0.00008	0.00009	0.00009	0.00011
0.00015	0.00012							
3674069.90	0.00005	0.00007	0.00009	0.00010	0.00010	0.00011	0.00011	0.00014
0.00019	0.00016							
3674222.10	0.00007	0.00007	0.00009	0.00013	0.00013	0.00014	0.00014	0.00018
0.00027	0.00024							
3674374.30	0.00008	0.00010	0.00011	0.00013	0.00019	0.00020	0.00020	0.00025
0.00040	0.00039							
3674526.50	0.00009	0.00011	0.00014	0.00017	0.00022	0.00034	0.00034	0.00039
0.00067	0.00071							
3674678.70	0.00012	0.00015	0.00018	0.00023	0.00032	0.00046	0.00046	0.00081
0.00164	0.00153							
3674830.90	0.00012	0.00016	0.00023	0.00033	0.00050	0.00081	0.00081	0.00170
0.00542	0.00506							
3674983.10	0.00009	0.00012	0.00017	0.00025	0.00043	0.00091	0.00091	0.00300
0.03162	0.03669							
3675135.30	0.00012	0.00016	0.00022	0.00032	0.00048	0.00091	0.00091	0.00244
0.00405	0.00565							
3675287.50	0.00012	0.00015	0.00019	0.00028	0.00047	0.00090	0.00090	0.00114
0.00158	0.00158							
3675439.70	0.00011	0.00014	0.00019	0.00030	0.00048	0.00054	0.00054	0.00081
0.00088	0.00086							
3675591.90	0.00011	0.00014	0.00021	0.00030	0.00034	0.00038	0.00038	0.00060
0.00057	0.00053							
3675744.10	0.00011	0.00016	0.00021	0.00024	0.00024	0.00032	0.00032	0.00043
0.00040	0.00038							
3675896.30	0.00013	0.00016	0.00017	0.00018	0.00019	0.00028	0.00028	0.00031
0.00031	0.00031							
3676048.50	0.00012	0.00013	0.00014	0.00014	0.00017	0.00024	0.00024	0.00023
0.00024	0.00026							
3676200.70	0.00011	0.00011	0.00011	0.00012	0.00016	0.00021	0.00021	0.00017
0.00020	0.00022							
3676352.90	0.00009	0.00009	0.00009	0.00011	0.00014	0.00018	0.00018	0.00014
0.00016	0.00019							
3676505.10	0.00008	0.00008	0.00008	0.00011	0.00013	0.00015	0.00015	0.00012
0.00014	0.00017							
3676657.30	0.00007	0.00007	0.00008	0.00010	0.00012	0.00012	0.00012	0.00010
0.00012	0.00015							
3676809.50	0.00006	0.00006	0.00008	0.00009	0.00011	0.00010	0.00010	0.00008
0.00010	0.00013							

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks)

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

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

 INCLUDING SOURCE(S): DNOVX000 , DNOVX001 , DNOVX002 , DNOVX003 ,
 DNOVX004 , DNOVX005 , DNOVX006 , DNOVX007 , DNOVX008 , DNOVX009 , DNOVX00A , DNOVX00B ,
 DNOVX00C , DNOVX00D , DNOVX00E , DNOVX00M , DNOVX00N , DNOVX00O , DNOVX00P , DNOVX00Q ,
 DNOVX00R , DNOVX00S , DNOVX00T , DNOVX00U , DNOVX00V , DNOVX00W , DNOVX00X , DNOVX00Y ,
 . . . ,

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

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

Y-COORD (METERS)	632943.90	633089.20	633234.50	633379.80	633525.10	633670.40	633815.70
633961.00	634106.30						
3673765.50	0.00011	0.00012	0.00010	0.00013	0.00013	0.00012	0.00009
0.00009	0.00009						
3673917.70	0.00015	0.00014	0.00014	0.00016	0.00015	0.00012	0.00011
0.00011	0.00012						
3674069.90	0.00020	0.00017	0.00021	0.00021	0.00016	0.00014	0.00015
0.00016	0.00016						
3674222.10	0.00027	0.00028	0.00029	0.00022	0.00020	0.00022	0.00023
0.00020	0.00017						
3674374.30	0.00037	0.00044	0.00033	0.00030	0.00033	0.00030	0.00026
0.00028	0.00031						
3674526.50	0.00074	0.00056	0.00054	0.00052	0.00046	0.00051	0.00052
0.00048	0.00043						
3674678.70	0.00122	0.00116	0.00104	0.00110	0.00098	0.00084	0.00072
0.00064	0.00057						
3674830.90	0.00461	0.00356	0.00259	0.00196	0.00153	0.00122	0.00100
0.00083	0.00070						
3674983.10	0.01359	0.00671	0.00401	0.00270	0.00197	0.00153	0.00122
0.00101	0.00086						
3675135.30	0.00602	0.00508	0.00353	0.00264	0.00211	0.00171	0.00140
0.00115	0.00096						
3675287.50	0.00262	0.00230	0.00241	0.00208	0.00170	0.00136	0.00113
0.00099	0.00088						
3675439.70	0.00111	0.00148	0.00126	0.00130	0.00131	0.00116	0.00103
0.00088	0.00075						
3675591.90	0.00057	0.00080	0.00095	0.00082	0.00081	0.00087	0.00083
0.00075	0.00069						
3675744.10	0.00039	0.00050	0.00063	0.00066	0.00058	0.00057	0.00059
0.00062	0.00058						
3675896.30	0.00031	0.00031	0.00039	0.00051	0.00049	0.00044	0.00042
0.00043	0.00046						
3676048.50	0.00023	0.00022	0.00029	0.00033	0.00041	0.00038	0.00034
0.00033	0.00033						
3676200.70	0.00017	0.00019	0.00020	0.00024	0.00029	0.00034	0.00030
0.00028	0.00027						
3676352.90	0.00014	0.00017	0.00015	0.00020	0.00020	0.00025	0.00028
0.00025	0.00023						
3676505.10	0.00011	0.00014	0.00012	0.00015	0.00017	0.00018	0.00023
0.00024	0.00021						
3676657.30	0.00010	0.00011	0.00011	0.00011	0.00014	0.00014	0.00017
0.00020	0.00020						
3676809.50	0.00009	0.00009	0.00010	0.00009	0.00011	0.00013	0.00013

0.00015 0.00018
 *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 34
 *** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

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

 INCLUDING SOURCE(S): DNOVX000 , DNOVX001 , DNOVX002 , DNOVX003 ,
 DNOVX004 , DNOVX005 , DNOVX006 , DNOVX007 , DNOVX008 , DNOVX009 , DNOVX00A , DNOVX00B ,
 DNOVX00C , DNOVX00D , DNOVX00E , DNOVX00M , DNOVX00N , DNOVX00O , DNOVX00P , DNOVX00Q ,
 DNOVX00R , DNOVX00S , DNOVX00T , DNOVX00U , DNOVX00V , DNOVX00W , DNOVX00X , DNOVX00Y ,
 . . . ,

*** NETWORK ID: DNOVX0H2 ; NETWORK TYPE: GRIDCART ***

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

Y-COORD (METERS)	634251.60	634396.90	634542.20	X-COORD (METERS)
3673765.50	0.00009	0.00010	0.00010	
3673917.70	0.00013	0.00012	0.00011	
3674069.90	0.00014	0.00012	0.00012	
3674222.10	0.00018	0.00020	0.00021	
3674374.30	0.00031	0.00029	0.00027	
3674526.50	0.00039	0.00035	0.00032	
3674678.70	0.00051	0.00046	0.00042	
3674830.90	0.00060	0.00052	0.00046	
3674983.10	0.00074	0.00065	0.00058	
3675135.30	0.00081	0.00070	0.00061	
3675287.50	0.00079	0.00071	0.00063	
3675439.70	0.00065	0.00058	0.00053	
3675591.90	0.00062	0.00055	0.00048	
3675744.10	0.00053	0.00050	0.00047	
3675896.30	0.00046	0.00043	0.00040	
3676048.50	0.00035	0.00037	0.00035	
3676200.70	0.00027	0.00027	0.00029	
3676352.90	0.00023	0.00022	0.00022	
3676505.10	0.00019	0.00019	0.00019	
3676657.30	0.00018	0.00017	0.00016	
3676809.50	0.00018	0.00015	0.00014	

*** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 35
 *** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL

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

 INCLUDING SOURCE(S): DNOVX000 , DNOVX001 , DNOVX002 , DNOVX003 ,
 DNOVX004 , DNOVX005 , DNOVX006 , DNOVX007 , DNOVX008 , DNOVX009 , DNOVX00A , DNOVX00B ,
 DNOVX00C , DNOVX00D , DNOVX00E , DNOVX00M , DNOVX00N , DNOVX00O , DNOVX00P , DNOVX00Q ,
 DNOVX00R , DNOVX00S , DNOVX00T , DNOVX00U , DNOVX00V , DNOVX00W , DNOVX00X , DNOVX00Y ,
 . . . ,

*** 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		
633209.40	3676664.90	0.00012					

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 36

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

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

		** CONC OF PM10		IN MICROGRAMS/M**3			
NETWORK GROUP ID	AVERAGE CONC	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE			
ALL DNOVX0H2	1ST HIGHEST VALUE IS	0.03669	AT (632798.60, 3674983.10,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	2ND HIGHEST VALUE IS	0.03162	AT (632653.30, 3674983.10,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	3RD HIGHEST VALUE IS	0.01359	AT (632943.90, 3674983.10,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	4TH HIGHEST VALUE IS	0.00671	AT (633089.20, 3674983.10,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	5TH HIGHEST VALUE IS	0.00602	AT (632943.90, 3675135.30,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	6TH HIGHEST VALUE IS	0.00565	AT (632798.60, 3675135.30,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	7TH HIGHEST VALUE IS	0.00542	AT (632653.30, 3674830.90,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	8TH HIGHEST VALUE IS	0.00508	AT (633089.20, 3675135.30,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	9TH HIGHEST VALUE IS	0.00506	AT (632798.60, 3674830.90,	0.00, 0.00, 0.00)	GC		
DNOVX0H2	10TH HIGHEST VALUE IS	0.00461	AT (632943.90, 3674830.90,	0.00, 0.00, 0.00)	GC		

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

▲ *** AERMOD - VERSION 19191 *** *** Diesle PM (Trucks) ***
 03/16/21
 *** AERMET - VERSION 14134 *** ***
 18:39:47

PAGE 37

*** MODELOPTs: RegDFault CONC ELEV NODRYDPLT NOWETDPLT RURAL

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

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

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

A Total of 10676 Informational Message(s)
A Total of 8760 Hours Were Processed
A Total of 1048 Calm Hours Identified
A Total of 1088 Missing Hours Identified (12.42 Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory Applications.
See Section 5.3.2 of "Meteorological Monitoring Guidance
for Regulatory Modeling Applications" (EPA-454/R-99-005).

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

***** WARNING MESSAGES *****
*** NONE ***

*** AERMOD Finishes Successfully ***

ATTACHMENT E

Onsite and Offsite Truck Operations Health Risk Analysis

Air Quality Health Risk Calculations
Hudson Ranch - Point of Maximum Maximum
Annual Concentration ($\mu\text{g}/\text{m}^3$) **0.00069**

Based on Risk Assessment Guidelines - Guidance
Manual for Preparation of Health Risk
Assessments - February 2015
Unit Risk Factors
(<https://oehha.ca.gov/media/CPFs042909.pdf>)

Duration (Years)	70					
Age of Person Exposed (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual)	0.00069	0.00069	0.00069	0.00069	0.00069	0.00069
Breathing Rate per agegroup BR/BW	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 m^3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.0000024	0.0000072	0.0000057	0.0000049	0.0000022	0.0000019
Exposure Duration (years)	70					
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	2	7	14	14	54
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 per million	7.98511E-09 0.0080	1.92881E-07 0.1929	1.3551E-07 0.1355	2.34505E-07 0.2345	3.56378E-08 0.0356	1.18995E-07 0.1190
Cancer Risk Per Million 9-years	0.336					
Cancer Risk Per Million 30-years	0.471					
Cancer Risk Per Million 70-years	0.554					