APPENDIX B – AIR QUALITY AND GREENHOUSE GAS EMISSIONS TECHNICAL ANALYSIS

Air Quality and Greenhouse Gas Emissions Technical Analysis

Imperial County

Le Conte Battery Storage
Project No. 110769

Final

July 2019

Air Quality and Greenhouse Gas Emissions Technical Analysis

prepared for

Imperial County
Le Conte Battery Storage
Imperial County, CA

Project No. 110769

Final
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prepared by

Burns & McDonnell Engineering Company, Inc.
Enter City, State of Office Location

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
$\mu g/m^3$	microgram per cubic meter
AB 32	California Global Warming Solutions Act of 2006
AQIA	Air Quality Impact Assessments
AQMP	Air Quality Management Plan
BACM	Best Available Control Measure
BACT	Best Available Control Technology
BESS	battery energy storage
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CSE	Centinela Solar Energy
DPM	diesel particulate matter
EPA	U.S. Environmental Protection Agency

Abbreviation	Term/Phrase/Name
FIP	Federal Implementation Plan
FROG	fraction of reactive organic gases
GHG	greenhouse gas
GWP	global warming potential
H_2S	hydrogen sulfide
ICAPCD	Imperial County Air Pollution Control District
MWh	megawatt-hours
NAAQS	national ambient air quality standards
NO_2	nitrogen dioxide
OAQPS	Office of Air Quality Planning and Standards
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
PVC	polyvinyl chloride
RACM	Reasonably Available Control Measures
ROG	reactive organic gases
SB 32	Senate Bill 32
SDG&E	San Diego Gas & Electric
SIPs	State Implementation Plans
SO_2	sulfur dioxide
SSAB	Salton Sea Air Basin

Abbreviation	Term/Phrase/Name
TOG	total organic gases
VOC	volatile organic compound

1.0 INTRODUCTION

The purpose of this Air Quality study is to determine whether potential air quality impacts are significant as defined in the California Environmental Quality Act (CEQA) and Imperial County Air Pollution Control District (ICAPCD) that may be created during the construction or operation of the proposed Le Conte Battery Energy Storage System (Project). This utility-scale battery energy storage system (BESS) will be capable of storing up to 125-megawatt hours (MWh) of solar-generated power onsite at the Centinela Solar Energy (CSE) Facility.

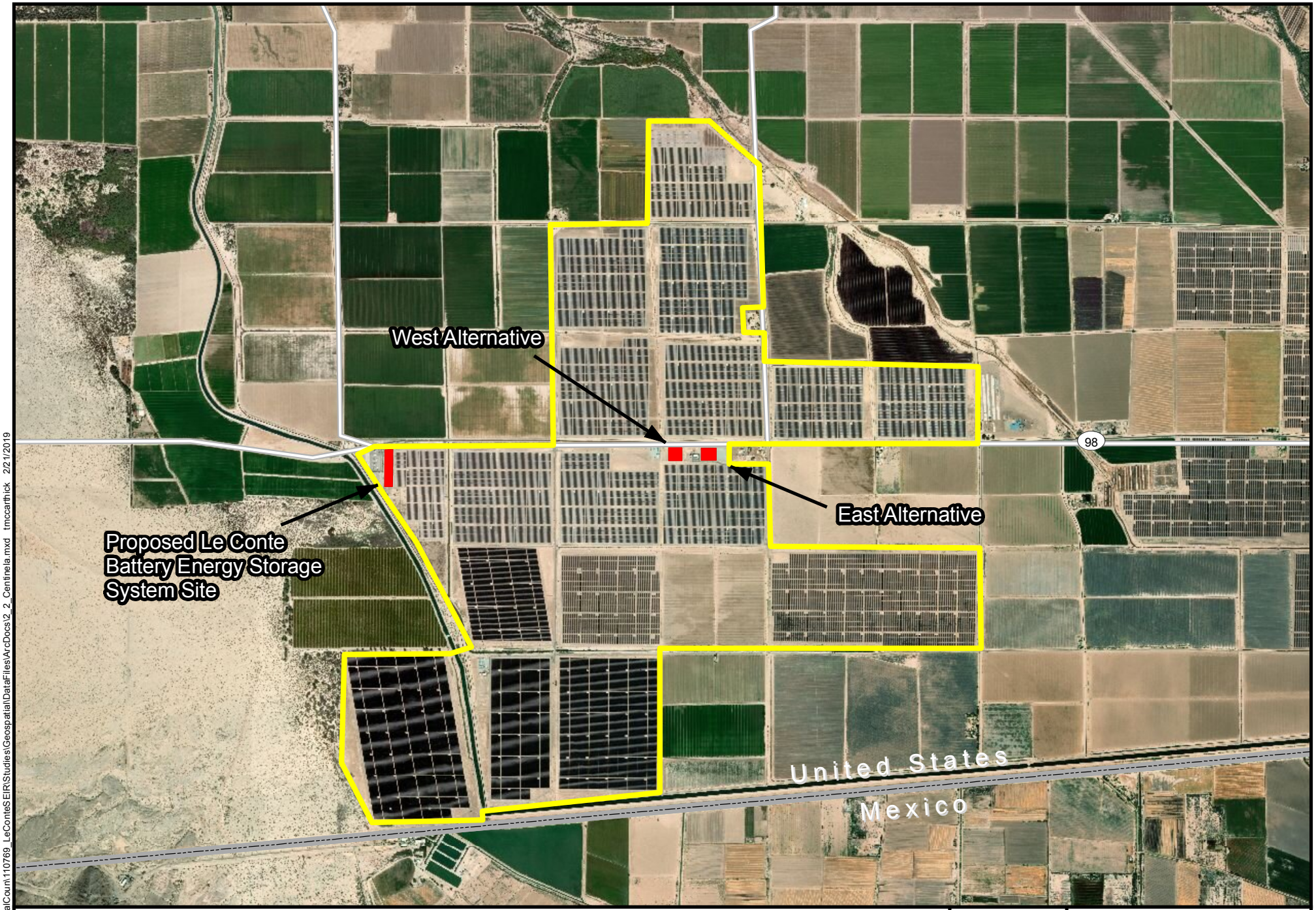
1.1 Project Location

The Project will be situated on approximately three to five acres within the fence line of the existing CSE site, located at 319 Brockman Road, Calexico, CA (Figure 1-1). The proposed stand-alone Project will be located within the fence line of the CSE site on land wholly owned by CSE (Assessor's Parcel Number 052-190-041). Figure 1-2 provides an overview of the Project site plan and the immediate surrounding area. The BESS facility is proposed to be located immediately adjacent to the east side of the existing San Diego Gas & Electric (SDG&E) Drew Switchyard within the western portion of the overall CSE project site just south of California State Route 98, west of the existing solar panels and east of the Drew Substation. The overall CSE site is bounded by Fisher Road to the north, Mandrapa Road and Westside Main Canal on the west, Rockwood Road to the east, and the Woodbine Lateral Four sits just south of the CSE southern limits. California State Route 98 bisects the overall CSE site from east to west and Brockman Road bisects the site from north to south.

1.2 Project Description

The proposed Project consists of the construction and operation of a BESS with up to 125 MWh of electrical storage capacity to receive and store excess energy and to return this electricity to the grid at a later time when needed. The Project will be situated on approximately three to five acres within the fence line of the existing CSE site, located at 319 Brockman Road, Calexico, CA (Figure 1-2). Construction activities are expected to take approximately 12 months. Major Project components include the following: up to two buildings totaling 85,000 square feet in size (batteries and enclosures; power conversion systems; substation and overhead electric tie line; and ancillary systems).

The primary purpose of the Project is to reliably and economically receive, store, and return up to 125 MWh of electric energy to the electric grid. Charging energy will be provided from the electric grid which will include solar energy currently produced at the CSE site. The Project will electrically connect to the adjacent SDG&E Drew Switchyard which is directly connected to the Imperial Valley substation.



Centinela Solar Energy Site

Proposed Battery Energy Storage System

Major Road

National Boundary

N

3,900 0 3,900

Scale in Feet

BURNS McDONNELL

Figure 1-1
Centinela Solar Energy Site
Imperial County, California

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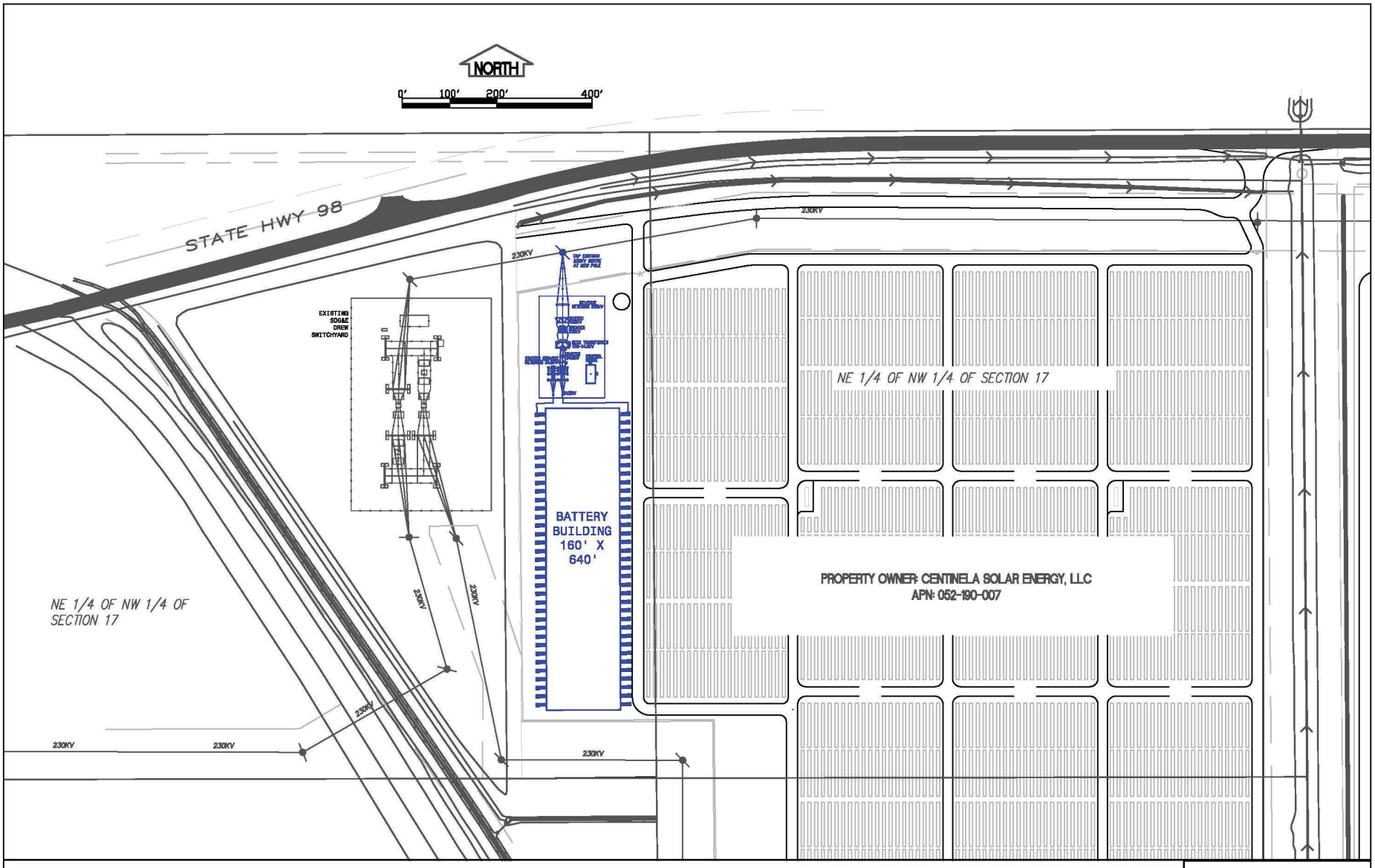

Figure 1-2
Proposed Le Conte
Battery Energy Storage
System Site

2.0 EXISTING ENVIRONMENTAL SETTING

As described in Section 1.1, the BESS facility is proposed to be located immediately adjacent to the east side of the existing SDG&E Drew Switchyard within the western portion of the overall CSE project site. The elevation of the proposed BESS facility is approximately 20 feet below sea level.

2.1 Climate and Meteorology

The entire Imperial County (Project site included) lies within the Salton Sea Air Basin (SSAB), which is under the jurisdiction of ICAPCD. The SSAB consists of all of Imperial County and the southeast portion of Riverside County.

The SSAB is generally an arid desert region, with a significant portion located below sea level. A semi-permanent high-pressure cell blocks mid-latitude storms and causes sunny skies most of the time. The high-pressure zone tends to be weaker in the winter and it is during this time that the SSAB usually receives its average 2.8 inches of yearly precipitation. The wettest month in the SSAB is December, averaging 0.5 inches of rainfall, while the driest month is June, with measurable rainfall recorded only twice since 1914. Rainfall is highly variable, with precipitation from a single heavy storm event one year exceeding the entire annual total during a drought year. Average humidity can range from 28 percent in summer to 52 percent in winter.

These climatic conditions are strongly influenced by the large-scale sinking and warming of air in the semi-permanent subtropical high-pressure center of the Pacific Ocean. The Peninsular Mountain range to the west blocks any coastal influence, such as cool and damp marine air. The geographic barriers and atmospheric conditions limit precipitation in the area. The flat terrain of the SSAB and the strong temperature differentials created by intense solar heating produce moderate winds and deep thermal convection. The combination of subsiding air, protective mountains, and distance from the ocean all combine to severely limit precipitation. As a result, the climate of the Imperial Valley is arid, with hot summers and mild winters. While summers are intensely hot, the climate for the rest of the year is mild.

Regional air quality within the SSAB is affected by topography and atmospheric inversions. The area is generally very flat and bordered to the west by the Peninsular Mountain range and to the east by the Chocolate, Orocopia, and Cargo Muchacho mountains. The prevailing winds tend to come from the west-northwest through southwest. The mountains to the east act as physical barriers to the dispersion of airborne contaminants.

2.2 Regulatory Standards

Federal, State, and regional regulatory standards applicable to the Project are described in the following paragraphs.

2.2.1 Federal Standards

The U.S. Environmental Protection Agency (EPA) has been charged with implementing national air quality programs at the Federal level. EPA's air quality mandates are drawn primarily from the Federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments made by Congress were in 1990.

The CAA required EPA to establish primary and secondary National Ambient Air Quality Standards (NAAQS). The CAA provides the basis for the national air pollution control effort. In order to improve air quality, the Clean Air Act requires areas with unhealthy levels of criteria pollutants to develop a State Implementation Plan (SIP). The Federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. The EPA has responsibility for reviewing all state SIPs to determine conformance with the mandates of the CAAA and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) that imposes additional control measures may be prepared for the nonattainment area. Failure to submit an approvable SIP or to implement the plan within the mandated timeframe may result in application of sanctions to transportation funding and stationary air pollution sources in the air basin.

2.2.1.1 National Ambient Air Quality Standards (NAAQS)

The NAAQS were established by the EPA per the requirements of the Clean Air Act. The NAAQS are used to identify thresholds for specific pollutants. Two types of air quality standards were established by the Clean Air Act: 1) primary standards; and 2) secondary standards. Primary Standards define limits for the intention of protecting public health, which includes sensitive populations such as asthmatics, children and elderly. Secondary Standards define limits to protect public welfare to include 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. The NAAQS are shown below in Table 2-1.

Table 2-1: Ambient Air Quality Standards

Pollutant	Averaging Period	Primary NAAQS[1]	Secondary NAAQS[1]	CAAQS[2]
PM_{10}	Annual	Revoked	Revoked	20 µg/m^3
	24-Hour	150 µg/m^{3c}	150 µg/m^{3c}	50 µg/m^3
$PM_{2.5}$	Annual	12 µg/m^{3c}	15 µg/m^{3c}	12 µg/m^3
	24-Hour	35 µg/m^3	35 µg/m^3	--
SO_2	Annual	Revoked	--	--
	24-hour	Revoked	--	105 µg/m^3
	3-hour	--	0.5 ppm	--
	1-hour	196.5 µg/m^3 (75 ppb)	--	655 µg/m^3 (25 ppb)
NO_2	Annual	100 µg/m^3	100 µg/m^3	57 µg/m^3
	1-hour	0.1 ppm (188 µg/m^3)	--	0.18 ppm (339 µg/m^3)
Ozone	8-hour	0.075 ppm	0.08 ppm	0.070 ppm
	1-hour	Revoked	--	0.09 ppm
CO	8-hour	9 ppm	--	9 ppm (6 ppm, Lake Tahoe only)
	1-hour	35 ppm	--	20 ppm
Lead	Rolling 3-month average	0.15 µg/m^3	0.15 µg/m^3	--
	30-day average	--	--	1.5 µg/m^3
	Calendar quarter	1.5 µg/m^3	--	--

Table 2-1 (ctd.): Ambient Air Quality Standards

Pollutant	Averaging Period	Primary NAAQS[1,a]	Secondary NAAQS[1,a]	CAAQS[2,a]
Visibility Reducing Particles	8-hour	--	--	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07 -30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent.
Sulfates	24-hour	--	--	25 $\mu g/m^3$
Hydrogen Sulfide	1-hour	--	--	0.03 ppm
Vinyl Chloride	1-hour	--	--	0.01 ppm

Source:
(1) Title 40 CFR Part 50
(2) Title 17 California Code of Regulations Section 70200
(a) NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; SO_2 = sulfur dioxide; NO_2 = nitrogen dioxide; CO = carbon monoxide; $\mu g/m^3$ = microgram per cubic meter; ppm = parts per million; ppb = parts per billion

2.2.1.2 General Conformity Requirements

In addition, general conformity requirements were adopted by Congress as part of the CAAA and were implemented by EPA regulations in 1993. General conformity requires that all Federal actions conform to the State Implementation Plan (SIP) as approved or promulgated by EPA. The purpose of the general conformity program is to ensure that actions taken by the Federal government do not undermine state or local efforts to achieve and maintain NAAQS. Before a Federal action is taken, it must be evaluated for conformity with the SIP. All reasonably foreseeable emissions, both direct and indirect, predicted to result from the action are taken into consideration and must be identified as to location and quantity. If it is found that the action would create emissions above *de minimis* threshold levels specified in EPA regulations, or if the activity is considered regionally significant because its emissions exceed 10 percent of an area's total emissions, the action cannot proceed unless mitigation measures are specified that would bring the Project into conformance.

General conformity applies in both Federal nonattainment and maintenance areas. Within these areas, it applies to any Federal action not specifically exempted by the CAA or EPA regulations. Emissions from construction activities are also included. General conformity does not apply to projects or actions that are

covered by the transportation conformity rule. If a Federal action falls under the general conformity rule, the Federal agency responsible for the action is responsible for making the conformity determination. In some instances, a state will make the conformity determination under delegation from a Federal agency.

2.2.2 State Standards

The California Air Resources Board (CARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required CARB to establish CAAQS. The CCAA requires that all local air districts in the State endeavor to achieve and maintain the CAAQS by the earliest practical date. The Act specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources.

Other CARB responsibilities include overseeing compliance with California and Federal laws by local air districts, approving local air quality plans, submitting SIPs to EPA, monitoring air quality, determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

2.2.2.1 California Ambient Air Quality Standards

Individual states have the discretion to add additional pollutants beyond those identified as part of the NAAQS. The CARB is responsible for setting the laws and regulation for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) are either the same or more restrictive than the NAAQS. The CAAQS also include four additional contaminants in keeping with discretionary power granted to the State. The additional contaminants include:

• Visibility Reducing Particles: particles in the air that obstruct visibility.

• 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.

• Hydrogen Sulfide (H_2S): is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. Usually, H_2S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat.

• Vinyl Chloride: is also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).

Table 2-1 identifies the both the national and state air quality standard for specific pollutants.

The CARB defines reactive organic gases (ROG) as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. CARB's Emission Inventory Branch uses the terms total organic gases (TOG) and ROG. California air pollution control districts report TOG to the Air Resources Board's emission inventory. For each source category, CARB derives a value for the ROG by multiplying the reported TOG by the fraction of reactive organic gases (FROG). Each source category is keyed to one of several hundred available chemical speciation profiles. For each category, the FROG value is calculated as the weight fraction of those species designated by CARB as reactive in the speciation profile applicable to the category (CARB, 2011).

The relationships among these organic gas terms are summarized as follows:

• TOG - Exempt compounds = ROG

• TOG x FROG = ROG

2.2.2.2 Global Warming Solutions Act of 2006

AB 32, the California Global Warming Solutions Act of 2006, recognizes that California is a source of substantial amounts of greenhouse gas (GHG) emissions. The statute states:

> *Global warming poses a serious threat to the economic wellbeing, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.*

In order to help avert these potential consequences, AB 32 established a State goal of reducing GHG emissions to 1990 levels by the year 2020, which is a reduction of approximately 16 percent from forecasted emission levels, with further reductions to follow. In 2016, Senate Bill 32 (SB 32) was passed, which increased the required reduction to 40 percent below 1990 levels by 2030.

2.2.2.3 Regional and Local Plans, Policies, Regulations and Laws

Regional and local plans, policies, regulations and laws are described in the following paragraphs.

2.2.2.3.1 Regional Comprehensive Plan and Guide

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.

ICAPCD is the government agency which regulates stationary sources of air pollution within Imperial County and SSAB. Currently, the SSAB is in "moderate" non-attainment status for ozone, "serious" non-attainment status for PM_{10} (24-hour standard), and "moderate" nonattainment for $PM_{2.5}$ (annual and 24-hour standards). In response, 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-hour 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 its SIP to address the serious non-attainment status of PM_{10}. The purpose of the SIP is to outline a plan that would provide attainment status as expeditiously as possible and require a 5 percent yearly reduction of emissions. The criteria pollutant standards are generally attained when each monitor within the region that has had no exceedances during the previous three calendar years.

2.2.2.3.2 Imperial County Air Pollution Control Management District

The ICAPCD has jurisdiction over air quality for the Project area. All development projects within the ICAPCD are required to comply with existing ICAPCD rules as they apply to each specific project. Imperial County is designated as a federal and state nonattainment area for ozone and PM_{10}. As such, ICAPCD has prepared an AQMP for ozone and SIPs for PM_{10} and $PM_{2.5}$ to demonstrate how the ambient air quality standards would be attained. The consistency of the project with the SIP/AQMP is based upon the land use and growth assumptions that are incorporated into the plans. These land use and growth assumptions are typically based upon the locally adopted general plans; therefore, if a proposed project is consistent with the jurisdictional general plan, it would be consistent with the ozone and PM_{10} plans. In preparing the AQMP/SIP, ICAPCD uses land use designations contained in the local general plan documents to forecast, inventory, and allocate regional emissions from land use and development-related sources. Local provisions applicable to the project site include:

- **ICAPCD Rule VIII (fugitive dust)**, which sets forth rules regarding the control of fugitive dust from construction and operation activities. Reasonably Available Control Measures (RACM) are required by Rule VIII during construction and operation activities to help reduce the amount of particulate matter. Some examples of RACMs include the application of water or chemical soil stabilizers to disturbed soils, the reduction of construction vehicle speed, the covering of haul vehicles, and some form of approved Track-Out Prevention device at access points where unpaved surface adjoins a paved surface.

- **ICAPCD Rule 424** regulates the sale of architectural coatings and limits the volatile organic compound (VOC) content in paints. While this rule does not apply directly to this Project, it does dictate the VOC content in paints and paint solvents that are available for use during construction.

- **ICAPCD Rule 310 (Operational Development Fee)** was adopted November 2007 with the purpose of providing the ICAPCD with a sound method for mitigating the emissions produced from the operation of new commercial and residential development to less than significant levels. All project proponents have the option to provide off-site mitigation, pay an operational development fee, or do a combination of both. This rule assists the ICAPCD in attaining the State and federal ambient air quality standards for PM_{10} and ozone. All project development proponents have the option to develop and implement an Alternative Emission Reduction Plan to provide mitigation of emissions associated with on-site and off-site emissions impacts. The developer has the option to provide full or partial mitigation of emissions. On each instance, the applicable fee will be reduced on a proportional rate to the reduction.

2.2.3 California Environmental Quality Act (CEQA) Significance Thresholds

The CEQA has provided a checklist to identify the significance of air quality impacts. These guidelines are found in Appendix G of the CEQA Guidelines. 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: Violate any air quality standard or contribute substantially to an existing or project air quality violation?

C: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

D: Expose sensitive receptors to substantial pollutant concentrations?

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

2.2.4 ICAPCD Air Quality Impact Assessment Screening Thresholds (CEQA)

The ICAPCD has established significance thresholds in the 2007 ICAPCD CEQA Handbook for the preparation of Air Quality Impact Assessments (AQIA). 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. Table 2-2 below shows the screening thresholds for construction and daily operations.

Table 2-2: ICAPCD Screening Thresholds 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 Oxides (SOx)	< 150	150 or greater
NOx and ROG	< 55	55 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 (ND)	Mitigated ND or EIR

Source: ICAPCD, 2007

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. 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. ICAPCD also has defined standard mitigation measures for construction equipment and fugitive PM_{10} must be implemented at all construction sites. As listed in the ICAPCD CEQA handbook, the implementation of discretionary mitigation measures apply to those construction sites which are 5 acres or more for non-residential developments. Although the proposed Project will be situated on approximately three to five acres (will disturb less than 5 acres) within the fence line of the existing CSE site, in an effort to reduce PM_{10} 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 would be required to not exceed the 20 percent opacity threshold under Rule 801.

If the proposed Project is large enough that operational mitigation measures simply cannot reduce pollutant levels below thresholds of significance, the ICAPCD has adopted the Operation Development Fee 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 PM_{10} 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.

To be consistent with the CARB, ICAPCD requires PM_{10} emitted by diesel powered construction equipment, diesel particulate matter (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. At no time shall the project increase the cancer risk to over 10 in one million.

2.2.5 Greenhouse Gas Emissions: California Environmental Quality Act

Based on criteria derived from Appendix G of the CEQA Guidelines, the Project would result in a significant GHG impact if the Project were to:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

In addition to the thresholds identified above, criteria for GHG emissions and fugitive dust have been established for the Project based on guidance from the Council on Environmental Quality (CEQ) and thresholds from the ICAPCD. Each of the identified criteria are described herein.

2.2.6 Greenhouse Gas Emissions: Council on Environmental Quality

Revised draft guidance from the CEQ, dated December 18, 2014, recommends agencies consider both the potential effects of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action. The guidance also emphasizes that agency analyses should be commensurate with projected GHG emissions and climate impacts and should employ appropriate quantitative or qualitative analytical methods to provide useful information to inform the public and the decision-making process in distinguishing among alternatives and mitigations. It recommends that agencies consider 25,000 metric tons of carbon dioxide equivalent (CO_2e) emissions on an annual basis as a reference point below which a quantitative analysis of GHG is not recommended unless it is easily accomplished based on available tools and data.

2.2.7 Greenhouse Gas Emissions and Fugitive Dust: County of Imperial

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the State CEQA Guidelines to provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and GCC impacts. Formal CEQA thresholds for lead agencies must always be established through a public hearing process. Imperial County has not established formal quantitative or qualitative GHG thresholds through a public rulemaking process, but CEQA permits the lead agency to establish a project-specific threshold of significance if backed by substantial evidence, until such time as a formal threshold is approved.

2.3 Local Air Quality

Local to the Project area, criteria pollutants are measured continuously throughout Imperial County. Existing levels of ambient air concentrations and historical trends and projections in the project area are best documented by measurements made by the ICAPCD and CARB. This data is used to track ambient air quality patterns throughout the County and is also used to determine attainment status when compared

to the NAAQS and CAAQS. The ICAPCD operates 10 monitoring sites, which collect data on criteria pollutants.

The closest station to the Project site is the Ethel Street Monitoring Station located in Calexico, CA which is approximately 11 miles East of the Project site. The most recent published data for the monitoring stations is presented in Table 2-3 which encompasses the years of 2016 through 2018 [Ambient data was obtained from the Environmental Protection Agency's Air Data Website (Source: https://www.epa.gov/outdoor-air-quality-data)]. As indicated in 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 PM_{10} is considered "serious" Non-Attainment. On November 13, 2009, EPA published air quality designations for the 2006 24-hour $PM_{2.5}$ NAAQS wherein Imperial County was listed as designated "moderate" nonattainment for the 2006 24-hour $PM_{2.5}$ NAAQS. On December 14, 2012, EPA issued its final rule revising the $PM_{2.5}$ NAAQS, by lowering the primary annual $PM_{2.5}$ standard from 15 micrograms per cubic meter ($\mu g/m^3$) to 12 $\mu g/m^3$ to provide increased protection against health effects associated with long- and short-term fine particle exposures. The EPA retained the primary 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$. In April 2015, Imperial County was classified as a "moderate" nonattainment for the 2012 Annual $PM_{2.5}$ standard. The $PM_{2.5}$ (annual and 24-hour) nonattainment designation for Imperial County is only for the urban area within the County and it has been determined that the Project is located within the nonattainment boundaries for $PM_{2.5}$. As such, in order to comply with the ICAPCDs SIP and AAQP, the Project must implement Best Available Control Measure (BACM) and Best Available Control Technology (BACT).

Table 2-3: Latest Three-Year Ambient Air Quality Data Near Project Site

Pollutant	Closest Recorded Ambient Monitoring Site[1]	Averaging Time[a]	CAAQS[2a]	NAAQS[3a]	2016	2017	2018
Ozone	Calexico Ethel Street	1-hour (ppm)	0.09	--	0.10	0.12	0.10
		8-hour (ppm)	0.070	0.075	0.07	0.08	0.08
PM_{10}	Calexico Ethel Street	24-hour ($\mu g/m^3$)	50	150	226.00	319.00	225.00
$PM_{2.5}$	Calexico Ethel Street	24-hour ($\mu g/m^3$)	--	35	34.20	29.80	28.60
		Annual ($\mu g/m^3$)	12	12	12.51	11.51	12.43
NO_2	Calexico Ethel Street	1-hour ($\mu g/m^3$)	338	188	59.90	59.20	64.9
		Annual (ppb)	30	53	11.50	12.40	13.8

Source:
(1) EPA Air Data, https://www.epa.gov/outdoor-air-quality-data, Accessed April 13, 2019
(2) Title 17 California Code of Regulations Section 70200
(3) Title 40 CFR Part 50
(a) ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; ppb = parts per billion; CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards

3.0 METHODOLOGY

The methodologies used to calculate construction and operational emissions of criteria pollutants and GHGs from the Project are described in this section.

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the CalEEMod air quality model (Version 2016.3.1), which was developed for the South Coast Air Quality Management District in 2013. CalEEMod is designed to quantify direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. CalEEMod allows for the input of project-specific information, such as the number and types of equipment, hours of operations, duration of construction activities, and selection of emission control measures. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project and uses methodologies presented in the EPA AP-42 document with emphasis on Chapter 11.9.

3.2 Construction Assumptions

Construction emission calculations for the Project assume the implementation of standard dust control measures, including watering during grading. The quantity, duration, and the intensity of construction activity have an effect on the amount of construction emissions and their related pollutant concentrations that occur at any one time. As such, the emission forecasts for the Project reflect a specific set of assumptions based on the expected construction scenario. If construction is delayed or occurs over a longer time period, daily emissions could be reduced because the Project could have a less intensive buildout schedule (i.e., fewer daily emissions spread over a longer time interval). The construction activities and overall size of the proposed Project footprint is so small that cancer health risks from diesel particulate matter would not be anticipated. Decommissioning emissions are assumed to be similar to construction emissions.

Typical equipment will be used for site preparation (including grading), digging foundations, excavating trenches, and for conduit installation. A cement truck will also be utilized during construction activities to pour concrete foundations. All on site equipment is expected to be Tier II compliant. Only a small portion of the construction access road surfaces will be unpaved; therefore, an assumption of 90 percent paved roads was used in CalEEMod. Disturbed surfaces that are not stabilized will be watered as needed for dust control. Grading is assumed to be the worst-case construction phase of the Project and therefore was analyzed for worst-case, short-term (pound per day) construction emissions. Anticipated construction

equipment during the grading phase has been provided in Table 3-1 below. All required construction data was input into CalEEMod which was run to quantify Project-generated construction emissions.

Table 3-1: Anticipated Construction Equipment During Grading Phase

Equipment	Power	Anticipated Usage	Quantity
Bulldozer	247 Horsepower	6 hours per day	1
Grader	187 Horsepower	6 hours per day	1
Scrapers	367 Horsepower	6 hours per day	2
Water Truck	402 Horsepower	6 hours per day	1
Self-Propelled Compactor	80 Horsepower	6 hours per day	1
Dump Truck	402 Horsepower	6 hours per day	1
Tractor/Loader/Backhoe	97 Horsepower	6 hours per day	1
Bobcat	65 Horsepower	6 hours per day	1

3.3 Greenhouse Gas Emissions from Construction

The California Air Pollution Control Officers Association (CAPCOA) published a white paper which suggested screening criteria of 900 metric tons of GHGs (CAPCOA, 2010). Projects creating more than 900 metric tons per year of GHGs generally are considered significant and would require reduction measures from business as usual with a goal of 28.3 percent. For purposes of this analysis in Imperial County, these screening and reduction thresholds will be utilized. Also, the threshold would be for both construction and operations and any overlap between the two.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to carbon dioxide (CO_2). The GWP of CO_2 is set to equal 1. Methane (CH_4) and nitrous oxide (N_2O) are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere; thus, they have GWPs of 25 and 298, respectively. CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWPs. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 3-2.

Table 3-2: Global Warming Potentials and Atmospheric Lifetimes

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon dioxide (CO_2)	50–200	1
Methane (CH_4)	12	25
Nitrous oxide (N_2O)	114	298

Source: IPCC, 2007

GHGs contributed from the proposed project are CO_2, CH_4, and N_2O. CalEEMod was used to estimate GHG emissions from construction. The construction assumptions described previously were used to calculate GHG emissions from construction.

3.4 Operational Impacts

When operating, the Project will be unmanned, operate year-round, and available to receive or deliver energy 24 hours per day. Routine maintenance activities, including equipment testing, monitoring, and repair will occur as needed. Only authorized personnel will be permitted on-site. Facility maintenance will include the periodic maintenance of structures and BESS components. Regular maintenance performed will consist of equipment inspection and replacement and occur primarily during daylight hours. Emergency maintenance could occur at any time, as needed; however, maintenance and emergency service during daylight hours will be encouraged to maximize worker safety. Based on a traffic impact study (KOA, 2019) conducted for the Project, the existing trips to the existing CSE Facility site would remain the same. As such, the Project is not anticipated to result in a net increase in vehicular trips compared to existing conditions. However, an increase of 2 vehicular trips per day was assumed as a conservative estimate. Power for the facility will be provided by the connection to the California Independent System Operator electric grid. In order to calculate emissions associated with operational electrical use, a Title-24 energy intensity of 2.31 kilowatt hours per 1,000 square feet per year (based on the “General Light Industry” category in CalEEMod) was used for a 5-acre site.

3.5 Greenhouse Gas Emissions from Operation

The same assumptions described in Section 3.4 were used to calculate GHG emissions from operation of the Project using CalEEMod.

4.0 FINDINGS

The findings of the emissions calculation analysis are described in the following sections.

4.1 Construction Findings

Construction of the proposed Project is anticipated to begin after receipt of all required approvals and will continue for approximately 12 months. The project may be constructed in phases if two buildings are selected. The construction workers employed for the project will consist of laborers, electricians, supervisory, support, and management personnel. The on-site assembly and construction workforce is expected to reach a maximum of 50 workers. Grading of the Project will occur over approximately three weeks. Disturbed surfaces that are not stabilized will be watered, as needed, for dust control. The detailed construction emissions calculation output from CalEEMod is shown in Appendix A.

As shown in Table 4-1, none of the construction emissions would exceed the significance threshold. It should be noted that all ICAPCD standard rules and regulations are required for all construction projects within the County. Based on this, the air quality emissions would be reduced even further from those presented in Table 4-1. Therefore, Project construction emissions would not exceed the ICAPCD significance threshold and impacts with regard to obstructing an air quality plan would be **less than significant** during Project construction.

Table 4-1: Maximum Expected Construction Emissions Summary (Pounds per Day)

Year	ROG	NOx	CO	PM_{10} (fugitive)	PM_{10} (exhaust)	PM_{10} Total	$PM_{2.5}$ (fugitive)	$PM_{2.5}$ (exhaust)	$PM_{2.5}$ Total
2020 (lb/day)	4.23	44.44	27.19	42.24	1.98	44.08	6.27	1.86	7.97
Significance Threshold (lb/day)	75	100	550	--	--	150	--	--	150
ICAPCD Significant Impact?	No	No	No	--	--	No	--	--	No

4.1.1 Construction Greenhouse Gas Findings

Construction of the proposed Project is anticipated to continue for approximately 12 months. The project may be constructed in phases if two buildings are selected. The construction workers employed for the project will consist of laborers, electricians, supervisory, support, and management personnel. The on-site assembly and construction workforce is expected to reach a maximum of 50 workers. Grading is assumed to be the worst-case construction phase of the Project and will occur over approximately three weeks. For the CalEEMod analysis, the grading phase was assumed to occur over the entire 12-month period in order

to calculate the annual metric tons of GHGs that will result from the construction of the Project. CalEEMod GHG annual outputs estimated for the Project construction period were used in this analysis. Table 4-2 summarizes the emissions calculated using CalEEMod in metric tons. Detailed GHG emission calculations are shown in Appendix A.

Table 4-2: Anticipated Construction GHG Emissions Summary

Year	Biogenic CO_2	Non-biogenic CO_2	Total CO_2	CH_4	N_2O	CO_2e
	Metric tons per year					
2020	0.00	703.37	703.37	0.22	0.00	708.93

Based upon the findings for the proposed Project, construction activities would not generate yearly GHG emissions in excess of the 900 metric ton screening threshold. Therefore, no impacts would be expected.

4.2 Operational Findings

Emissions from operation will be generated from electricity usage at the facility and emissions from vehicle trips. CalEEMod was used to calculate operational emissions from the Project. A Title-24 energy intensity of 2.31 kilowatt hours per 1,000 square feet per year (based on the "General Light Industry" category in CalEEMod) was used for a 5-acre site.

Table 4-3: Maximum Expected Construction Emissions Summary (Pounds per Day)

Year	ROG	NOx	CO	PM_{10} (fugitive)	PM_{10} (exhaust)	PM_{10} Total	SO_2 Total
2020 (lb/day)	4.67	0.06	0.16	10.51	3.0×10^{-4}	10.51	3.5×10^{-4}
Significance Threshold (lb/day)	55	55	550	--	--	150	150
ICAPCD Significant Impact?	No	No	No	--	--	No	--

As shown in Table 4-3, emissions from operation of the facility will be below all ICAPCD significance thresholds for operation. Detailed operational emissions calculations from CalEEMod are shown in Appendix A.

4.2.1 Operational Greenhouse Gas Findings

Operational GHG emissions from the facility were calculated with CalEEMod using the same assumptions described in Section 3.4. Table 4-4 summarizes the operational GHG emissions from the Project.

Table 4-4: Anticipated Operational GHG Emissions Summary

Year	Biogenic CO_2	Non-biogenic CO_2	Total CO_2	CH_4	N_2O	CO_2e
	Metric tons per year					
2020	70.80	373.98	444.78	4.90	0.419	579.68

Based upon these findings, operation of the Project is not expected to exceed the 900 metric ton screening threshold. Therefore, no impacts would be expected.

4.3 Odor Impact Findings

Odor impacts from construction operations would be considered short term events and would not be considered an impact.

4.4 Conclusion of Findings

Based on this analysis, no construction or operational impacts are expected. No mitigation will be required for any construction activities. In summary responses to CEQA questions are as follows:

A: Conflict with or obstruct implementation of the applicable air quality plan?

The proposed project would not obstruct the implementation of the air quality plan. Diesel construction equipment will utilize Tier II technologies. Furthermore, air quality emissions would not exceed ICAPCD thresholds.

B: Violate any air quality standard or contribute substantially to an existing or project air quality violation?

The proposed project would not violate any air quality standards or significantly contribute to existing or project air quality violations. Diesel construction equipment will utilize Tier II technologies. Furthermore, air quality emissions would not exceed ICAPCD thresholds.

C: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The proposed project will follow all ICAPCD requirements for grading. Also, all diesel equipment will be Tier II rated. Furthermore, all air quality impacts would be less than significant. Therefore, no cumulatively considerable net increases would be expected in air quality.

D: Expose sensitive receptors to substantial pollutant concentrations?

The proposed project isn't located near any sensitive receptors. Furthermore, air quality emissions generated from the construction work would be relatively small. Given this, sensitive receptors wouldn't be exposed to substantial pollutant concentrations.

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

The proposed project would not generate objectionable odors.

5.0 REFERENCES

California Air Resource Board. 2014. Assembly Bill 32 Overview. Retrieved April 19, 2019 from http://www.arb.ca.gov/cc/ab32/ab32.htm.

CAPCOA. 2010. CEQA & Climate Change. www.CAPCOA.ORG. Retrieved April 19, 2019 from http://capcoa.org/wpcontent/uploads/downloads/2010/05/CAPCOA-White-Paper.pdf.

IPCC. 2007. *AR4 Climate Change 2007: Synthesis Report.* Retrieved April 19, 2019 from https://www.ipcc.ch/report/ar4/syr/.

KOA. 2019. *Le Conte Energy Storage Traffic Impact Study.* June, 2019.

APPENDIX A - CALEEMOD EMISSION CALCULATIONS

Le Conte Battery Storage

Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	217.80	1000sqft	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	12
Climate Zone	15			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - '

Land Use - Project site will be less than 5 acres

Construction Phase - Grading phase will produce maximum emissions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project-specific equipment

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

On-road Fugitive Dust - Project roadways were assumed to be 90% paved and 1% dirt

Grading - 5 acres of grading

Architectural Coating - No architectural coating will be done

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Construction Off-road Equipment Mitigation - All equipment on-site will be Tier 2.

Energy Use - Only Title-24 Energy Usage at this Facility

Vehicle Trips - Trip rate adjusted to be 2 trips per day for the entire site. 2 trips per 217.8 (1000sqft) = 0.01 trips per 1000 sqft

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	108,900.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	326,700.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	0.00
tblAreaCoating	Area_Nonresidential_Exterior	108900	0
tblAreaCoating	Area_Nonresidential_Interior	326700	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
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tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
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tblConstructionPhase	NumDays	230.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	8.00	260.00
tblConstructionPhase	NumDays	18.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24NG	15.43	0.00
tblGrading	AcresOfGrading	487.50	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00

tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	36.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	23.00	25.00
tblTripsAndVMT	WorkerTripNumber	91.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	28.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblVehicleTrips	ST_TR	1.32	0.01
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.01

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.5465	5.7773	3.4929	8.0000e-003	5.3309	0.2387	5.5696	0.8000	0.2196	1.0196	0.0000	703.3722	703.3722	0.2224	0.0000	708.9317
Maximum	**0.5465**	**5.7773**	**3.4929**	**8.0000e-003**	**5.3309**	**0.2387**	**5.5696**	**0.8000**	**0.2196**	**1.0196**	**0.0000**	**703.3722**	**703.3722**	**0.2224**	**0.0000**	**708.9317**

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					
2020	0.5465	5.7773	3.4929	8.0000e-003	5.3309	0.2387	5.5696	0.8000	0.2196	1.0196	0.0000	703.3714	703.3714	0.2224	0.0000	708.9309
Maximum	**0.5465**	**5.7773**	**3.4929**	**8.0000e-003**	**5.3309**	**0.2387**	**5.5696**	**0.8000**	**0.2196**	**1.0196**	**0.0000**	**703.3714**	**703.3714**	**0.2224**	**0.0000**	**708.9309**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2020	3-31-2020	1.5809	1.5809
2	4-1-2020	6-30-2020	1.5818	1.5818
3	7-1-2020	9-30-2020	1.5992	1.5992
		Highest	1.5992	1.5992

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	0.8508	2.0000e-005	2.0000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8900e-003	3.8900e-003	1.0000e-005	0.0000	4.1500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	160.3042	160.3042	6.6200e-003	1.3700e-003	160.8777
Mobile	1.2300e-003	9.7000e-003	0.0175	5.0000e-005	1.6392	3.0000e-005	1.6393	0.1636	3.0000e-005	0.1636	0.0000	4.7109	4.7109	2.9000e-004	0.0000	4.7181
Waste						0.0000	0.0000		0.0000	0.0000	54.8218	0.0000	54.8218	3.2399	0.0000	135.8186
Water						0.0000	0.0000		0.0000	0.0000	15.9789	208.9580	224.9369	1.6498	0.0405	278.2621
Total	**0.8520**	**9.7200e-003**	**0.0195**	**5.0000e-005**	**1.6392**	**4.0000e-005**	**1.6393**	**0.1636**	**4.0000e-005**	**0.1636**	**70.8007**	**373.9769**	**444.7776**	**4.8966**	**0.0419**	**579.6807**

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	0.8508	2.0000e-005	2.0000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8900e-003	3.8900e-003	1.0000e-005	0.0000	4.1500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	160.3042	160.3042	6.6200e-003	1.3700e-003	160.8777
Mobile	1.2300e-003	9.7000e-003	0.0175	5.0000e-005	1.6392	3.0000e-005	1.6393	0.1636	3.0000e-005	0.1636	0.0000	4.7109	4.7109	2.9000e-004	0.0000	4.7181
Waste						0.0000	0.0000		0.0000	0.0000	54.8218	0.0000	54.8218	3.2399	0.0000	135.8186
Water						0.0000	0.0000		0.0000	0.0000	15.9789	208.9580	224.9369	1.6498	0.0405	278.2621
Total	**0.8520**	**9.7200e-003**	**0.0195**	**5.0000e-005**	**1.6392**	**4.0000e-005**	**1.6393**	**0.1636**	**4.0000e-005**	**0.1636**	**70.8007**	**373.9769**	**444.7776**	**4.8966**	**0.0419**	**579.6807**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/1/2020	12/31/2019	5	0	
3	Grading	Grading	1/1/2020	12/29/2020	5	260	
4	Building Construction	Building Construction	12/30/2020	12/29/2020	5	0	
5	Paving	Paving	12/30/2020	12/29/2020	5	0	
6	Architectural Coating	Architectural Coating	12/30/2020	12/29/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

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
Demolition	Tractors/Loaders/Backhoes	0		97	0.37
Site Preparation	Graders	0		187	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	0	0.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Off-Highway Trucks	2	6.00	402	0.38
Grading	Rollers	1	6.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Scrapers	2	6.00	367	0.48
Grading	Skid Steer Loaders	1	6.00	65	0.37
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0		9	0.56
Paving	Pavers	2	8.00	130	0.42

Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0		97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	20.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	20.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	28.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	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

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5898	0.0000	0.5898	0.3230	0.0000	0.3230	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5231	5.7580	3.3195	7.7700e-003		0.2385	0.2385		0.2195	0.2195	0.0000	682.5141	682.5141	0.2207	0.0000	688.0326
Total	**0.5231**	**5.7580**	**3.3195**	**7.7700e-003**	**0.5898**	**0.2385**	**0.8283**	**0.3230**	**0.2195**	**0.5425**	**0.0000**	**682.5141**	**682.5141**	**0.2207**	**0.0000**	**688.0326**

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	0.0234	0.0193	0.1734	2.3000e-004	4.7411	1.6000e-004	4.7413	0.4769	1.5000e-004	0.4771	0.0000	20.8580	20.8580	1.6400e-003	0.0000	20.8991
Total	**0.0234**	**0.0193**	**0.1734**	**2.3000e-004**	**4.7411**	**1.6000e-004**	**4.7413**	**0.4769**	**1.5000e-004**	**0.4771**	**0.0000**	**20.8580**	**20.8580**	**1.6400e-003**	**0.0000**	**20.8991**

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					0.5898	0.0000	0.5898	0.3230	0.0000	0.3230	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5231	5.7580	3.3195	7.7700e-003		0.2385	0.2385		0.2195	0.2195	0.0000	682.5133	682.5133	0.2207	0.0000	688.0318
Total	**0.5231**	**5.7580**	**3.3195**	**7.7700e-003**	**0.5898**	**0.2385**	**0.8283**	**0.3230**	**0.2195**	**0.5425**	**0.0000**	**682.5133**	**682.5133**	**0.2207**	**0.0000**	**688.0318**

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	0.0234	0.0193	0.1734	2.3000e-004	4.7411	1.6000e-004	4.7413	0.4769	1.5000e-004	0.4771	0.0000	20.8580	20.8580	1.6400e-003	0.0000	20.8991
Total	**0.0234**	**0.0193**	**0.1734**	**2.3000e-004**	**4.7411**	**1.6000e-004**	**4.7413**	**0.4769**	**1.5000e-004**	**0.4771**	**0.0000**	**20.8580**	**20.8580**	**1.6400e-003**	**0.0000**	**20.8991**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2300e-003	9.7000e-003	0.0175	5.0000e-005	1.6392	3.0000e-005	1.6393	0.1636	3.0000e-005	0.1636	0.0000	4.7109	4.7109	2.9000e-004	0.0000	4.7181
Unmitigated	1.2300e-003	9.7000e-003	0.0175	5.0000e-005	1.6392	3.0000e-005	1.6393	0.1636	3.0000e-005	0.1636	0.0000	4.7109	4.7109	2.9000e-004	0.0000	4.7181

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2.18	2.18	0.00	8,799	8,799
Total	2.18	2.18	0.00	8,799	8,799

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.40	9.50	11.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	160.3042	160.3042	6.6200e-003	1.3700e-003	160.8777
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	160.3042	160.3042	6.6200e-003	1.3700e-003	160.8777
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light 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	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light 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	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	503118	160.3042	6.6200e-003	1.3700e-003	160.8777
Total		**160.3042**	**6.6200e-003**	**1.3700e-003**	**160.8777**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	503118	160.3042	6.6200e-003	1.3700e-003	160.8777
Total		**160.3042**	**6.6200e-003**	**1.3700e-003**	**160.8777**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8508	2.0000e-005	2.0000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8900e-003	3.8900e-003	1.0000e-005	0.0000	4.1500e-003
Unmitigated	0.8508	2.0000e-005	2.0000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8900e-003	3.8900e-003	1.0000e-005	0.0000	4.1500e-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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8506					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	2.0000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8900e-003	3.8900e-003	1.0000e-005	0.0000	4.1500e-003
Total	**0.8508**	**2.0000e-005**	**2.0000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.8900e-003**	**3.8900e-003**	**1.0000e-005**	**0.0000**	**4.1500e-003**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8506					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	2.0000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8900e-003	3.8900e-003	1.0000e-005	0.0000	4.1500e-003
Total	**0.8508**	**2.0000e-005**	**2.0000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.8900e-003**	**3.8900e-003**	**1.0000e-005**	**0.0000**	**4.1500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	224.9369	1.6498	0.0405	278.2621
Unmitigated	224.9369	1.6498	0.0405	278.2621

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	50.3663 / 0	224.9369	1.6498	0.0405	278.2621
Total		**224.9369**	**1.6498**	**0.0405**	**278.2621**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	50.3663 / 0	224.9369	1.6498	0.0405	278.2621
Total		**224.9369**	**1.6498**	**0.0405**	**278.2621**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	54.8218	3.2399	0.0000	135.8186
Unmitigated	54.8218	3.2399	0.0000	135.8186

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	270.07	54.8218	3.2399	0.0000	135.8186
Total		**54.8218**	**3.2399**	**0.0000**	**135.8186**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	270.07	54.8218	3.2399	0.0000	135.8186
Total		**54.8218**	**3.2399**	**0.0000**	**135.8186**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Le Conte Battery Storage

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	217.80	1000sqft	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	12
Climate Zone	15			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - '

Land Use - Project site will be less than 5 acres

Construction Phase - Grading phase will produce maximum emissions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project-specific equipment

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

On-road Fugitive Dust - Project roadways were assumed to be 90% paved and 10% dirt

Grading - 5 acres of grading

Architectural Coating - No architectural coating will be done

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Construction Off-road Equipment Mitigation - All equipment on-site will be Tier 2.

Energy Use - Only Title-24 Energy Usage at this Facility

Vehicle Trips - Trip rate adjusted to be 2 trips per day for the entire site. 2 trips per 217.8 (1000sqft) = 0.01 trips per 1000 sqft

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	108,900.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	326,700.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	0.00
tblAreaCoating	Area_Nonresidential_Exterior	108900	0
tblAreaCoating	Area_Nonresidential_Interior	326700	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	18.00	0.00
tblConstructionPhase	NumDays	230.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	8.00	260.00
tblConstructionPhase	NumDays	18.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24NG	15.43	0.00
tblGrading	AcresOfGrading	487.50	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00

tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	36.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	23.00	25.00
tblTripsAndVMT	WorkerTripNumber	91.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	28.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblVehicleTrips	ST_TR	1.32	0.01
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.01

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.2353	44.4354	27.1891	0.0617	42.2419	1.9822	44.0780	6.2770	1.8551	7.9662	0.0000	5,982.8316	5,982.8316	1.8879	0.0000	6,030.0285
Maximum	**4.2353**	**44.4354**	**27.1891**	**0.0617**	**42.2419**	**1.9822**	**44.0780**	**6.2770**	**1.8551**	**7.9662**	**0.0000**	**5,982.8316**	**5,982.8316**	**1.8879**	**0.0000**	**6,030.0285**

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					
2020	4.2353	44.4354	27.1891	0.0617	42.2419	1.9822	44.0780	6.2770	1.8551	7.9662	0.0000	5,982.8316	5,982.8316	1.8879	0.0000	6,030.0285
Maximum	**4.2353**	**44.4354**	**27.1891**	**0.0617**	**42.2419**	**1.9822**	**44.0780**	**6.2770**	**1.8551**	**7.9662**	**0.0000**	**5,982.8316**	**5,982.8316**	**1.8879**	**0.0000**	**6,030.0285**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
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	9.3300e-003	0.0605	0.1367	3.5000e-004	10.5079	2.2000e-004	10.5081	1.0487	2.1000e-004	1.0489		35.2609	35.2609	2.1800e-003		35.3154
Total	**4.6723**	**0.0607**	**0.1590**	**3.5000e-004**	**10.5079**	**3.0000e-004**	**10.5082**	**1.0487**	**2.9000e-004**	**1.0490**		**35.3086**	**35.3086**	**2.3100e-003**	**0.0000**	**35.3662**

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	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
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	9.3300e-003	0.0605	0.1367	3.5000e-004	10.5079	2.2000e-004	10.5081	1.0487	2.1000e-004	1.0489		35.2609	35.2609	2.1800e-003		35.3154
Total	**4.6723**	**0.0607**	**0.1590**	**3.5000e-004**	**10.5079**	**3.0000e-004**	**10.5082**	**1.0487**	**2.9000e-004**	**1.0490**		**35.3086**	**35.3086**	**2.3100e-003**	**0.0000**	**35.3662**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/1/2020	12/31/2019	5	0	
3	Grading	Grading	1/1/2020	12/29/2020	5	260	
4	Building Construction	Building Construction	12/30/2020	12/29/2020	5	0	
5	Paving	Paving	12/30/2020	12/29/2020	5	0	
6	Architectural Coating	Architectural Coating	12/30/2020	12/29/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

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
Demolition	Tractors/Loaders/Backhoes	0		97	0.37
Site Preparation	Graders	0		187	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	0	0.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Off-Highway Trucks	2	6.00	402	0.38
Grading	Rollers	1	6.00	80	0.38

Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Scrapers	2	6.00	367	0.48
Grading	Skid Steer Loaders	1	6.00	65	0.37
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0		9	0.56
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0		97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	20.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	20.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	28.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	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

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5370	0.0000	4.5370	2.4849	0.0000	2.4849			0.0000			0.0000
Off-Road	4.0237	44.2921	25.5349	0.0598		1.8348	1.8348		1.6880	1.6880		5,787.2543	5,787.2543	1.8717		5,834.0472
Total	**4.0237**	**44.2921**	**25.5349**	**0.0598**	**4.5370**	**1.8348**	**6.3718**	**2.4849**	**1.6880**	**4.1729**		**5,787.2543**	**5,787.2543**	**1.8717**		**5,834.0472**

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	0.2116	0.1433	1.6541	1.9800e-003	37.7049	1.2600e-003	37.7062	3.7921	1.1600e-003	3.7933		195.5773	195.5773	0.0162		195.9814
Total	**0.2116**	**0.1433**	**1.6541**	**1.9800e-003**	**37.7049**	**1.2600e-003**	**37.7062**	**3.7921**	**1.1600e-003**	**3.7933**		**195.5773**	**195.5773**	**0.0162**		**195.9814**

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					4.5370	0.0000	4.5370	2.4849	0.0000	2.4849			0.0000			0.0000
Off-Road	4.0237	44.2921	25.5349	0.0598		1.8348	1.8348		1.6880	1.6880	0.0000	5,787.2543	5,787.2543	1.8717		5,834.0472
Total	**4.0237**	**44.2921**	**25.5349**	**0.0598**	**4.5370**	**1.8348**	**6.3718**	**2.4849**	**1.6880**	**4.1729**	**0.0000**	**5,787.2543**	**5,787.2543**	**1.8717**		**5,834.0472**

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	0.2116	0.1433	1.6541	1.9800e-003	37.7049	1.2600e-003	37.7062	3.7921	1.1600e-003	3.7933		195.5773	195.5773	0.0162		195.9814
Total	**0.2116**	**0.1433**	**1.6541**	**1.9800e-003**	**37.7049**	**1.2600e-003**	**37.7062**	**3.7921**	**1.1600e-003**	**3.7933**		**195.5773**	**195.5773**	**0.0162**		**195.9814**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.3300e-003	0.0605	0.1367	3.5000e-004	10.5079	2.2000e-004	10.5081	1.0487	2.1000e-004	1.0489		35.2609	35.2609	2.1800e-003		35.3154
Unmitigated	9.3300e-003	0.0605	0.1367	3.5000e-004	10.5079	2.2000e-004	10.5081	1.0487	2.1000e-004	1.0489		35.2609	35.2609	2.1800e-003		35.3154

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2.18	2.18	0.00	8,799	8,799
Total	2.18	2.18	0.00	8,799	8,799

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.40	9.50	11.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light 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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light 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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
Unmitigated	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0700e-003	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
Total	**4.6630**	**2.0000e-004**	**0.0223**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0477**	**0.0477**	**1.3000e-004**		**0.0508**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0700e-003	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
Total	**4.6630**	**2.0000e-004**	**0.0223**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0477**	**0.0477**	**1.3000e-004**		**0.0508**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Le Conte Battery Storage

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	217.80	1000sqft	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	12
Climate Zone	15			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - '

Land Use - Project site will be less than 5 acres

Construction Phase - Grading phase will produce maximum emissions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project-specific equipment

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

On-road Fugitive Dust - Project roadways were assumed to be 90% paved and 1% dirt

Grading - 5 acres of grading

Architectural Coating - No architectural coating will be done

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Construction Off-road Equipment Mitigation - All equipment on-site will be Tier 2.

Energy Use - Only Title-24 Energy Usage at this Facility

Vehicle Trips - Trip rate adjusted to be 2 trips per day for the entire site. 2 trips per 217.8 (1000sqft) = 0.01 trips per 1000 sqft

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	108,900.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	326,700.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	0.00
tblAreaCoating	Area_Nonresidential_Exterior	108900	0
tblAreaCoating	Area_Nonresidential_Interior	326700	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	18.00	0.00
tblConstructionPhase	NumDays	230.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	8.00	260.00
tblConstructionPhase	NumDays	18.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24NG	15.43	0.00
tblGrading	AcresOfGrading	487.50	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	HaulingPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00

tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	36.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	23.00	25.00
tblTripsAndVMT	WorkerTripNumber	91.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	28.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblVehicleTrips	ST_TR	1.32	0.01
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.01

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.2004	44.4427	26.7425	0.0614	42.2419	1.9822	44.0780	6.2770	1.8551	7.9662	0.0000	5,951.0513	5,951.0513	1.8845	0.0000	5,998.1636
Maximum	**4.2004**	**44.4427**	**26.7425**	**0.0614**	**42.2419**	**1.9822**	**44.0780**	**6.2770**	**1.8551**	**7.9662**	**0.0000**	**5,951.0513**	**5,951.0513**	**1.8845**	**0.0000**	**5,998.1636**

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					
2020	4.2004	44.4427	26.7425	0.0614	42.2419	1.9822	44.0780	6.2770	1.8551	7.9662	0.0000	5,951.0513	5,951.0513	1.8845	0.0000	5,998.1636
Maximum	**4.2004**	**44.4427**	**26.7425**	**0.0614**	**42.2419**	**1.9822**	**44.0780**	**6.2770**	**1.8551**	**7.9662**	**0.0000**	**5,951.0513**	**5,951.0513**	**1.8845**	**0.0000**	**5,998.1636**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
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	7.2800e-003	0.0619	0.1024	3.1000e-004	10.5079	2.3000e-004	10.5081	1.0487	2.1000e-004	1.0490		31.7962	31.7962	2.0100e-003		31.8464
Total	**4.6703**	**0.0621**	**0.1247**	**3.1000e-004**	**10.5079**	**3.1000e-004**	**10.5082**	**1.0487**	**2.9000e-004**	**1.0490**		**31.8438**	**31.8438**	**2.1400e-003**	**0.0000**	**31.8972**

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	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
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	7.2800e-003	0.0619	0.1024	3.1000e-004	10.5079	2.3000e-004	10.5081	1.0487	2.1000e-004	1.0490		31.7962	31.7962	2.0100e-003		31.8464
Total	**4.6703**	**0.0621**	**0.1247**	**3.1000e-004**	**10.5079**	**3.1000e-004**	**10.5082**	**1.0487**	**2.9000e-004**	**1.0490**		**31.8438**	**31.8438**	**2.1400e-003**	**0.0000**	**31.8972**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	12/31/2019	5	0	
2	Site Preparation	Site Preparation	1/1/2020	12/31/2019	5	0	
3	Grading	Grading	1/1/2020	12/29/2020	5	260	
4	Building Construction	Building Construction	12/30/2020	12/29/2020	5	0	
5	Paving	Paving	12/30/2020	12/29/2020	5	0	
6	Architectural Coating	Architectural Coating	12/30/2020	12/29/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

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
Demolition	Tractors/Loaders/Backhoes	0		97	0.37
Site Preparation	Graders	0		187	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	0	0.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Off-Highway Trucks	2	6.00	402	0.38
Grading	Rollers	1	6.00	80	0.38

Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Scrapers	2	6.00	367	0.48
Grading	Skid Steer Loaders	1	6.00	65	0.37
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0		9	0.56
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0		97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	20.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	20.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	25.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	28.00	0.00	0.00	10.20	11.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	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

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5370	0.0000	4.5370	2.4849	0.0000	2.4849			0.0000			0.0000
Off-Road	4.0237	44.2921	25.5349	0.0598		1.8348	1.8348		1.6880	1.6880		5,787.2543	5,787.2543	1.8717		5,834.0472
Total	**4.0237**	**44.2921**	**25.5349**	**0.0598**	**4.5370**	**1.8348**	**6.3718**	**2.4849**	**1.6880**	**4.1729**		**5,787.2543**	**5,787.2543**	**1.8717**		**5,834.0472**

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	0.1767	0.1507	1.2075	1.6600e-003	37.7049	1.2600e-003	37.7062	3.7921	1.1600e-003	3.7933		163.7970	163.7970	0.0128		164.1164
Total	**0.1767**	**0.1507**	**1.2075**	**1.6600e-003**	**37.7049**	**1.2600e-003**	**37.7062**	**3.7921**	**1.1600e-003**	**3.7933**		**163.7970**	**163.7970**	**0.0128**		**164.1164**

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					4.5370	0.0000	4.5370	2.4849	0.0000	2.4849			0.0000			0.0000
Off-Road	4.0237	44.2921	25.5349	0.0598		1.8348	1.8348		1.6880	1.6880	0.0000	5,787.2543	5,787.2543	1.8717		5,834.0472
Total	**4.0237**	**44.2921**	**25.5349**	**0.0598**	**4.5370**	**1.8348**	**6.3718**	**2.4849**	**1.6880**	**4.1729**	**0.0000**	**5,787.2543**	**5,787.2543**	**1.8717**		**5,834.0472**

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	0.1767	0.1507	1.2075	1.6600e-003	37.7049	1.2600e-003	37.7062	3.7921	1.1600e-003	3.7933		163.7970	163.7970	0.0128		164.1164
Total	**0.1767**	**0.1507**	**1.2075**	**1.6600e-003**	**37.7049**	**1.2600e-003**	**37.7062**	**3.7921**	**1.1600e-003**	**3.7933**		**163.7970**	**163.7970**	**0.0128**		**164.1164**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.2800e-003	0.0619	0.1024	3.1000e-004	10.5079	2.3000e-004	10.5081	1.0487	2.1000e-004	1.0490		31.7962	31.7962	2.0100e-003		31.8464
Unmitigated	7.2800e-003	0.0619	0.1024	3.1000e-004	10.5079	2.3000e-004	10.5081	1.0487	2.1000e-004	1.0490		31.7962	31.7962	2.0100e-003		31.8464

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	2.18	2.18	0.00	8,799	8,799
Total	2.18	2.18	0.00	8,799	8,799

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.40	9.50	11.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light 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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light 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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
Unmitigated	4.6630	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0700e-003	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
Total	**4.6630**	**2.0000e-004**	**0.0223**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0477**	**0.0477**	**1.3000e-004**		**0.0508**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0700e-003	2.0000e-004	0.0223	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0477	0.0477	1.3000e-004		0.0508
Total	**4.6630**	**2.0000e-004**	**0.0223**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0477**	**0.0477**	**1.3000e-004**		**0.0508**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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