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April 26, 2023

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RE: Memorandum for Air Quality and Greenhouse Gas – Goal Line Energy Storage Project, City of Escondido

This letter will serve to augment the evaluations of the potential environmental impacts associated with the proposed Project's emissions of air quality and greenhouse gases (GHG) in response to the recent changes to the site plan and project description. This memorandum letter is based on information provided in the original Air Quality and GHG Studies prepared by Ldn Consulting, dated December 19, 2022.

Discussion

The modeling and results of the original Air Quality and GHG Studies were based on the Project (Project) delivering up to 150 MW of energy storage capacity with a 4-to-8-hour capacity rating. Achievement of 150 MW of storage would be completed in three phases with a demolition phase removing the existing ice-rink facility, Phase 1 storing 50 MW for 8 hours (400 MWh), and Phase 2 storing approximately 100 MW for 4 hours (400 MWh) or another 50 MW for 8 hours (400 MWh).

The Project has been revised to construct 50 MW of battery energy storage. Which may occur in a single phase and would reduce the construction duration.

Air Quality

The construction duration for the revised Project is anticipated to be reduced and therefore the emissions in the original analysis are conservative. The overall construction methods will not change and daily emissions are anticipated to be the same if not lower.

From a health risk persecuted, based upon the reduced construction duration the exposure from the Projects diesel Particulate Matter (DPM) is anticipated to be less. Therefore, the health risk findings would not change and remain less than significant.

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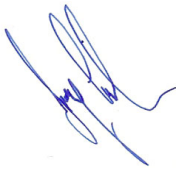
Operational and cumulative air quality emissions did not change due to the updated site plan. The project would generate a less than significant impact related to operational emissions.

Greenhouse Gas

Similar to the revised air quality analysis, the construction emissions estimate for greenhouse gases (GHG) would be reduced. Operational emissions would not change from the values presented in the previous analysis as a result of the changes to the Project. Given this, the project would not exceed the City's 500 MT screening level and is not expected to result in a significant cumulative contribution to global climate change, consistent with the conclusion of the previous GHG Analysis. As noted in the previous GHG Analysis, the proposed project would result in development that is generally less than what would be allowed under the current use.

The changes to the Project would not change the conclusions of the original Air Quality Study or Global Climate Change Analysis.

Sincerely,
Ldn Consulting, Inc.



Jeremy Louden, Principal

AIR QUALITY ASSESSMENT

GOAL LINE
BATTERY ENERGY STORAGE SYSTEM PROJECT
ESCONDIDO CA

Prepared for:

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October 20, 2022

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1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Air Quality study is to determine potential air quality impacts (if any) that may be created during the construction or operation of the proposed Goal Line Battery Energy Storage System (BESS) Project which would be constructed in the City of Escondido. Should impacts be determined, the intent of this study would be to recommend mitigation measures, which would reduce those impacts. Daily operations of the project will be primarily from maintenance and worker trips, although some emissions are expected, they would be minimal and below the screening level thresholds within the City of Escondido Municipal Code Section 33-924 of Article 47 in Chapter 33.

1.2 Project Location

The Project site is located at 555 Tulip Street and will utilize approximately 4.5 acres of a larger 6.5 acre parcel containing an existing electrical generation facility and a non-operational ice-rink facility (Project Site). A general project vicinity map is shown in Figure 1-A.

1.3 Project Description

Onward Energy proposes to construct, own, and operate the Goal Line Reliability Project (Project), a lithium-ion battery energy storage facility capable of delivering up to 150 MW of energy storage capacity with a 4-to-8-hour capacity rating. Achievement of 150 MW of storage would be completed in three phases with a demolition phase removing the existing ice-rink facility, Phase 1 storing 50 MW for 8 hours (400 MWh), and Phase 2 storing approximately 100 MW for 4 hours (400 MWh) or another 50 MW for 8 hours (400 MWh).

The Project consists of lithium-based battery modules installed in racks and housed within purpose-built outdoor Battery Energy Storage System (BESS) enclosures. A typical BESS enclosure will house hundreds of battery modules where each enclosure is typically capable of storing between 0.4 to 5 megawatt-hours (MWh) of energy.

The dimensions of a typical BESS enclosure vary between manufacturers and are arranged in repeated "blocks" across the site. System blocks may consist of a single enclosure, or several smaller enclosures set side-by-side to create banks of batteries with similar overall dimensions. Smaller enclosures are typically closely spaced or physically attached at the time to construction, and larger enclosures are placed in smaller groupings or individually. An enclosure grouping typically consist of 4 to 12 enclosures measuring approximately 30 feet long by 6 feet wide with a height of 10 feet. Smaller enclosures may be as small as 3.5 feet

long by 5 feet wide by 8 feet tall while larger enclosures may measure over 50 feet long by 12 feet wide with a height of up to 20 feet. Enclosures may also be double-stacked if designed to do so, which is anticipated for this Project. However, the number, size, layout, and capabilities of each enclosure will vary depending on the battery, enclosure manufacturer design, and BESS system manufacturer(s) selected for the Project. Regardless of the system manufacturer, the Project's developed footprint and overall capability will remain substantially the same. In some instances, the battery enclosures may contain inverters which convert low voltage direct current (DC) to alternating current (AC) (and vice-versa when charging).

Energy stored in the Project will then be discharged into the grid when the energy is needed, providing important electrical reliability services to the local area. The Project will interconnect to the existing, adjacent SDGE Esco Substation via an existing overhead generation tie-line.

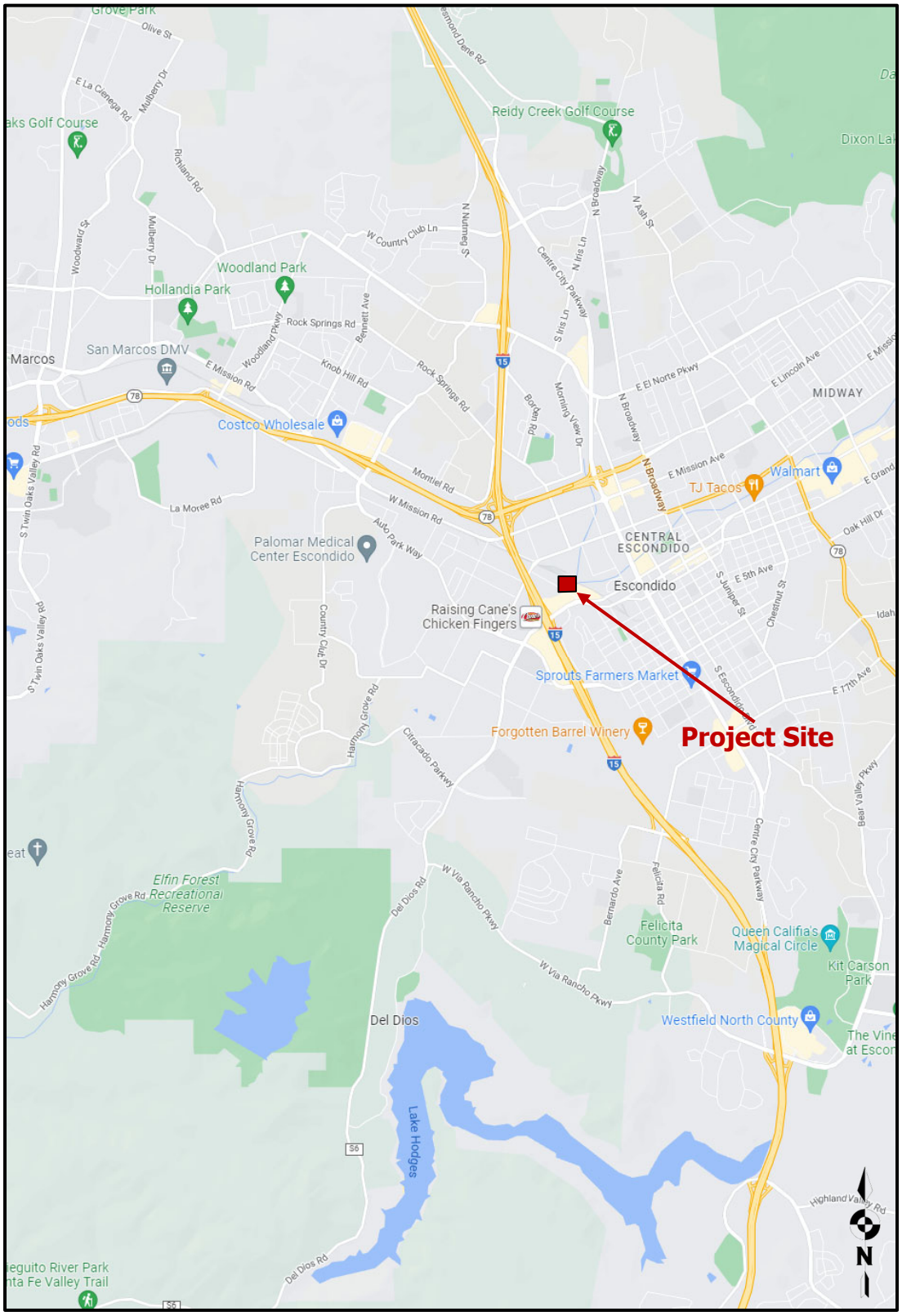
It is expected that between two to four staff members will visit the site weekly and as needed for maintenance and monitoring of the Project. The Project will be operated remotely with no permanent on-site operations personnel. No changes are proposed to the existing electrical generation assets or operations as part of the Project.

The Project would be constructed three parts to include demolition of the existing facilities followed by Phase 1. Phase 2 would be constructed at a later date which has not yet been established. For purposes of this analysis, Phase 2 was assumed to be constructed one year later. Operations of Phase 1 and Phase 2 are assumed as the baseline analysis. Figure 1-B shows the Conceptual Plan of the Project.

Project construction includes demolition of the existing facility, site preparation and grading, installation of drainage and retention basins, foundations/supports, setting battery enclosures, wiring and electrical system installation, and assembly of the accessory components including inverter transformers and generation step-up transformers. Earth cut and fill are proposed to be balanced within the Project site. It is assumed up to 30,000 cubic yards (CY) of material may needed with an additional 5,000 CY of surfacing material (asphalt and/or open graded crushed rock aggregate) to complete the project.

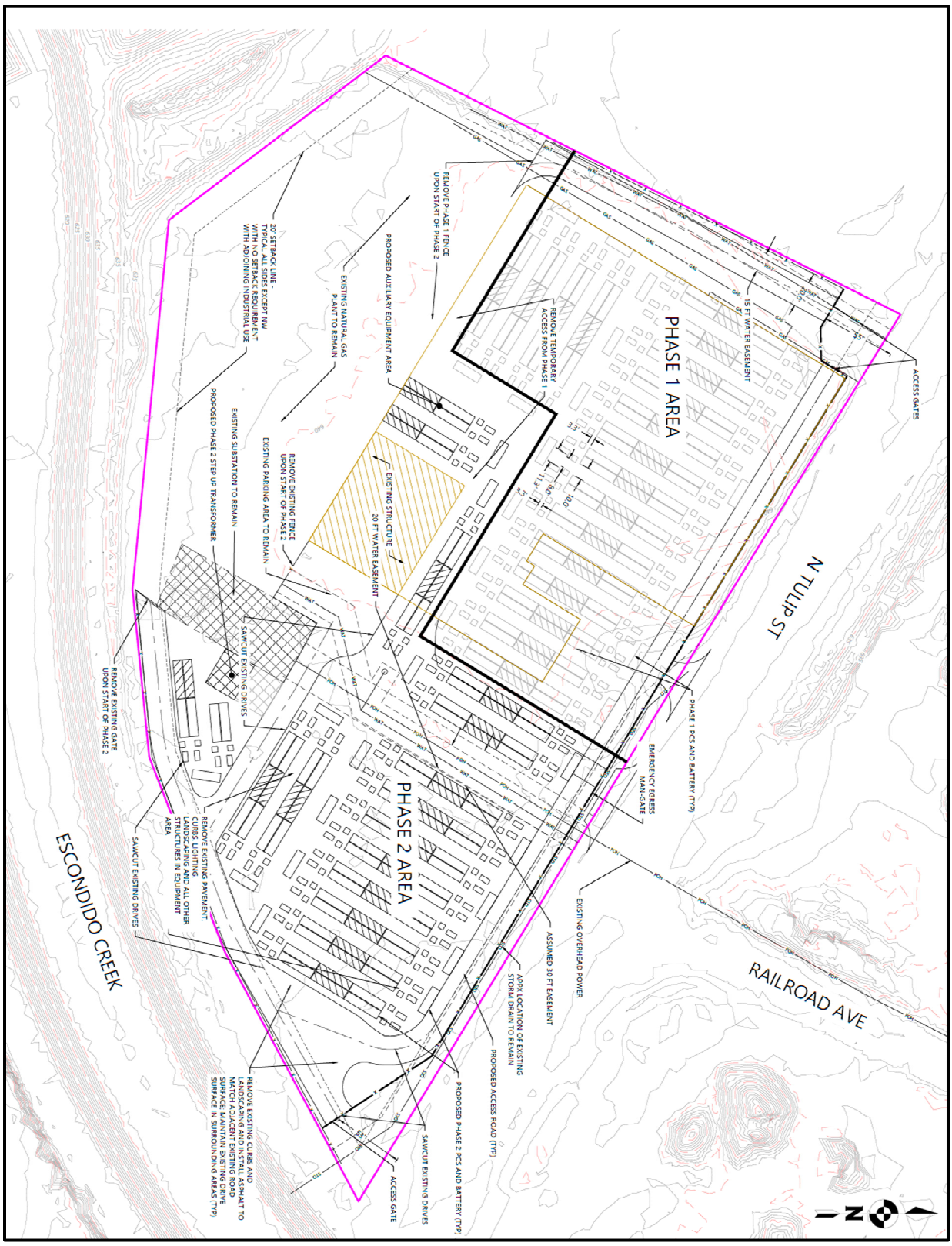
The proposed construction schedule includes approximately 6 months for demolition and 15 months for Phase 1 construction. Phase 2 construction will follow Phase 1 and would also take roughly 15 months to complete. Additional offsite infrastructure upgrades to existing offsite facilities may be required with Phase 2 but would occur during the 15-month duration.

Figure 1-A: Project Vicinity Map



Source: (Google, 2022)

Figure 1-B: Site Development Plan



Source: (Westwood Professional Services, Inc., 2022)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The Project site is located at 555 N. Tulip Street and will utilize up to 4.5 acres within a 6.5-acre parcel (232-131-25-00). The site topography is flat, with an elevation of approximately 640 feet above sea level. Access to the Project site will be provided via two driveways from Tulip Road. The project site is within the General Industrial (GI) zone district. The project is surrounded by industrial uses to the north a flood control channel to the south and Interstate 15 to the west.

2.2 Climate and Meteorology

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

Meteorological trends within Escondido produce daytime highs ranging between 65ºF in the winter to approximately 88ºF in the summer with August usually being the hottest month. Median temperatures range from approximately 57ºF in the winter to approximately 78ºF in the summer. Precipitation is generally about 16.2 inches per year (WRCC, 2018). Prevailing wind patterns for the area vary during any given month during the year and also vary depending on the time of day or night. The predominant pattern though throughout the year is usually from the west or westerly (WRCC, 2018).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

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

the act included the development of National Ambient Air Quality Standards (NAAQS) for major air pollutants.

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

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

1. ***Carbon Monoxide (CO):*** *is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. ***Lead (Pb):*** *is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. ***Nitrogen Dioxide (NO_2):*** *is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO_2 is usually visible as a reddish-brown air layer over urban areas. NO_2 along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO_2 above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.*
4. ***Particulate Matter (PM_{10} or $PM_{2.5}$):*** *is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such as metal, soot, soil, and dust. PM_{10} particles are 10 microns (µm) or less and $PM_{2.5}$ particles are 2.5 (µm) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.*
5. ***Ozone (O_3)****: is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals directly emitted from vehicles, industrial plants, and many other sources. Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.*

6. ***Sulfur Dioxide (SO_2)****: is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO_2 exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO_2 results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.*

2.3.2 State Standards and Definitions

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

1. ***Visibility Reducing Particles****: Particles in the Air that obstruct the visibility.*
2. ***Sulfates****: are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.*
3. ***Hydrogen Sulfide (H_2S)****: is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H_2S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 Parts per Million (ppm)) can cause a loss of consciousness and possibly death.*
4. ***Vinyl Chloride****: also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).*

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	**Average Time**	**California Standards[1]**		**Federal Standards[2]**		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.070 ppm (137 µg/m3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3		-		
Fine Particulate Matter (PM2.5)[9]	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		-	-	-
Nitrogen Dioxide (NO_2)[10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3)[8]	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m3)		0.100 ppm[8] (188/ µg/m3)	-	
Sulfur Dioxide (SO_2)[11]	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm[10] (for Certain Areas)	-	Ultraviolet Flourescence; Spectrophotometry (Pararoosaniline Method)[9]
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm[10] (for Certain Areas) (See Footnote 9)	-	
	3 Hour	-		-	0.5 ppm (1300 µg/m3)	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m3)	-	
Lead[12,13]	30 Day Average	1.5 µg/m3	Atomic Absorption	-		-
	Calendar Quarter	-		1.5 µg/m3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	-		0.15 µg/m3		
Visibility Reducing Particles	8 Hour	See footnote 14				
Sulfates	24 Hour	25 µg/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m3)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3 . The existing national 24- hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3 , as was the annual secondary standard of 15 µg/m3 . The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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

2.3.3 Regional Standards

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

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

The 2016 update mostly summarizes how the 2009 update has lowered NO_X and VOCs emissions which reduces ozone and clarifies and enhances emission reductions by introducing for discussion three new VOC and four new NO_X reduction measures. NO_X and VOCs are precursors to the formation of ozone in the atmosphere. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years. A complete listing of the current attainment status for criteria pollutants with respect to both federal and state nonattainment status by pollutants for County is shown in Table 2.2 on the following page (SDAPCD, 2019).

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

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

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment *	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM10	Unclassifiable **	Nonattainment
PM2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

** The federal 1-hour standard of 12 pphm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.*
*** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.*
(SDAPCD, 2019)

2.4 California Environmental Quality Act Significance Thresholds

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

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

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

2.5 Escondido Municipal Code (Section 33-924 Coordination of CEQA, Quality of Life Standards)

The City of Escondido has established threshold in Section 33-924 of Article 47 in Chapter 33 of the Municipal Code to address and implement CEQA guidelines and should be used for the preparation of Air Quality Impact Assessments (AQIA). The Code provides screening criteria

that can be used to demonstrate that a Project's total emissions would not 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. The screening thresholds for construction and daily operations are shown in Table 2.3.

Table 2.3: Screening Threshold for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
Air Quality Emissions Screening Levels	
Respirable Particulate Matter (PM_{10})	100
Respirable Particulate Matter ($PM_{2.5}$)	55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs) (Operations)	55
Volatile Organic Compounds (VOCs) (Construction)	75
Source: (City of Escondido Municiple Code)	

2.6 SDAPCD Rule 1200 – New Source Review

Non-Criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the Project increase the cancer risk to over 10 in one million. Projects creating cancer risks less than one in one million are not required to implement T-BACT technology. This report assumes that Volatile Organic Compounds (VOC) and Reactive Organic Gases (ROG) are essentially the same due to the fact that emissions generated from the Project represent non-methane organic compounds.

2.7 Local Air Quality

Criteria pollutants are measured continuously throughout the San Diego Air Basin. This data is used to track ambient air quality patterns throughout the County. As mentioned earlier,

this data is also used to determine attainment status when compared to the NAAQS and CAAQS. The SDAPCD is responsible for monitoring and reporting monitoring data. The District operates 10 monitoring sites, which collect data on criteria pollutants. The proposed development project is closest to the Carmel Mountain Ranch and Camp Pendleton monitoring stations which are located roughly 10 and 18 miles from the Project site respectively. Table 2.4 identifies the criteria pollutants monitored at the aforementioned station. Four additional sites collect meteorological data which is used by the District to assist with pollutant forecasting, data analysis and characterization of pollutant transport. SDAPCD published the five-year air quality summary for all of the monitoring stations (SDAPCD, 2021).

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

Pollutant	Closest Recorded Ambient Monitoring Site	Averaging Time	CAAQS	NAAQS	2019	2020	Days Exceeded over 2 years
O_3 (ppm)	Camp Pendleton or Carmel Mountain Ranch	1 Hour	0.09 ppm	No Standard	0.08	0.09	0
		8 Hour	0.070 ppm	0.070 ppm	0.06	0.07	3
PM_{10} (µg/m3)		24 Hour	50 µg/m3	150 µg/m3	PM10 Data Not Available for Monitoring Sites near Project Site		
		Annual Arithmetic Mean	20 µg/m3	No Standard			
* $PM_{2.5}$ (µg/m^3)		24 Hour	No standard -	35 µg/m3	18.9	40.2	N/A
		Annual Arithmetic Mean	12 µg/m3	15 µg/m3	8.2	9.3	N/A
NO_2 (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.014	0.013	N/A
		1 Hour	0.18 ppm	0.100 ppm	0.086	0.056	N/A
* CO (ppm)		1 Hour	20 ppm	35 ppm	4.1	3.3	N/A
		8 Hour	9 ppm	9 ppm	2.5	1.7	N/A

Notes:
1. - Yearly maximums marked with "-" indicated data was not available for either monitoring station.
2. * Data was selected from the Carmel Mountain Ranch station which began in 2019. All other data presented was collected at the Camp Pendleton Monitoring Station.
3. SO_2 is only monitored at the El Cajon Monitoring Station. Within the entire County of San Diego, SO_2 emissions within the County are essentially Zero for all metrics including the Average, Maximum 24 hour and 1- hour standards. The Highest 1-hr measurement identified is 0.004 ppm and the most restrictive standard (CAAQS for SO_2) is 0.25 ppm.

3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod 2020.4.0 air quality model, which was developed by BREEZE Software for South Coast Air Quality Management District (SCAQMD) in 2021. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project and uses methodologies presented in the U.S. EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in ***Attachment A*** to this report.

The notable toxic air contaminant from construction is diesel exhaust since exposure to diesel exhaust is known to cause cancer and acute and chronic health effects. The project however is in an industrial/commercial zone and sensitive receptors such as residential or schools are not located in the nearby vicinity. Given this, health risks would not be expected.

3.2 Construction Assumptions

The Project construction dates were estimated based on a construction kickoff starting in the middle of 2023. The project would be constructed in three phases and would start with demolition which would be expected to last 6 months. Phase 1 would follow and would be expected to take up to 15 months to complete. Phase 2 would commence at a later date which has not yet been established. For purposes of this analysis, it is assumed that construction for phase 2 would be one year later. The project will import material and is assumed to be as much as 30,000 CY of soil and up to 5,000 CY of surface material such as asphalt or crushed stone with roughly ½ of the material necessary for each phase. Phase 2 may have additional offsite construction in the immediate vicinity of the project, so additional equipment was assumed as part of this phase.

CalEEMod 2020.4.0 was utilized for all calculations. Table 3.1 shows the expected timeframes for the construction processes for all the Project infrastructure, facilities, improvements and structures at the proposed Project location, as well as the expected number of pieces of equipment. CalEEMod has been updated to reflect the anticipated construction activities.

Table 3.1: Expected Construction Equipment and Durations

Equipment Identification	Proposed Start	Proposed Completion	Quantity
Demolition Phase 1 and Phase 2 Area	06/01/2023	12/27/2023	
Excavators			3
Rubber Tired Dozers			2
Skid Steer Loaders			2
Grading and Excavation for Pads Phase 1	01/01/2024	03/22/2024	
Excavators			1
Graders			1
Skid Steer Loaders			3
Building Construction and concrete placement Phase 1	03/23/2024	02/28/2025	
Generator Sets			1
Plate Compactors			1
Rollers			1
Rough Terrain Forklifts			3
Skid Steer Loaders			1
Welders			1
Crane Use to set Units Phase 1	12/01/2024	01/24/2025	
Cranes			1
Grading and Excavation for Pads Phase 2	02/01/2026	04/24/2026	
Excavators			1
Graders			1
Skid Steer Loaders			3
Building Construction including offsite work and concrete placement Phase 2	04/25/2026	04/02/2027	
Generator Sets			1
Plate Compactors			1
Rollers			1
Rough Terrain Forklifts			4
Skid Steer Loaders			2
Welders			2
Crane Use to set Units Phase 2	01/15/2027	03/11/2027	
Cranes			1
This equipment list is based upon equipment inventory and durations provide by the Project engineer.			

3.3 Operational Assumptions

The intent of this project is to charge during the day when solar energy production is at it is peak on SDGE's electrical grid and then re-supply the grid at night. Operational air emission sources would include area sources such as landscaping and maintenance activities to include mobile sources which would be generated from traffic associated with monthly maintenance

site visits. For purposes of this analysis, it is assumed that the Project would generate as many as four (4) trips per day. CalEEMod has been updated to reflect Project related operational conditions.

3.4 Odor Impacts (Onsite)

Potential onsite odor generators would include short-term construction odors from construction equipment during demolition though odors would likely be minimal and since sensitive receptors are not located in the vicinity of the Project site, odor impacts would be less than significant.

Operational odors would not be expected and a less than significant impact would be expected from this battery storage project since daily operations onsite would not occur.

4.0 FINDINGS

4.1 Construction Emission Findings

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

Table 4.1: Expected Construction Emissions Summary – Pounds per Day

Year	ROG	NO_x	CO	SO_2	PM_{10} (Dust)	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Dust)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
2023	2.10	20.97	19.13	0.04	0.67	0.93	1.60	0.12	0.86	0.97
2024	1.46	13.19	17.76	0.04	1.46	0.48	1.78	0.30	0.46	0.63
2025	1.38	12.42	17.59	0.03	0.66	0.43	1.09	0.18	0.41	0.58
2026	1.46	12.96	21.09	0.04	1.46	0.41	1.74	0.30	0.39	0.57
2027	1.73	15.72	22.57	0.04	0.66	0.53	1.19	0.18	0.50	0.68
Significance Threshold (lb/day)	75	250	550	250	-	-	100	-	-	55
Exceeds Screening Threshold?	**No**	**No**	**No**	**No**	-	-	**No**	-	-	**No**

4.2 Operational Findings

Project Buildout of Phase 1 in 2024/2025 and Phase 2 in 2026/2027 would be expected. The Project traffic generation was assumed to be as high as 4 trips per day during a worst-case day and was used within this analysis. Additionally, the model was run for the winter, summer scenarios to determine maximum daily operational impacts for operation.

The expected daily pollutant generation can be calculated utilizing the product of the average daily miles traveled and the expected emissions inventory calculated by EMFAC2017; CALEEMOD 2020.4.0 performs this calculation. The daily pollutants calculated for summer and winter are shown in Tables 4.2 and 4.3. Based upon these calculations, the proposed Project would produce less than significant air quality impacts under CEQA.

Table 4.2: Expected Summer Daily Pollutant Generation

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area	0.000	0.000	0.000	0.000	0.000	0.000
Energy	0.000	0.000	0.000	0.000	0.000	0.000
Mobile	0.017	0.020	0.179	0.000	0.029	0.008
Total (Unmitigated)	**0.017**	**0.020**	**0.179**	**0.000**	**0.029**	**0.008**
County Thresholds	75	250	550	250	100	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

Table 4.3: Expected Winter Daily Pollutant Generation

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area	0.000	0.000	0.000	0.000	0.000	0.000
Energy	0.000	0.000	0.000	0.000	0.000	0.000
Mobile	0.012	0.014	0.119	0.000	0.029	0.008
Total (Unmitigated)	**0.012**	**0.014**	**0.119**	**0.000**	**0.029**	**0.008**
County Thresholds	75	250	550	250	100	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

4.3 RAQS and SIP Analysis

The proposed Project site operated a natural gas power plant and Ice-Skating Rink. The proposed Project would remove the rink but maintain the natural gas power plant and install battery storage for electricity. The project would have less than significant air quality impacts for both construction and operations and would not require a zone change for the Project. Since the project is consistent with the Industrial Zoning, and since the Project would not generate direct impacts, the Project would be compatible with the area RAQS and SIP.

4.4 Odor Impact Findings

The Project may create temporary construction odors from combustion engine equipment but would not be considered significant due to the highly dispersive nature of diesel exhaust and since the project is not located near any sensitive receptors. Operational odors would not be expected. Therefore, less than significant odor impacts are expected.

5.0 REFERENCES

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6.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the air quality environment and impacts within and surrounding the proposed development. This report was prepared utilizing the latest emission rates and reduction methodologies.

DRAFT

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Date October 20, 2022

ATTACHMENT A

CALEEMOD 2020.4.0

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Escondido Goal Line BESS

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	4.50	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project would install battery storage containers and operations onsite will be remote

Construction Phase - Project would install fully constructed containers shipped to the site on trucks. Cranes lift the units off and set them on either a concrete pad or Steel colums driven into the ground.

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CE

Off-road Equipment - ce

Off-road Equipment - ce

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Worker and vendor trips per day for concrete placement added. Trips added for crane operator

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - 4 trips per day

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Water And Wastewater - Basic onsite landscaping will be watered 100 gal/day

Solid Waste - solid waste is not likely though 1 ton per year was assumed. Systems will be remotly managed.

Construction Off-road Equipment Mitigation - Tier 3 equipment with DPF

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	245.00
tblConstructionPhase	NumDays	230.00	40.00
tblConstructionPhase	NumDays	230.00	245.00
tblConstructionPhase	NumDays	230.00	40.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	8.00	60.00
tblConstructionPhase	NumDays	8.00	60.00
tblGrading	MaterialImported	0.00	17,500.00
tblGrading	MaterialImported	0.00	17,500.00
tblLandUse	LotAcreage	0.00	4.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Grading and Excavation for Pads Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	0.00	70.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	0.00	70.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	4.00

2.0 Emissions Summary

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	2.1039	20.9674	19.1327	0.0390	0.6726	0.9310	1.6036	0.1183	0.8566	0.9749	0.0000	3,804.9032	3,804.9032	1.1603	0.0277	3,842.1700
2024	1.4622	13.1890	17.7593	0.0415	1.4555	0.4833	1.7811	0.3037	0.4577	0.6341	0.0000	4,328.7287	4,328.7287	0.6942	0.3821	4,459.9626
2025	1.3766	12.4239	17.5898	0.0348	0.6592	0.4300	1.0892	0.1764	0.4070	0.5834	0.0000	3,361.9850	3,361.9850	0.6432	0.0424	3,390.6944
2026	1.4570	12.9557	21.0872	0.0404	1.4555	0.4100	1.7401	0.3037	0.3918	0.5670	0.0000	4,221.4769	4,221.4769	0.7010	0.3668	4,348.2983
2027	1.7261	15.7183	22.5713	0.0422	0.6592	0.5277	1.1869	0.1764	0.5001	0.6765	0.0000	4,047.5608	4,047.5608	0.8260	0.0400	4,080.1255
Maximum	**2.1039**	**20.9674**	**22.5713**	**0.0422**	**1.4555**	**0.9310**	**1.7811**	**0.3037**	**0.8566**	**0.9749**	**0.0000**	**4,328.7287**	**4,328.7287**	**1.1603**	**0.3821**	**4,459.9626**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

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					
2023	2.1039	20.9674	19.1327	0.0390	0.6726	0.9310	1.6036	0.1183	0.8566	0.9749	0.0000	3,804.9032	3,804.9032	1.1603	0.0277	3,842.1700
2024	1.4622	13.1890	17.7593	0.0415	1.4555	0.4833	1.7811	0.3037	0.4577	0.6341	0.0000	4,328.7287	4,328.7287	0.6942	0.3821	4,459.9626
2025	1.3766	12.4239	17.5898	0.0348	0.6592	0.4300	1.0892	0.1764	0.4070	0.5834	0.0000	3,361.9850	3,361.9850	0.6432	0.0424	3,390.6944
2026	1.4570	12.9557	21.0872	0.0404	1.4555	0.4100	1.7401	0.3037	0.3918	0.5670	0.0000	4,221.4769	4,221.4769	0.7010	0.3668	4,348.2983
2027	1.7261	15.7183	22.5713	0.0422	0.6592	0.5277	1.1869	0.1764	0.5001	0.6765	0.0000	4,047.5608	4,047.5608	0.8260	0.0400	4,080.1255
Maximum	**2.1039**	**20.9674**	**22.5713**	**0.0422**	**1.4555**	**0.9310**	**1.7811**	**0.3037**	**0.8566**	**0.9749**	**0.0000**	**4,328.7287**	**4,328.7287**	**1.1603**	**0.3821**	**4,459.9626**

	ROG	NOx	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**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0123	0.0129	0.1168	2.7000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		27.8321	27.8321	1.7200e-003	1.1000e-003	28.2024
Total	**0.0123**	**0.0129**	**0.1169**	**2.7000e-004**	**0.0291**	**2.0000e-004**	**0.0293**	**7.7600e-003**	**1.8000e-004**	**7.9400e-003**		**27.8323**	**27.8323**	**1.7200e-003**	**1.1000e-003**	**28.2027**

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	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0123	0.0129	0.1168	2.7000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		27.8321	27.8321	1.7200e-003	1.1000e-003	28.2024
Total	**0.0123**	**0.0129**	**0.1169**	**2.7000e-004**	**0.0291**	**2.0000e-004**	**0.0293**	**7.7600e-003**	**1.8000e-004**	**7.9400e-003**		**27.8323**	**27.8323**	**1.7200e-003**	**1.1000e-003**	**28.2027**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	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 Phase 1 and Phase 2 Area	Demolition	6/1/2023	12/27/2023	5	150	
2	Grading and Excavation for Pads Phase 1	Grading	1/1/2024	3/22/2024	5	60	
3	Building Construction and concrete placement Phase 1	Building Construction	3/23/2024	2/28/2025	5	245	
4	Crane Use to set Units Phase 1	Building Construction	12/1/2024	1/24/2025	5	40	
5	Grading and Excavation for Pads Phase 2	Grading	2/1/2026	4/24/2026	5	60	
6	Buiding Construction including offsite work and concrete placement Phase 2	Building Construction	4/25/2026	4/2/2027	5	245	
7	Crane Use to set Units Phase 2	Building Construction	1/15/2027	3/11/2027	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 30

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition Phase 1 and Phase 2 Area	Excavators	3	8.00	158	0.38
Demolition Phase 1 and Phase 2 Area	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Phase 1 and Phase 2 Area	Skid Steer Loaders	2	8.00	65	0.37

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading and Excavation for Pads Phase 1	Excavators	1	8.00	158	0.38
Grading and Excavation for Pads Phase 1	Graders	1	8.00	187	0.41
Grading and Excavation for Pads Phase 1	Skid Steer Loaders	3	8.00	65	0.37
Building Construction and concrete placement Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction and concrete placement Phase 1	Plate Compactors	1	4.00	8	0.43
Building Construction and concrete placement Phase 1	Rollers	1	4.00	80	0.38
Building Construction and concrete placement Phase 1	Rough Terrain Forklifts	3	8.00	100	0.40
Building Construction and concrete placement Phase 1	Skid Steer Loaders	1	7.00	65	0.37
Building Construction and concrete placement Phase 1	Welders	1	8.00	46	0.45
Crane Use to set Units Phase 1	Cranes	1	7.00	231	0.29
Grading and Excavation for Pads Phase 2	Excavators	1	8.00	158	0.38
Grading and Excavation for Pads Phase 2	Graders	1	8.00	187	0.41
Grading and Excavation for Pads Phase 2	Skid Steer Loaders	3	8.00	65	0.37
Buiding Construction including offsite work and concrete placement Phase 2	Generator Sets	1	8.00	84	0.74
Buiding Construction including offsite work and concrete placement Phase 2	Plate Compactors	1	4.00	8	0.43
Buiding Construction including offsite work and concrete placement Phase 2	Rollers	1	4.00	80	0.38
Buiding Construction including offsite work and concrete placement Phase 2	Rough Terrain Forklifts	4	8.00	100	0.40
Buiding Construction including offsite work and concrete placement Phase 2	Skid Steer Loaders	2	7.00	65	0.37
Buiding Construction including offsite work and concrete placement Phase 2	Welders	2	8.00	46	0.45
Crane Use to set Units Phase 2	Cranes	1	7.00	231	0.29

Trips and VMT

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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 Phase 1 and Phase 2 Area	7	12.00	0.00	364.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Excavation for Pads P	5	30.00	0.00	2,188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction and concrete placeme	8	70.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Crane Use to set Units Phase 1	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Excavation for Pads P	5	30.00	0.00	2,188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Buiding Construction including offsite work	11	70.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Crane Use to set Units Phase 2	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition Phase 1 and Phase 2 Area - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5315	0.0000	0.5315	0.0805	0.0000	0.0805			0.0000			0.0000
Off-Road	2.0655	20.6295	18.7568	0.0367		0.9278	0.9278		0.8535	0.8535		3,555.2908	3,555.2908	1.1499		3,584.0371
Total	**2.0655**	**20.6295**	**18.7568**	**0.0367**	**0.5315**	**0.9278**	**1.4593**	**0.0805**	**0.8535**	**0.9340**		**3,555.2908**	**3,555.2908**	**1.1499**		**3,584.0371**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition Phase 1 and Phase 2 Area - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5000e-003	0.3174	0.0872	1.4500e-003	0.0424	2.6900e-003	0.0451	0.0116	2.5800e-003	0.0142		160.4700	160.4700	8.0900e-003	0.0255	168.2768
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
Worker	0.0328	0.0204	0.2888	8.7000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		89.1424	89.1424	2.3900e-003	2.1900e-003	89.8561
Total	**0.0383**	**0.3378**	**0.3760**	**2.3200e-003**	**0.1410**	**3.2200e-003**	**0.1443**	**0.0378**	**3.0700e-003**	**0.0409**		**249.6124**	**249.6124**	**0.0105**	**0.0277**	**258.1329**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5315	0.0000	0.5315	0.0805	0.0000	0.0805			0.0000			0.0000
Off-Road	2.0655	20.6295	18.7568	0.0367		0.9278	0.9278		0.8535	0.8535	0.0000	3,555.2908	3,555.2908	1.1499		3,584.0371
Total	**2.0655**	**20.6295**	**18.7568**	**0.0367**	**0.5315**	**0.9278**	**1.4593**	**0.0805**	**0.8535**	**0.9340**	**0.0000**	**3,555.2908**	**3,555.2908**	**1.1499**		**3,584.0371**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition Phase 1 and Phase 2 Area - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5000e-003	0.3174	0.0872	1.4500e-003	0.0424	2.6900e-003	0.0451	0.0116	2.5800e-003	0.0142		160.4700	160.4700	8.0900e-003	0.0255	168.2768
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
Worker	0.0328	0.0204	0.2888	8.7000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		89.1424	89.1424	2.3900e-003	2.1900e-003	89.8561
Total	**0.0383**	**0.3378**	**0.3760**	**2.3200e-003**	**0.1410**	**3.2200e-003**	**0.1443**	**0.0378**	**3.0700e-003**	**0.0409**		**249.6124**	**249.6124**	**0.0105**	**0.0277**	**258.1329**

3.3 Grading and Excavation for Pads Phase 1 - 2024

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					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.7218	8.0379	9.0750	0.0180		0.2836	0.2836		0.2609	0.2609		1,742.4746	1,742.4746	0.5636		1,756.5634
Total	**0.7218**	**8.0379**	**9.0750**	**0.0180**	**0.5712**	**0.2836**	**0.8548**	**0.0635**	**0.2609**	**0.3243**		**1,742.4746**	**1,742.4746**	**0.5636**		**1,756.5634**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading and Excavation for Pads Phase 1 - 2024

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	0.0816	4.7289	1.3286	0.0214	0.6378	0.0407	0.6786	0.1748	0.0390	0.2138		2,369.0068	2,369.0068	0.1252	0.3770	2,484.4882
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
Worker	0.0771	0.0458	0.6746	2.1100e-003	0.2464	1.2600e-003	0.2477	0.0654	1.1600e-003	0.0665		217.2473	217.2473	5.4300e-003	5.1300e-003	218.9111
Total	**0.1587**	**4.7747**	**2.0032**	**0.0235**	**0.8843**	**0.0420**	**0.9263**	**0.2402**	**0.0401**	**0.2803**		**2,586.2542**	**2,586.2542**	**0.1307**	**0.3821**	**2,703.3992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.7218	8.0379	9.0750	0.0180		0.2836	0.2836		0.2609	0.2609	0.0000	1,742.4746	1,742.4746	0.5636		1,756.5634
Total	**0.7218**	**8.0379**	**9.0750**	**0.0180**	**0.5712**	**0.2836**	**0.8548**	**0.0635**	**0.2609**	**0.3243**	**0.0000**	**1,742.4746**	**1,742.4746**	**0.5636**		**1,756.5634**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading and Excavation for Pads Phase 1 - 2024

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	0.0816	4.7289	1.3286	0.0214	0.6378	0.0407	0.6786	0.1748	0.0390	0.2138		2,369.0068	2,369.0068	0.1252	0.3770	2,484.4882
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
Worker	0.0771	0.0458	0.6746	2.1100e-003	0.2464	1.2600e-003	0.2477	0.0654	1.1600e-003	0.0665		217.2473	217.2473	5.4300e-003	5.1300e-003	218.9111
Total	**0.1587**	**4.7747**	**2.0032**	**0.0235**	**0.8843**	**0.0420**	**0.9263**	**0.2402**	**0.0401**	**0.2803**		**2,586.2542**	**2,586.2542**	**0.1307**	**0.3821**	**2,703.3992**

3.4 Building Construction and concrete placement Phase 1 - 2024

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	0.9755	9.5870	14.4364	0.0229		0.3500	0.3500		0.3351	0.3351		2,151.5298	2,151.5298	0.4699		2,163.2760
Total	**0.9755**	**9.5870**	**14.4364**	**0.0229**		**0.3500**	**0.3500**		**0.3351**	**0.3351**		**2,151.5298**	**2,151.5298**	**0.4699**		**2,163.2760**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2024

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
Vendor	0.0115	0.4258	0.1509	2.0100e-003	0.0677	2.6200e-003	0.0704	0.0195	2.5100e-003	0.0220		217.1931	217.1931	6.8500e-003	0.0315	226.7353
Worker	0.1798	0.1069	1.5741	4.9100e-003	0.5750	2.9500e-003	0.5780	0.1525	2.7100e-003	0.1552		506.9105	506.9105	0.0127	0.0120	510.7925
Total	**0.1913**	**0.5327**	**1.7250**	**6.9200e-003**	**0.6428**	**5.5700e-003**	**0.6483**	**0.1720**	**5.2200e-003**	**0.1773**		**724.1035**	**724.1035**	**0.0195**	**0.0434**	**737.5278**

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	0.9755	9.5870	14.4364	0.0229		0.3500	0.3500		0.3351	0.3351	0.0000	2,151.5298	2,151.5298	0.4699		2,163.2760
Total	**0.9755**	**9.5870**	**14.4364**	**0.0229**		**0.3500**	**0.3500**		**0.3351**	**0.3351**	**0.0000**	**2,151.5298**	**2,151.5298**	**0.4699**		**2,163.2760**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2024

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
Vendor	0.0115	0.4258	0.1509	2.0100e-003	0.0677	2.6200e-003	0.0704	0.0195	2.5100e-003	0.0220		217.1931	217.1931	6.8500e-003	0.0315	226.7353
Worker	0.1798	0.1069	1.5741	4.9100e-003	0.5750	2.9500e-003	0.5780	0.1525	2.7100e-003	0.1552		506.9105	506.9105	0.0127	0.0120	510.7925
Total	**0.1913**	**0.5327**	**1.7250**	**6.9200e-003**	**0.6428**	**5.5700e-003**	**0.6483**	**0.1720**	**5.2200e-003**	**0.1773**		**724.1035**	**724.1035**	**0.0195**	**0.0434**	**737.5278**

3.4 Building Construction and concrete placement Phase 1 - 2025

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	0.9174	9.1308	14.4032	0.0229		0.3067	0.3067		0.2935	0.2935		2,151.3511	2,151.3511	0.4661		2,163.0045
Total	**0.9174**	**9.1308**	**14.4032**	**0.0229**		**0.3067**	**0.3067**		**0.2935**	**0.2935**		**2,151.3511**	**2,151.3511**	**0.4661**		**2,163.0045**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2025

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
Vendor	0.0112	0.4216	0.1483	1.9700e-003	0.0677	2.6200e-003	0.0703	0.0195	2.5000e-003	0.0220		213.0498	213.0498	7.0300e-003	0.0308	222.4130
Worker	0.1694	0.0969	1.4767	4.7500e-003	0.5750	2.8200e-003	0.5779	0.1525	2.6000e-003	0.1551		494.4830	494.4830	0.0115	0.0112	498.1183
Total	**0.1806**	**0.5184**	**1.6250**	**6.7200e-003**	**0.6428**	**5.4400e-003**	**0.6482**	**0.1720**	**5.1000e-003**	**0.1771**		**707.5328**	**707.5328**	**0.0186**	**0.0421**	**720.5313**

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	0.9174	9.1308	14.4032	0.0229		0.3067	0.3067		0.2935	0.2935	0.0000	2,151.3511	2,151.3511	0.4661		2,163.0045
Total	**0.9174**	**9.1308**	**14.4032**	**0.0229**		**0.3067**	**0.3067**		**0.2935**	**0.2935**	**0.0000**	**2,151.3511**	**2,151.3511**	**0.4661**		**2,163.0045**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2025

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
Vendor	0.0112	0.4216	0.1483	1.9700e-003	0.0677	2.6200e-003	0.0703	0.0195	2.5000e-003	0.0220		213.0498	213.0498	7.0300e-003	0.0308	222.4130
Worker	0.1694	0.0969	1.4767	4.7500e-003	0.5750	2.8200e-003	0.5779	0.1525	2.6000e-003	0.1551		494.4830	494.4830	0.0115	0.0112	498.1183
Total	**0.1806**	**0.5184**	**1.6250**	**6.7200e-003**	**0.6428**	**5.4400e-003**	**0.6482**	**0.1720**	**5.1000e-003**	**0.1771**		**707.5328**	**707.5328**	**0.0186**	**0.0421**	**720.5313**

3.5 Crane Use to set Units Phase 1 - 2024

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	0.2903	3.0663	1.5529	5.0500e-003		0.1276	0.1276		0.1174	0.1174		488.9564	488.9564	0.1581		492.9099
Total	**0.2903**	**3.0663**	**1.5529**	**5.0500e-003**		**0.1276**	**0.1276**		**0.1174**	**0.1174**		**488.9564**	**488.9564**	**0.1581**		**492.9099**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2024

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
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
Worker	5.1400e-003	3.0600e-003	0.0450	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		14.4832	14.4832	3.6000e-004	3.4000e-004	14.5941
Total	**5.1400e-003**	**3.0600e-003**	**0.0450**	**1.4000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**14.4832**	**14.4832**	**3.6000e-004**	**3.4000e-004**	**14.5941**

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	0.2903	3.0663	1.5529	5.0500e-003		0.1276	0.1276		0.1174	0.1174	0.0000	488.9564	488.9564	0.1581		492.9099
Total	**0.2903**	**3.0663**	**1.5529**	**5.0500e-003**		**0.1276**	**0.1276**		**0.1174**	**0.1174**	**0.0000**	**488.9564**	**488.9564**	**0.1581**		**492.9099**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2024

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
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
Worker	5.1400e-003	3.0600e-003	0.0450	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		14.4832	14.4832	3.6000e-004	3.4000e-004	14.5941
Total	**5.1400e-003**	**3.0600e-003**	**0.0450**	**1.4000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**14.4832**	**14.4832**	**3.6000e-004**	**3.4000e-004**	**14.5941**

3.5 Crane Use to set Units Phase 1 - 2025

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084		488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**		**488.9730**	**488.9730**	**0.1581**		**492.9266**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2025

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
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
Worker	4.8400e-003	2.7700e-003	0.0422	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.1281	14.1281	3.3000e-004	3.2000e-004	14.2320
Total	**4.8400e-003**	**2.7700e-003**	**0.0422**	**1.4000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**14.1281**	**14.1281**	**3.3000e-004**	**3.2000e-004**	**14.2320**

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084	0.0000	488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**	**0.0000**	**488.9730**	**488.9730**	**0.1581**		**492.9266**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2025

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
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
Worker	4.8400e-003	2.7700e-003	0.0422	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.1281	14.1281	3.3000e-004	3.2000e-004	14.2320
Total	**4.8400e-003**	**2.7700e-003**	**0.0422**	**1.4000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**14.1281**	**14.1281**	**3.3000e-004**	**3.2000e-004**	**14.2320**

3.6 Grading and Excavation for Pads Phase 2 - 2026

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					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.6561	7.0546	8.9911	0.0180		0.2433	0.2433		0.2238	0.2238		1,742.0024	1,742.0024	0.5634		1,756.0873
Total	**0.6561**	**7.0546**	**8.9911**	**0.0180**	**0.5712**	**0.2433**	**0.8145**	**0.0635**	**0.2238**	**0.2873**		**1,742.0024**	**1,742.0024**	**0.5634**		**1,756.0873**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Grading and Excavation for Pads Phase 2 - 2026

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	0.0797	4.5930	1.3656	0.0204	0.6379	0.0402	0.6780	0.1748	0.0385	0.2133		2,272.5073	2,272.5073	0.1331	0.3622	2,383.7746
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
Worker	0.0686	0.0379	0.5972	1.9700e-003	0.2464	1.1500e-003	0.2476	0.0654	1.0600e-003	0.0664		206.9673	206.9673	4.5200e-003	4.5500e-003	208.4364
Total	**0.1483**	**4.6309**	**1.9628**	**0.0224**	**0.8843**	**0.0413**	**0.9256**	**0.2402**	**0.0395**	**0.2797**		**2,479.4745**	**2,479.4745**	**0.1376**	**0.3668**	**2,592.2110**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.6561	7.0546	8.9911	0.0180		0.2433	0.2433		0.2238	0.2238	0.0000	1,742.0024	1,742.0024	0.5634		1,756.0873
Total	**0.6561**	**7.0546**	**8.9911**	**0.0180**	**0.5712**	**0.2433**	**0.8145**	**0.0635**	**0.2238**	**0.2873**	**0.0000**	**1,742.0024**	**1,742.0024**	**0.5634**		**1,756.0873**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Grading and Excavation for Pads Phase 2 - 2026

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	0.0797	4.5930	1.3656	0.0204	0.6379	0.0402	0.6780	0.1748	0.0385	0.2133		2,272.5073	2,272.5073	0.1331	0.3622	2,383.7746
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
Worker	0.0686	0.0379	0.5972	1.9700e-003	0.2464	1.1500e-003	0.2476	0.0654	1.0600e-003	0.0664		206.9673	206.9673	4.5200e-003	4.5500e-003	208.4364
Total	**0.1483**	**4.6309**	**1.9628**	**0.0224**	**0.8843**	**0.0413**	**0.9256**	**0.2402**	**0.0395**	**0.2797**		**2,479.4745**	**2,479.4745**	**0.1376**	**0.3668**	**2,592.2110**

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869		2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**		**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

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
Vendor	0.0109	0.4170	0.1465	1.9300e-003	0.0677	2.6000e-003	0.0703	0.0195	2.4800e-003	0.0220		208.9797	208.9797	7.2000e-003	0.0302	218.1679
Worker	0.1601	0.0884	1.3935	4.6000e-003	0.5750	2.6900e-003	0.5777	0.1525	2.4700e-003	0.1550		482.9236	482.9236	0.0106	0.0106	486.3516
Total	**0.1710**	**0.5055**	**1.5400**	**6.5300e-003**	**0.6428**	**5.2900e-003**	**0.6480**	**0.1720**	**4.9500e-003**	**0.1770**		**691.9033**	**691.9033**	**0.0178**	**0.0409**	**704.5195**

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	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869	0.0000	2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**	**0.0000**	**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

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
Vendor	0.0109	0.4170	0.1465	1.9300e-003	0.0677	2.6000e-003	0.0703	0.0195	2.4800e-003	0.0220		208.9797	208.9797	7.2000e-003	0.0302	218.1679
Worker	0.1601	0.0884	1.3935	4.6000e-003	0.5750	2.6900e-003	0.5777	0.1525	2.4700e-003	0.1550		482.9236	482.9236	0.0106	0.0106	486.3516
Total	**0.1710**	**0.5055**	**1.5400**	**6.5300e-003**	**0.6428**	**5.2900e-003**	**0.6480**	**0.1720**	**4.9500e-003**	**0.1770**		**691.9033**	**691.9033**	**0.0178**	**0.0409**	**704.5195**

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869		2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**		**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

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
Vendor	0.0106	0.4126	0.1451	1.8900e-003	0.0677	2.5700e-003	0.0703	0.0195	2.4600e-003	0.0220		204.6565	204.6565	7.3600e-003	0.0296	213.6608
Worker	0.1514	0.0812	1.3219	4.4600e-003	0.5750	2.5300e-003	0.5776	0.1525	2.3300e-003	0.1549		472.4702	472.4702	9.7000e-003	0.0101	475.7212
Total	**0.1620**	**0.4938**	**1.4669**	**6.3500e-003**	**0.6428**	**5.1000e-003**	**0.6479**	**0.1720**	**4.7900e-003**	**0.1768**		**677.1268**	**677.1268**	**0.0171**	**0.0397**	**689.3821**

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	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869	0.0000	2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**	**0.0000**	**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

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
Vendor	0.0106	0.4126	0.1451	1.8900e-003	0.0677	2.5700e-003	0.0703	0.0195	2.4600e-003	0.0220		204.6565	204.6565	7.3600e-003	0.0296	213.6608
Worker	0.1514	0.0812	1.3219	4.4600e-003	0.5750	2.5300e-003	0.5776	0.1525	2.3300e-003	0.1549		472.4702	472.4702	9.7000e-003	0.0101	475.7212
Total	**0.1620**	**0.4938**	**1.4669**	**6.3500e-003**	**0.6428**	**5.1000e-003**	**0.6479**	**0.1720**	**4.7900e-003**	**0.1768**		**677.1268**	**677.1268**	**0.0171**	**0.0397**	**689.3821**

3.8 Crane Use to set Units Phase 2 - 2027

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084		488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**		**488.9730**	**488.9730**	**0.1581**		**492.9266**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Crane Use to set Units Phase 2 - 2027

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
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
Worker	4.3300e-003	2.3200e-003	0.0378	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4200e-003		13.4992	13.4992	2.8000e-004	2.9000e-004	13.5920
Total	**4.3300e-003**	**2.3200e-003**	**0.0378**	**1.3000e-004**	**0.0164**	**7.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4200e-003**		**13.4992**	**13.4992**	**2.8000e-004**	**2.9000e-004**	**13.5920**

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084	0.0000	488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**	**0.0000**	**488.9730**	**488.9730**	**0.1581**		**492.9266**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Crane Use to set Units Phase 2 - 2027

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
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
Worker	4.3300e-003	2.3200e-003	0.0378	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4200e-003		13.4992	13.4992	2.8000e-004	2.9000e-004	13.5920
Total	**4.3300e-003**	**2.3200e-003**	**0.0378**	**1.3000e-004**	**0.0164**	**7.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4200e-003**		**13.4992**	**13.4992**	**2.8000e-004**	**2.9000e-004**	**13.5920**

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0123	0.0129	0.1168	2.7000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		27.8321	27.8321	1.7200e-003	1.1000e-003	28.2024
Unmitigated	0.0123	0.0129	0.1168	2.7000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		27.8321	27.8321	1.7200e-003	1.1000e-003	28.2024

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	4.00	0.00	0.00	9,880	9,880
Total	4.00	0.00	0.00	9,880	9,880

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Escondido Goal Line BESS - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**1.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**1.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Escondido Goal Line BESS

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	4.50	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project would install battery storage containers and operations onsite will be remote

Construction Phase - Project would install fully constructed containers shipped to the site on trucks. Cranes lift the units off and set them on either a concrete pad or Steel colums driven into the ground.

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CE

Off-road Equipment - ce

Off-road Equipment - ce

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Worker and vendor trips per day for concrete placement added. Trips added for crane operator

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - 4 trips per day

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Water And Wastewater - Basic onsite landscaping will be watered 100 gal/day

Solid Waste - solid waste is not likely though 1 ton per year was assumed. Systems will be remotly managed.

Construction Off-road Equipment Mitigation - Tier 3 equipment with DPF

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	245.00
tblConstructionPhase	NumDays	230.00	40.00
tblConstructionPhase	NumDays	230.00	245.00
tblConstructionPhase	NumDays	230.00	40.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	8.00	60.00
tblConstructionPhase	NumDays	8.00	60.00
tblGrading	MaterialImported	0.00	17,500.00
tblGrading	MaterialImported	0.00	17,500.00
tblLandUse	LotAcreage	0.00	4.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Grading and Excavation for Pads Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	0.00	70.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	0.00	70.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	4.00

2.0 Emissions Summary

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	2.1063	20.9827	19.1195	0.0390	0.6726	0.9310	1.6036	0.1183	0.8566	0.9749	0.0000	3,800.1591	3,800.1591	1.1605	0.0279	3,837.4903
2024	1.4780	13.2206	17.6864	0.0414	1.4555	0.4833	1.7811	0.3037	0.4578	0.6341	0.0000	4,319.1571	4,319.1571	0.6943	0.3829	4,450.6325
2025	1.3918	12.4541	17.5239	0.0345	0.6592	0.4301	1.0893	0.1764	0.4070	0.5834	0.0000	3,334.4622	3,334.4622	0.6440	0.0434	3,363.4917
2026	1.4714	12.9844	21.0286	0.0403	1.4555	0.4100	1.7402	0.3037	0.3918	0.5670	0.0000	4,212.4807	4,212.4807	0.7010	0.3675	4,339.5265
2027	1.7404	15.7463	22.5155	0.0419	0.6592	0.5277	1.1869	0.1764	0.5001	0.6765	0.0000	4,021.3362	4,021.3362	0.8267	0.0409	4,054.1883
Maximum	**2.1063**	**20.9827**	**22.5155**	**0.0419**	**1.4555**	**0.9310**	**1.7811**	**0.3037**	**0.8566**	**0.9749**	**0.0000**	**4,319.1571**	**4,319.1571**	**1.1605**	**0.3829**	**4,450.6325**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

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					
2023	2.1063	20.9827	19.1195	0.0390	0.6726	0.9310	1.6036	0.1183	0.8566	0.9749	0.0000	3,800.1591	3,800.1591	1.1605	0.0279	3,837.4903
2024	1.4780	13.2206	17.6864	0.0414	1.4555	0.4833	1.7811	0.3037	0.4578	0.6341	0.0000	4,319.1571	4,319.1571	0.6943	0.3829	4,450.6325
2025	1.3918	12.4541	17.5239	0.0345	0.6592	0.4301	1.0893	0.1764	0.4070	0.5834	0.0000	3,334.4622	3,334.4622	0.6440	0.0434	3,363.4917
2026	1.4714	12.9844	21.0286	0.0403	1.4555	0.4100	1.7402	0.3037	0.3918	0.5670	0.0000	4,212.4807	4,212.4807	0.7010	0.3675	4,339.5265
2027	1.7404	15.7463	22.5155	0.0419	0.6592	0.5277	1.1869	0.1764	0.5001	0.6765	0.0000	4,021.3362	4,021.3362	0.8267	0.0409	4,054.1883
Maximum	**2.1063**	**20.9827**	**22.5155**	**0.0419**	**1.4555**	**0.9310**	**1.7811**	**0.3037**	**0.8566**	**0.9749**	**0.0000**	**4,319.1571**	**4,319.1571**	**1.1605**	**0.3829**	**4,450.6325**

	ROG	NOx	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**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0120	0.0140	0.1190	2.5000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		26.6155	26.6155	1.8100e-003	1.1500e-003	27.0047
Total	**0.0120**	**0.0140**	**0.1191**	**2.5000e-004**	**0.0291**	**2.0000e-004**	**0.0293**	**7.7600e-003**	**1.8000e-004**	**7.9400e-003**		**26.6157**	**26.6157**	**1.8100e-003**	**1.1500e-003**	**27.0049**

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	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0120	0.0140	0.1190	2.5000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		26.6155	26.6155	1.8100e-003	1.1500e-003	27.0047
Total	**0.0120**	**0.0140**	**0.1191**	**2.5000e-004**	**0.0291**	**2.0000e-004**	**0.0293**	**7.7600e-003**	**1.8000e-004**	**7.9400e-003**		**26.6157**	**26.6157**	**1.8100e-003**	**1.1500e-003**	**27.0049**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	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 Phase 1 and Phase 2 Area	Demolition	6/1/2023	12/27/2023	5	150	
2	Grading and Excavation for Pads Phase 1	Grading	1/1/2024	3/22/2024	5	60	
3	Building Construction and concrete placement Phase 1	Building Construction	3/23/2024	2/28/2025	5	245	
4	Crane Use to set Units Phase 1	Building Construction	12/1/2024	1/24/2025	5	40	
5	Grading and Excavation for Pads Phase 2	Grading	2/1/2026	4/24/2026	5	60	
6	Buiding Construction including offsite work and concrete placement Phase 2	Building Construction	4/25/2026	4/2/2027	5	245	
7	Crane Use to set Units Phase 2	Building Construction	1/15/2027	3/11/2027	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 30

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition Phase 1 and Phase 2 Area	Excavators	3	8.00	158	0.38
Demolition Phase 1 and Phase 2 Area	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Phase 1 and Phase 2 Area	Skid Steer Loaders	2	8.00	65	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading and Excavation for Pads Phase 1	Excavators	1	8.00	158	0.38
Grading and Excavation for Pads Phase 1	Graders	1	8.00	187	0.41
Grading and Excavation for Pads Phase 1	Skid Steer Loaders	3	8.00	65	0.37
Building Construction and concrete placement Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction and concrete placement Phase 1	Plate Compactors	1	4.00	8	0.43
Building Construction and concrete placement Phase 1	Rollers	1	4.00	80	0.38
Building Construction and concrete placement Phase 1	Rough Terrain Forklifts	3	8.00	100	0.40
Building Construction and concrete placement Phase 1	Skid Steer Loaders	1	7.00	65	0.37
Building Construction and concrete placement Phase 1	Welders	1	8.00	46	0.45
Crane Use to set Units Phase 1	Cranes	1	7.00	231	0.29
Grading and Excavation for Pads Phase 2	Excavators	1	8.00	158	0.38
Grading and Excavation for Pads Phase 2	Graders	1	8.00	187	0.41
Grading and Excavation for Pads Phase 2	Skid Steer Loaders	3	8.00	65	0.37
Buiding Construction including offsite work and concrete placement Phase 2	Generator Sets	1	8.00	84	0.74
Buiding Construction including offsite work and concrete placement Phase 2	Plate Compactors	1	4.00	8	0.43
Buiding Construction including offsite work and concrete placement Phase 2	Rollers	1	4.00	80	0.38
Buiding Construction including offsite work and concrete placement Phase 2	Rough Terrain Forklifts	4	8.00	100	0.40
Buiding Construction including offsite work and concrete placement Phase 2	Skid Steer Loaders	2	7.00	65	0.37
Buiding Construction including offsite work and concrete placement Phase 2	Welders	2	8.00	46	0.45
Crane Use to set Units Phase 2	Cranes	1	7.00	231	0.29

Trips and VMT

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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 Phase 1 and Phase 2 Area	7	12.00	0.00	364.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Excavation for Pads P	5	30.00	0.00	2,188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction and concrete placeme	8	70.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Crane Use to set Units Phase 1	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Excavation for Pads P	5	30.00	0.00	2,188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Buiding Construction including offsite work	11	70.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Crane Use to set Units Phase 2	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition Phase 1 and Phase 2 Area - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5315	0.0000	0.5315	0.0805	0.0000	0.0805			0.0000			0.0000
Off-Road	2.0655	20.6295	18.7568	0.0367		0.9278	0.9278		0.8535	0.8535		3,555.2908	3,555.2908	1.1499		3,584.0371
Total	**2.0655**	**20.6295**	**18.7568**	**0.0367**	**0.5315**	**0.9278**	**1.4593**	**0.0805**	**0.8535**	**0.9340**		**3,555.2908**	**3,555.2908**	**1.1499**		**3,584.0371**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition Phase 1 and Phase 2 Area - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.1700e-003	0.3303	0.0883	1.4500e-003	0.0424	2.7000e-003	0.0451	0.0116	2.5800e-003	0.0142		160.6259	160.6259	8.0700e-003	0.0255	168.4399
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
Worker	0.0356	0.0229	0.2744	8.2000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		84.2424	84.2424	2.5400e-003	2.3700e-003	85.0133
Total	**0.0408**	**0.3532**	**0.3627**	**2.2700e-003**	**0.1410**	**3.2300e-003**	**0.1443**	**0.0378**	**3.0700e-003**	**0.0409**		**244.8683**	**244.8683**	**0.0106**	**0.0279**	**253.4532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5315	0.0000	0.5315	0.0805	0.0000	0.0805			0.0000			0.0000
Off-Road	2.0655	20.6295	18.7568	0.0367		0.9278	0.9278		0.8535	0.8535	0.0000	3,555.2908	3,555.2908	1.1499		3,584.0371
Total	**2.0655**	**20.6295**	**18.7568**	**0.0367**	**0.5315**	**0.9278**	**1.4593**	**0.0805**	**0.8535**	**0.9340**	**0.0000**	**3,555.2908**	**3,555.2908**	**1.1499**		**3,584.0371**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition Phase 1 and Phase 2 Area - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.1700e-003	0.3303	0.0883	1.4500e-003	0.0424	2.7000e-003	0.0451	0.0116	2.5800e-003	0.0142		160.6259	160.6259	8.0700e-003	0.0255	168.4399
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
Worker	0.0356	0.0229	0.2744	8.2000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		84.2424	84.2424	2.5400e-003	2.3700e-003	85.0133
Total	**0.0408**	**0.3532**	**0.3627**	**2.2700e-003**	**0.1410**	**3.2300e-003**	**0.1443**	**0.0378**	**3.0700e-003**	**0.0409**		**244.8683**	**244.8683**	**0.0106**	**0.0279**	**253.4532**

3.3 Grading and Excavation for Pads Phase 1 - 2024

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					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.7218	8.0379	9.0750	0.0180		0.2836	0.2836		0.2609	0.2609		1,742.4746	1,742.4746	0.5636		1,756.5634
Total	**0.7218**	**8.0379**	**9.0750**	**0.0180**	**0.5712**	**0.2836**	**0.8548**	**0.0635**	**0.2609**	**0.3243**		**1,742.4746**	**1,742.4746**	**0.5636**		**1,756.5634**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading and Excavation for Pads Phase 1 - 2024

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	0.0767	4.9200	1.3450	0.0214	0.6378	0.0408	0.6786	0.1748	0.0390	0.2139		2,371.3503	2,371.3503	0.1249	0.3774	2,486.9398
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
Worker	0.0838	0.0515	0.6423	1.9900e-003	0.2464	1.2600e-003	0.2477	0.0654	1.1600e-003	0.0665		205.3322	205.3322	5.7900e-003	5.5400e-003	207.1293
Total	**0.1604**	**4.9715**	**1.9873**	**0.0234**	**0.8843**	**0.0421**	**0.9263**	**0.2402**	**0.0402**	**0.2804**		**2,576.6826**	**2,576.6826**	**0.1307**	**0.3829**	**2,694.0691**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.7218	8.0379	9.0750	0.0180		0.2836	0.2836		0.2609	0.2609	0.0000	1,742.4746	1,742.4746	0.5636		1,756.5634
Total	**0.7218**	**8.0379**	**9.0750**	**0.0180**	**0.5712**	**0.2836**	**0.8548**	**0.0635**	**0.2609**	**0.3243**	**0.0000**	**1,742.4746**	**1,742.4746**	**0.5636**		**1,756.5634**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading and Excavation for Pads Phase 1 - 2024

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	0.0767	4.9200	1.3450	0.0214	0.6378	0.0408	0.6786	0.1748	0.0390	0.2139		2,371.3503	2,371.3503	0.1249	0.3774	2,486.9398
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
Worker	0.0838	0.0515	0.6423	1.9900e-003	0.2464	1.2600e-003	0.2477	0.0654	1.1600e-003	0.0665		205.3322	205.3322	5.7900e-003	5.5400e-003	207.1293
Total	**0.1604**	**4.9715**	**1.9873**	**0.0234**	**0.8843**	**0.0421**	**0.9263**	**0.2402**	**0.0402**	**0.2804**		**2,576.6826**	**2,576.6826**	**0.1307**	**0.3829**	**2,694.0691**

3.4 Building Construction and concrete placement Phase 1 - 2024

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	0.9755	9.5870	14.4364	0.0229		0.3500	0.3500		0.3351	0.3351		2,151.5298	2,151.5298	0.4699		2,163.2760
Total	**0.9755**	**9.5870**	**14.4364**	**0.0229**		**0.3500**	**0.3500**		**0.3351**	**0.3351**		**2,151.5298**	**2,151.5298**	**0.4699**		**2,163.2760**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2024

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
Vendor	0.0112	0.4437	0.1555	2.0100e-003	0.0677	2.6400e-003	0.0704	0.0195	2.5200e-003	0.0220		217.5107	217.5107	6.8200e-003	0.0315	227.0738
Worker	0.1955	0.1203	1.4987	4.6400e-003	0.5750	2.9500e-003	0.5780	0.1525	2.7100e-003	0.1552		479.1086	479.1086	0.0135	0.0129	483.3017
Total	**0.2066**	**0.5640**	**1.6542**	**6.6500e-003**	**0.6428**	**5.5900e-003**	**0.6483**	**0.1720**	**5.2300e-003**	**0.1773**		**696.6193**	**696.6193**	**0.0203**	**0.0445**	**710.3756**

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	0.9755	9.5870	14.4364	0.0229		0.3500	0.3500		0.3351	0.3351	0.0000	2,151.5298	2,151.5298	0.4699		2,163.2760
Total	**0.9755**	**9.5870**	**14.4364**	**0.0229**		**0.3500**	**0.3500**		**0.3351**	**0.3351**	**0.0000**	**2,151.5298**	**2,151.5298**	**0.4699**		**2,163.2760**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2024

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
Vendor	0.0112	0.4437	0.1555	2.0100e-003	0.0677	2.6400e-003	0.0704	0.0195	2.5200e-003	0.0220		217.5107	217.5107	6.8200e-003	0.0315	227.0738
Worker	0.1955	0.1203	1.4987	4.6400e-003	0.5750	2.9500e-003	0.5780	0.1525	2.7100e-003	0.1552		479.1086	479.1086	0.0135	0.0129	483.3017
Total	**0.2066**	**0.5640**	**1.6542**	**6.6500e-003**	**0.6428**	**5.5900e-003**	**0.6483**	**0.1720**	**5.2300e-003**	**0.1773**		**696.6193**	**696.6193**	**0.0203**	**0.0445**	**710.3756**

3.4 Building Construction and concrete placement Phase 1 - 2025

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	0.9174	9.1308	14.4032	0.0229		0.3067	0.3067		0.2935	0.2935		2,151.3511	2,151.3511	0.4661		2,163.0045
Total	**0.9174**	**9.1308**	**14.4032**	**0.0229**		**0.3067**	**0.3067**		**0.2935**	**0.2935**		**2,151.3511**	**2,151.3511**	**0.4661**		**2,163.0045**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2025

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
Vendor	0.0108	0.4394	0.1530	1.9700e-003	0.0677	2.6300e-003	0.0704	0.0195	2.5100e-003	0.0220		213.3688	213.3688	6.9900e-003	0.0309	222.7524
Worker	0.1846	0.1089	1.4081	4.4900e-003	0.5750	2.8200e-003	0.5779	0.1525	2.6000e-003	0.1551		467.4146	467.4146	0.0123	0.0121	471.3413
Total	**0.1954**	**0.5483**	**1.5611**	**6.4600e-003**	**0.6428**	**5.4500e-003**	**0.6482**	**0.1720**	**5.1100e-003**	**0.1771**		**680.7834**	**680.7834**	**0.0193**	**0.0430**	**694.0937**

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	0.9174	9.1308	14.4032	0.0229		0.3067	0.3067		0.2935	0.2935	0.0000	2,151.3511	2,151.3511	0.4661		2,163.0045
Total	**0.9174**	**9.1308**	**14.4032**	**0.0229**		**0.3067**	**0.3067**		**0.2935**	**0.2935**	**0.0000**	**2,151.3511**	**2,151.3511**	**0.4661**		**2,163.0045**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2025

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
Vendor	0.0108	0.4394	0.1530	1.9700e-003	0.0677	2.6300e-003	0.0704	0.0195	2.5100e-003	0.0220		213.3688	213.3688	6.9900e-003	0.0309	222.7524
Worker	0.1846	0.1089	1.4081	4.4900e-003	0.5750	2.8200e-003	0.5779	0.1525	2.6000e-003	0.1551		467.4146	467.4146	0.0123	0.0121	471.3413
Total	**0.1954**	**0.5483**	**1.5611**	**6.4600e-003**	**0.6428**	**5.4500e-003**	**0.6482**	**0.1720**	**5.1100e-003**	**0.1771**		**680.7834**	**680.7834**	**0.0193**	**0.0430**	**694.0937**

3.5 Crane Use to set Units Phase 1 - 2024

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	0.2903	3.0663	1.5529	5.0500e-003		0.1276	0.1276		0.1174	0.1174		488.9564	488.9564	0.1581		492.9099
Total	**0.2903**	**3.0663**	**1.5529**	**5.0500e-003**		**0.1276**	**0.1276**		**0.1174**	**0.1174**		**488.9564**	**488.9564**	**0.1581**		**492.9099**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2024

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
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
Worker	5.5800e-003	3.4400e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		13.6888	13.6888	3.9000e-004	3.7000e-004	13.8086
Total	**5.5800e-003**	**3.4400e-003**	**0.0428**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**13.6888**	**13.6888**	**3.9000e-004**	**3.7000e-004**	**13.8086**

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	0.2903	3.0663	1.5529	5.0500e-003		0.1276	0.1276		0.1174	0.1174	0.0000	488.9564	488.9564	0.1581		492.9099
Total	**0.2903**	**3.0663**	**1.5529**	**5.0500e-003**		**0.1276**	**0.1276**		**0.1174**	**0.1174**	**0.0000**	**488.9564**	**488.9564**	**0.1581**		**492.9099**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2024

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
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
Worker	5.5800e-003	3.4400e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		13.6888	13.6888	3.9000e-004	3.7000e-004	13.8086
Total	**5.5800e-003**	**3.4400e-003**	**0.0428**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**13.6888**	**13.6888**	**3.9000e-004**	**3.7000e-004**	**13.8086**

3.5 Crane Use to set Units Phase 1 - 2025

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084		488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**		**488.9730**	**488.9730**	**0.1581**		**492.9266**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2025

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
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
Worker	5.2700e-003	3.1100e-003	0.0402	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.3547	13.3547	3.5000e-004	3.5000e-004	13.4669
Total	**5.2700e-003**	**3.1100e-003**	**0.0402**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**13.3547**	**13.3547**	**3.5000e-004**	**3.5000e-004**	**13.4669**

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084	0.0000	488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**	**0.0000**	**488.9730**	**488.9730**	**0.1581**		**492.9266**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2025

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
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
Worker	5.2700e-003	3.1100e-003	0.0402	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.3547	13.3547	3.5000e-004	3.5000e-004	13.4669
Total	**5.2700e-003**	**3.1100e-003**	**0.0402**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**13.3547**	**13.3547**	**3.5000e-004**	**3.5000e-004**	**13.4669**

3.6 Grading and Excavation for Pads Phase 2 - 2026

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					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.6561	7.0546	8.9911	0.0180		0.2433	0.2433		0.2238	0.2238		1,742.0024	1,742.0024	0.5634		1,756.0873
Total	**0.6561**	**7.0546**	**8.9911**	**0.0180**	**0.5712**	**0.2433**	**0.8145**	**0.0635**	**0.2238**	**0.2873**		**1,742.0024**	**1,742.0024**	**0.5634**		**1,756.0873**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Grading and Excavation for Pads Phase 2 - 2026

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	0.0747	4.7797	1.3817	0.0204	0.6379	0.0403	0.6781	0.1748	0.0385	0.2134		2,274.8253	2,274.8253	0.1328	0.3626	2,386.1992
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
Worker	0.0750	0.0426	0.5701	1.8600e-003	0.2464	1.1500e-003	0.2476	0.0654	1.0600e-003	0.0664		195.6531	195.6531	4.8500e-003	4.9200e-003	197.2399
Total	**0.1497**	**4.8223**	**1.9519**	**0.0223**	**0.8843**	**0.0414**	**0.9257**	**0.2402**	**0.0396**	**0.2798**		**2,470.4784**	**2,470.4784**	**0.1376**	**0.3675**	**2,583.4391**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5712	0.0000	0.5712	0.0635	0.0000	0.0635			0.0000			0.0000
Off-Road	0.6561	7.0546	8.9911	0.0180		0.2433	0.2433		0.2238	0.2238	0.0000	1,742.0024	1,742.0024	0.5634		1,756.0873
Total	**0.6561**	**7.0546**	**8.9911**	**0.0180**	**0.5712**	**0.2433**	**0.8145**	**0.0635**	**0.2238**	**0.2873**	**0.0000**	**1,742.0024**	**1,742.0024**	**0.5634**		**1,756.0873**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Grading and Excavation for Pads Phase 2 - 2026

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	0.0747	4.7797	1.3817	0.0204	0.6379	0.0403	0.6781	0.1748	0.0385	0.2134		2,274.8253	2,274.8253	0.1328	0.3626	2,386.1992
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
Worker	0.0750	0.0426	0.5701	1.8600e-003	0.2464	1.1500e-003	0.2476	0.0654	1.0600e-003	0.0664		195.6531	195.6531	4.8500e-003	4.9200e-003	197.2399
Total	**0.1497**	**4.8223**	**1.9519**	**0.0223**	**0.8843**	**0.0414**	**0.9257**	**0.2402**	**0.0396**	**0.2798**		**2,470.4784**	**2,470.4784**	**0.1376**	**0.3675**	**2,583.4391**

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869		2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**		**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

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
Vendor	0.0105	0.4347	0.1511	1.9300e-003	0.0677	2.6100e-003	0.0703	0.0195	2.4900e-003	0.0220		209.2992	209.2992	7.1700e-003	0.0303	218.5074
Worker	0.1749	0.0994	1.3303	4.3500e-003	0.5750	2.6900e-003	0.5777	0.1525	2.4700e-003	0.1550		456.5238	456.5238	0.0113	0.0115	460.2265
Total	**0.1854**	**0.5342**	**1.4814**	**6.2800e-003**	**0.6428**	**5.3000e-003**	**0.6481**	**0.1720**	**4.9600e-003**	**0.1770**		**665.8231**	**665.8231**	**0.0185**	**0.0418**	**678.7339**

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	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869	0.0000	2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**	**0.0000**	**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

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
Vendor	0.0105	0.4347	0.1511	1.9300e-003	0.0677	2.6100e-003	0.0703	0.0195	2.4900e-003	0.0220		209.2992	209.2992	7.1700e-003	0.0303	218.5074
Worker	0.1749	0.0994	1.3303	4.3500e-003	0.5750	2.6900e-003	0.5777	0.1525	2.4700e-003	0.1550		456.5238	456.5238	0.0113	0.0115	460.2265
Total	**0.1854**	**0.5342**	**1.4814**	**6.2800e-003**	**0.6428**	**5.3000e-003**	**0.6481**	**0.1720**	**4.9600e-003**	**0.1770**		**665.8231**	**665.8231**	**0.0185**	**0.0418**	**678.7339**

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869		2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**		**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

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
Vendor	0.0102	0.4302	0.1496	1.8900e-003	0.0677	2.5800e-003	0.0703	0.0195	2.4700e-003	0.0220		204.9755	204.9755	7.3300e-003	0.0297	213.9994
Worker	0.1657	0.0913	1.2632	4.2200e-003	0.5750	2.5300e-003	0.5776	0.1525	2.3300e-003	0.1549		446.6640	446.6640	0.0104	0.0109	450.1754
Total	**0.1759**	**0.5215**	**1.4128**	**6.1100e-003**	**0.6428**	**5.1100e-003**	**0.6479**	**0.1720**	**4.8000e-003**	**0.1768**		**651.6395**	**651.6395**	**0.0177**	**0.0406**	**664.1748**

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	1.2861	12.4502	19.5472	0.0307		0.4047	0.4047		0.3869	0.3869	0.0000	2,867.9619	2,867.9619	0.6505		2,884.2248
Total	**1.2861**	**12.4502**	**19.5472**	**0.0307**		**0.4047**	**0.4047**		**0.3869**	**0.3869**	**0.0000**	**2,867.9619**	**2,867.9619**	**0.6505**		**2,884.2248**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

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
Vendor	0.0102	0.4302	0.1496	1.8900e-003	0.0677	2.5800e-003	0.0703	0.0195	2.4700e-003	0.0220		204.9755	204.9755	7.3300e-003	0.0297	213.9994
Worker	0.1657	0.0913	1.2632	4.2200e-003	0.5750	2.5300e-003	0.5776	0.1525	2.3300e-003	0.1549		446.6640	446.6640	0.0104	0.0109	450.1754
Total	**0.1759**	**0.5215**	**1.4128**	**6.1100e-003**	**0.6428**	**5.1100e-003**	**0.6479**	**0.1720**	**4.8000e-003**	**0.1768**		**651.6395**	**651.6395**	**0.0177**	**0.0406**	**664.1748**

3.8 Crane Use to set Units Phase 2 - 2027

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084		488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**		**488.9730**	**488.9730**	**0.1581**		**492.9266**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Crane Use to set Units Phase 2 - 2027

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
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
Worker	4.7400e-003	2.6100e-003	0.0361	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4200e-003		12.7618	12.7618	3.0000e-004	3.1000e-004	12.8622
Total	**4.7400e-003**	**2.6100e-003**	**0.0361**	**1.2000e-004**	**0.0164**	**7.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4200e-003**		**12.7618**	**12.7618**	**3.0000e-004**	**3.1000e-004**	**12.8622**

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	0.2737	2.7720	1.5194	5.0500e-003		0.1178	0.1178		0.1084	0.1084	0.0000	488.9730	488.9730	0.1581		492.9266
Total	**0.2737**	**2.7720**	**1.5194**	**5.0500e-003**		**0.1178**	**0.1178**		**0.1084**	**0.1084**	**0.0000**	**488.9730**	**488.9730**	**0.1581**		**492.9266**

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Crane Use to set Units Phase 2 - 2027

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
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
Worker	4.7400e-003	2.6100e-003	0.0361	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4200e-003		12.7618	12.7618	3.0000e-004	3.1000e-004	12.8622
Total	**4.7400e-003**	**2.6100e-003**	**0.0361**	**1.2000e-004**	**0.0164**	**7.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4200e-003**		**12.7618**	**12.7618**	**3.0000e-004**	**3.1000e-004**	**12.8622**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0120	0.0140	0.1190	2.5000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		26.6155	26.6155	1.8100e-003	1.1500e-003	27.0047
Unmitigated	0.0120	0.0140	0.1190	2.5000e-004	0.0291	2.0000e-004	0.0293	7.7600e-003	1.8000e-004	7.9400e-003		26.6155	26.6155	1.8100e-003	1.1500e-003	27.0047

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	4.00	0.00	0.00	9,880	9,880
Total	4.00	0.00	0.00	9,880	9,880

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**1.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**1.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Escondido Goal Line BESS - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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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October 14, 2022

Corinne Lytle Bonine
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RE: Goal Line Battery Energy Storage System Project Greenhouse Gas Screening Letter – Escondido CA

The purpose of this greenhouse gas (GHG) screening assessment, conducted for the Ramona Creelman EnerSmart Battery Energy Storage System (BESS) Project, is to determine GHG significance under CEQA specific to estimated GHG emission produced by the construction and operations of the Project. More specifically, this screening analysis is to provide documentation showing Project conformance with greenhouse gas laws and regulations in the City of Escondido.

City of Escondido General Plan

A project's adherence to the City's General Plan can be determined through demonstrating consistency with General Plan assumptions and policies. If a project would generate GHG emissions consistent with the maximum allowable buildout as defined by the General Plan, the Project would be consistent with the estimated GHG emissions for that site.

City of Escondido Climate Action Plan

The City of Escondido developed an update to the 2013 Climate Action Plan (CAP) (City of Escondido, 2020). The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. The CAP's strategies and measures are designed to reduce GHG emissions for build-out under the General Plan. The CAP does so by (1) calculating a baseline GHG emissions level as of 2012; and (2) estimating future 2030 and 2035 emissions under a business as usual standard; and (3) implementing state mandated GHG reduction targets. Measures to reduce GHG emissions for projects with land use consistent with the City's General Plan are found in the CAP. The CAP aims to achieve the following local community wide GHG reduction targets:

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- 4 percent below 2012 levels (907,000 MTCO2e) by 2020,
- 42 percent below 2012 levels (547,000 MTCO2e) by 2030, and
- 52 percent below 2012 levels (456,000 MTCO2e) by 2035.

The City has also developed a Climate Action Plan Consistency Review Checklist (CAP Consistency Checklist), in conjunction with the CAP, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. This memorandum summarizes the methodology and application of a GHG screening threshold (set at 500 metric tons carbon dioxide equivalent [$MTCO_2e$] per year) for new development projects in order to determine if a project would need to demonstrate consistency with the CAP through the CAP Consistency Checklist. The memorandum also describes application of a numerical GHG threshold (set at 2.0 $MTCO_2e$ per service population (SP) per year) for use as a supplemental method for demonstrating consistency with the CAP.

Project Location

The Project site is located at 555 Tulip Street and will utilize approximately 4.5 acres of a larger 6.5 acre parcel containing an existing electrical generation facility and a non-operational ice-rink facility (Project Site).

Project Description

Onward Energy proposes to construct, own, and operate the Goal Line Reliability Project (Project), a lithium-ion battery energy storage facility capable of delivering up to 150 MW of energy storage capacity with a 4-to-8-hour capacity rating. Achievement of 150 MW of storage would be completed in three phases with a demolition phase removing the existing ice-rink facility, Phase 1 storing 50 MW for 8 hours (400 MWh), and Phase 2 storing approximately 100 MW for 4 hours (400 MWh) or another 50 MW for 8 hours (400 MWh).

The Project consists of lithium-based battery modules installed in racks and housed within purpose-built outdoor Battery Energy Storage System (BESS) enclosures. A typical BESS enclosure will house hundreds of battery modules where each enclosure is typically capable of storing between 0.4 to 5 megawatt-hours (MWh) of energy.

The dimensions of a typical BESS enclosure vary between manufacturers and are arranged in repeated "blocks" across the site. System blocks may consist of a single enclosure, or several smaller enclosures set side-by-side to create banks of batteries with similar overall dimensions. Smaller enclosures are typically closely spaced or physically attached at the time to construction, and larger enclosures are placed in smaller groupings or individually. An enclosure grouping typically consist of 4 to 12 enclosures measuring approximately 30 feet long by 6 feet wide with

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a height of 10 feet. Smaller enclosures may be as small as 3.5 feet long by 5 feet wide by 8 feet tall while larger enclosures may measure over 50 feet long by 12 feet wide with a height of up to 20 feet. Enclosures may also be double-stacked if designed to do so, which is anticipated for this Project. However, the number, size, layout, and capabilities of each enclosure will vary depending on the battery, enclosure manufacturer design, and BESS system manufacturer(s) selected for the Project. Regardless of the system manufacturer, the Project's developed footprint and overall capability will remain substantially the same. In some instances, the battery enclosures may contain inverters which convert low voltage direct current (DC) to alternating current (AC) (and vice-versa when charging).

Energy stored in the Project will then be discharged into the grid when the energy is needed, providing important electrical reliability services to the local area. The Project will interconnect to the existing, adjacent SDGE Esco Substation via an existing overhead generation tie-line.

It is expected that between two to four staff members will visit the site weekly and as needed for maintenance and monitoring of the Project. The Project will be operated remotely with no permanent on-site operations personnel. No changes are proposed to the existing electrical generation assets or operations as part of the Project.

The Project would be constructed three parts to include demolition of the existing facilities followed by Phase 1. Phase 2 would be constructed at a later date which has not yet been established. For purposes of this analysis, Phase 2 was assumed to be constructed one year later. Operations of Phase 1 and Phase 2 are assumed as the baseline analysis.

Project construction includes demolition of the existing facility, site preparation and grading, installation of drainage and retention basins, foundations/supports, setting battery enclosures, wiring and electrical system installation, and assembly of the accessory components including inverter transformers and generation step-up transformers. Earth cut and fill are proposed to be balanced within the Project site. It is assumed up to 30,000 cubic yards (CY) of material may needed with an additional 5,000 CY of surfacing material (asphalt and/or open graded crushed rock aggregate) to complete the project.

The proposed construction schedule includes approximately 6 months for demolition and 15 months for Phase 1 construction. Phase 2 construction will follow Phase 1 and would also take roughly 15 months to complete. Additional offsite infrastructure upgrades to existing offsite facilities may be required with Phase 2 but would occur during the 15-month duration.

The facility would be unoccupied and is designed for remote operation; therefore, no septic system or sewer connection would be required. The proposed Project would be operated independent operator remotely, however, would require periodic site visits for maintenance activities along with basic landscaping and weed control. Access to the site would be expected 3 times per year. For purposes of this analysis however, it was assumed that daily weekday

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trips would be taken with up to 4 trips per day. This assumption is conservative and would be worst-case in terms of GHG emission generation.

GHG Modeling

GHGs analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O) since these are the most prevalent GHG gasses generated from projects like this. To simplify GHG calculations, both CH_4 and N_2O are converted to equivalent amounts of CO_2 and are identified as carbon dioxide equivalent (CO_2e). CO_2e is calculated by multiplying the calculated levels of CH_4 and N_2O by a Global Warming Potential (GWP). The Intergovernmental Panel on Climate Change (IPCC) as source data for GWP factors for both CH_4 and N_2O using the 100 year periods of 25, 298 respectively (IPCC, 2007).

GHGs related to construction and daily operations were calculated using the latest CalEEMod 2020.4.0 GHG model. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project. The CalEEMod input/output model is shown in ***Attachment A*** to this report. The model was manually updated to include 4 trips per day to the site. This is not expected but was done to provide conservative GHG estimates.

GHG emissions for Construction are provided as a total GHG emission generated over the construction duration. Based on South Coast Air Quality Management District (SCAQMD) methodology, it is recommended to average this emission over a 30 year duration.

Proposed Project Related Construction Emissions

The Project construction dates were estimated based on a construction kickoff starting in the middle of 2023. The project would be constructed in three phases and would start with demolition which would be expected to last 6 months. Phase 1 would follow and would be expected to take up to 15 months to complete. Phase 2 would commence at a later date which has not yet been established. For purposes of this analysis, it is assumed that construction for phase 2 would be one year later. The project will import material and is assumed to be as much as 30,000 CY of soil and up to 5,000 CY of surface material such as asphalt or crushed stone with roughly ½ of the material necessary for each phase. Phase 2 may have additional offsite construction in the immediate vicinity of the project, so additional equipment was assumed as part of this phase.

Table 1 shows the expected timeframes for the construction processes for all the Project infrastructure, facilities, improvements and structures at the proposed Project location, as well as the expected number of pieces of equipment.

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Table 1: Expected Construction Equipment and Durations

Equipment Identification	Proposed Start	Proposed Completion	Quantity
Demolition Phase 1 and Phase 2 Area	06/01/2023	12/27/2023	
Excavators			3
Rubber Tired Dozers			2
Skid Steer Loaders			2
Grading and Excavation for Pads Phase 1	01/01/2024	03/22/2024	
Excavators			1
Graders			1
Skid Steer Loaders			3
Building Construction and concrete placement Phase 1	03/23/2024	02/28/2025	
Generator Sets			1
Plate Compactors			1
Rollers			1
Rough Terrain Forklifts			3
Skid Steer Loaders			1
Welders			1
Crane Use to set Units Phase 1	12/01/2024	01/24/2025	
Cranes			1
Grading and Excavation for Pads Phase 2	02/01/2026	04/24/2026	
Excavators			1
Graders			1
Skid Steer Loaders			3
Building Construction including offsite work and concrete placement Phase 2	04/25/2026	04/02/2027	
Generator Sets			1
Plate Compactors			1
Rollers			1
Rough Terrain Forklifts			4
Skid Steer Loaders			2
Welders			2
Crane Use to set Units Phase 2	01/15/2027	03/11/2027	
Cranes			1
This equipment list is based upon equipment inventory and durations provide by the Project engineer.			

Based on modeling conducted, construction of the project would generate approximately 1,234.16 MT CO_2e over the construction life of the project. Given the fact that the total emissions would ultimately contribute to cumulative levels, it is acceptable to average the total construction emission over the life of the project which is assumed to be 30 years. Given this,

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the project would add approximately 141.14 $MTCO_2e$ per year. A summary of the construction emissions is shown in Table 2.

Table 2: Annual Construction Emissions MT CO_2e

Year	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT)
2023	0.00	258.60	258.60	0.08	0.00	261.14
2024	0.00	383.91	383.91	0.07	0.01	389.86
2025	0.00	59.42	59.42	0.01	0.00	59.94
2026	0.00	401.89	401.89	0.07	0.01	407.70
2027	0.00	114.58	114.58	0.02	0.00	115.52
Total						1,234.16
Amortized 30 Year annual Emissions						41.14
Expected Construction emissions are based upon CalEEMod modeling assumptions (Table 1 above)						

Project Related Operational Emissions

Operational-related emissions would result primarily from vehicle exhaust emissions associated with the maintenance crews traveling to and from the site. The larger contribution to GHGs however are related to amortized construction emissions. The combined emissions from both operations and construction are summarized below in Table 3 on the following page.

The City of Escondido has a CAP Checklist screening level suggesting that projects that emit fewer than 500 MT CO_2e would have a less than significant impact on the environment. The proposed project would produce 44.35 MT CO2e per year which would be less than the City's screening threshold and would have a less than significant GHG impact. It should also be noted that the existing use on the site included an Ice Rink opened to the public which generated a significantly higher operational emission from patrons to the facility. These emissions have been removed from the GHG inventory for the City, however no corrections were applied to the proposed Project.

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Table 3: Operational Emissions Summary MT/Year

Year	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT/Yr)
Area	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	3.16	3.16	0.00	0.00	3.20
Waste	0.00	0.00	0.00	0.00	0.00	0.00
Water	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total (MT/Year)						**3.21**
Amortized Construction Emissions (Table 2 above)						**41.14**
Total Construction and Operations (MT/Year)						**44.35**
Data is presented in decimal format and may have rounding errors.						

As discussed above, the project would be considered less than significant for GHG emissions. If you have any questions, please do not hesitate to contact me directly at (760) 473-1253.

Sincerely,
Ldn Consulting, Inc.

DRAFT

Jeremy Louden

Attachments:

Attachment A: CALEEMOD Inputs/Outputs

Sources:

City of Escondido. (2020). Climate Action Plan (2020).

IPCC. (2007). *IPCC Fourth Assessment Report: Climate Change 2007 : Working Group I: The Physical Science Basis.* Retrieved from https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Escondido Goal Line BESS

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	4.50	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project would install battery storage containers and operations onsite will be remote

Construction Phase - Project would install fully constructed containers shipped to the site on trucks. Cranes lift the units off and set them on either a concrete pad or Steel colums driven into the ground.

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CE

Off-road Equipment - ce

Off-road Equipment - ce

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Trips and VMT - Worker and vendor trips per day for concrete placement added. Trips added for crane operator

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - 4 trips per day

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Water And Wastewater - Basic onsite landscaping will be watered 100 gal/day

Solid Waste - solid waste is not likely though 1 ton per year was assumed. Systems will be remotly managed.

Construction Off-road Equipment Mitigation - Tier 3 equipment with DPF

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	245.00
tblConstructionPhase	NumDays	230.00	40.00
tblConstructionPhase	NumDays	230.00	245.00
tblConstructionPhase	NumDays	230.00	40.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	8.00	60.00
tblConstructionPhase	NumDays	8.00	60.00
tblGrading	MaterialImported	0.00	17,500.00
tblGrading	MaterialImported	0.00	17,500.00
tblLandUse	LotAcreage	0.00	4.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblOffRoadEquipment	PhaseName		Grading and Excavation for Pads Phase 2
tblOffRoadEquipment	PhaseName		Buiding Construction including offsite work and concrete placement Phase 2
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	18.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	0.00	70.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	0.00	70.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	4.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	0.1578	1.5736	1.4339	2.9200e-003	0.0502	0.0698	0.1200	8.8100e-003	0.0643	0.0731	0.0000	258.6031	258.6031	0.0790	1.9000e-003	261.1421
2024	0.1472	1.4483	1.9738	4.2800e-003	0.1067	0.0471	0.1538	0.0260	0.0447	0.0707	0.0000	383.9125	383.9125	0.0654	0.0145	389.8594
2025	0.0261	0.2330	0.3572	6.8000e-004	0.0136	7.7700e-003	0.0214	3.6600e-003	7.4000e-003	0.0111	0.0000	59.4184	59.4184	0.0108	8.4000e-004	59.9373
2026	0.1543	1.5175	2.2096	4.5200e-003	0.0993	0.0452	0.1445	0.0240	0.0430	0.0670	0.0000	401.8856	401.8856	0.0734	0.0134	407.7047
2027	0.0533	0.4834	0.7226	1.3200e-003	0.0210	0.0159	0.0369	5.6400e-003	0.0151	0.0207	0.0000	114.5842	114.5842	0.0229	1.2100e-003	115.5181
Maximum	**0.1578**	**1.5736**	**2.2096**	**4.5200e-003**	**0.1067**	**0.0698**	**0.1538**	**0.0260**	**0.0643**	**0.0731**	**0.0000**	**401.8856**	**401.8856**	**0.0790**	**0.0145**	**407.7047**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

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					
2023	0.1578	1.5736	1.4339	2.9200e-003	0.0502	0.0698	0.1200	8.8100e-003	0.0643	0.0731	0.0000	258.6028	258.6028	0.0790	1.9000e-003	261.1418
2024	0.1472	1.4483	1.9738	4.2800e-003	0.1067	0.0471	0.1538	0.0260	0.0447	0.0707	0.0000	383.9122	383.9122	0.0654	0.0145	389.8591
2025	0.0261	0.2330	0.3572	6.8000e-004	0.0136	7.7700e-003	0.0214	3.6600e-003	7.4000e-003	0.0111	0.0000	59.4184	59.4184	0.0108	8.4000e-004	59.9372
2026	0.1543	1.5175	2.2096	4.5200e-003	0.0993	0.0452	0.1445	0.0240	0.0430	0.0670	0.0000	401.8852	401.8852	0.0734	0.0134	407.7044
2027	0.0533	0.4834	0.7226	1.3200e-003	0.0210	0.0159	0.0369	5.6400e-003	0.0151	0.0207	0.0000	114.5841	114.5841	0.0229	1.2100e-003	115.5180
Maximum	**0.1578**	**1.5736**	**2.2096**	**4.5200e-003**	**0.1067**	**0.0698**	**0.1538**	**0.0260**	**0.0643**	**0.0731**	**0.0000**	**401.8852**	**401.8852**	**0.0790**	**0.0145**	**407.7044**

	ROG	NOx	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	**6-1-2023**	**8-31-2023**	0.7581	0.7581
2	**9-1-2023**	**11-30-2023**	0.7502	0.7502
3	**12-1-2023**	**2-29-2024**	0.5203	0.5203
4	**3-1-2024**	**5-31-2024**	0.3915	0.3915
5	**6-1-2024**	**8-31-2024**	0.3708	0.3708
6	**9-1-2024**	**11-30-2024**	0.3678	0.3678
7	**12-1-2024**	**2-28-2025**	0.4163	0.4163

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11	**12-1-2025**	**2-28-2026**	0.1268	0.1268
12	**3-1-2026**	**5-31-2026**	0.4379	0.4379
13	**6-1-2026**	**8-31-2026**	0.4736	0.4736
14	**9-1-2026**	**11-30-2026**	0.4694	0.4694
15	**12-1-2026**	**2-28-2027**	0.5133	0.5133
16	**3-1-2027**	**5-31-2027**	0.1821	0.1821
		Highest	0.7581	0.7581

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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
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	0.0000
Mobile	1.5400e-003	1.8000e-003	0.0152	3.0000e-005	3.7000e-003	3.0000e-005	3.7200e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.1567	3.1567	2.1000e-004	1.3000e-004	3.2021
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.5400e-003**	**1.8000e-003**	**0.0152**	**3.0000e-005**	**3.7000e-003**	**3.0000e-005**	**3.7200e-003**	**9.9000e-004**	**2.0000e-005**	**1.0100e-003**	**0.0000**	**3.1567**	**3.1567**	**2.1000e-004**	**1.3000e-004**	**3.2021**

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
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	0.0000
Mobile	1.5400e-003	1.8000e-003	0.0152	3.0000e-005	3.7000e-003	3.0000e-005	3.7200e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.1567	3.1567	2.1000e-004	1.3000e-004	3.2021
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.5400e-003**	**1.8000e-003**	**0.0152**	**3.0000e-005**	**3.7000e-003**	**3.0000e-005**	**3.7200e-003**	**9.9000e-004**	**2.0000e-005**	**1.0100e-003**	**0.0000**	**3.1567**	**3.1567**	**2.1000e-004**	**1.3000e-004**	**3.2021**

	ROG	NOx	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 Phase 1 and Phase 2 Area	Demolition	6/1/2023	12/27/2023	5	150	
2	Grading and Excavation for Pads Phase 1	Grading	1/1/2024	3/22/2024	5	60	

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3	Building Construction and concrete placement Phase 1	Building Construction	3/23/2024	2/28/2025	5	245	
4	Crane Use to set Units Phase 1	Building Construction	12/1/2024	1/24/2025	5	40	
5	Grading and Excavation for Pads Phase 2	Grading	2/1/2026	4/24/2026	5	60	
6	Buiding Construction including offsite work and concrete placement Phase 2	Building Construction	4/25/2026	4/2/2027	5	245	
7	Crane Use to set Units Phase 2	Building Construction	1/15/2027	3/11/2027	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 30

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition Phase 1 and Phase 2 Area	Excavators	3	8.00	158	0.38
Demolition Phase 1 and Phase 2 Area	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Phase 1 and Phase 2 Area	Skid Steer Loaders	2	8.00	65	0.37
Grading and Excavation for Pads Phase 1	Excavators	1	8.00	158	0.38
Grading and Excavation for Pads Phase 1	Graders	1	8.00	187	0.41
Grading and Excavation for Pads Phase 1	Skid Steer Loaders	3	8.00	65	0.37
Building Construction and concrete placement Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction and concrete placement Phase 1	Plate Compactors	1	4.00	8	0.43
Building Construction and concrete placement Phase 1	Rollers	1	4.00	80	0.38
Building Construction and concrete placement Phase 1	Rough Terrain Forklifts	3	8.00	100	0.40
Building Construction and concrete placement Phase 1	Skid Steer Loaders	1	7.00	65	0.37
Building Construction and concrete placement Phase 1	Welders	1	8.00	46	0.45

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Crane Use to set Units Phase 1	Cranes	1	7.00	231	0.29
Grading and Excavation for Pads Phase 2	Excavators	1	8.00	158	0.38
Grading and Excavation for Pads Phase 2	Graders	1	8.00	187	0.41
Grading and Excavation for Pads Phase 2	Skid Steer Loaders	3	8.00	65	0.37
Buiding Construction including offsite work and concrete placement Phase 2	Generator Sets	1	8.00	84	0.74
Buiding Construction including offsite work and concrete placement Phase 2	Plate Compactors	1	4.00	8	0.43
Buiding Construction including offsite work and concrete placement Phase 2	Rollers	1	4.00	80	0.38
Buiding Construction including offsite work and concrete placement Phase 2	Rough Terrain Forklifts	4	8.00	100	0.40
Buiding Construction including offsite work and concrete placement Phase 2	Skid Steer Loaders	2	7.00	65	0.37
Buiding Construction including offsite work and concrete placement Phase 2	Welders	2	8.00	46	0.45
Crane Use to set Units Phase 2	Cranes	1	7.00	231	0.29

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition Phase 1 and Phase 2 Area	7	12.00	0.00	364.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Excavation for Pads P	5	30.00	0.00	2,188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction and concrete placeme	8	70.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Crane Use to set Units Phase 1	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Excavation for Pads P	5	30.00	0.00	2,188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Buiding Construction including offsite work	11	70.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Crane Use to set Units Phase 2	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition Phase 1 and Phase 2 Area - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0399	0.0000	0.0399	6.0400e-003	0.0000	6.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1549	1.5472	1.4068	2.7500e-003		0.0696	0.0696		0.0640	0.0640	0.0000	241.8979	241.8979	0.0782	0.0000	243.8538
Total	**0.1549**	**1.5472**	**1.4068**	**2.7500e-003**	**0.0399**	**0.0696**	**0.1095**	**6.0400e-003**	**0.0640**	**0.0701**	**0.0000**	**241.8979**	**241.8979**	**0.0782**	**0.0000**	**243.8538**

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	4.0000e-004	0.0247	6.5700e-003	1.1000e-004	3.1200e-003	2.0000e-004	3.3200e-003	8.6000e-004	1.9000e-004	1.0500e-003	0.0000	10.9226	10.9226	5.5000e-004	1.7400e-003	11.4540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4400e-003	1.6900e-003	0.0206	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9500e-003	0.0000	5.7825	5.7825	1.7000e-004	1.6000e-004	5.8343
Total	**2.8400e-003**	**0.0264**	**0.0271**	**1.7000e-004**	**0.0103**	**2.4000e-004**	**0.0106**	**2.7800e-003**	**2.3000e-004**	**3.0000e-003**	**0.0000**	**16.7052**	**16.7052**	**7.2000e-004**	**1.9000e-003**	**17.2883**

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3.2 Demolition Phase 1 and Phase 2 Area - 2023

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					0.0399	0.0000	0.0399	6.0400e-003	0.0000	6.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1549	1.5472	1.4068	2.7500e-003		0.0696	0.0696		0.0640	0.0640	0.0000	241.8976	241.8976	0.0782	0.0000	243.8535
Total	**0.1549**	**1.5472**	**1.4068**	**2.7500e-003**	**0.0399**	**0.0696**	**0.1095**	**6.0400e-003**	**0.0640**	**0.0701**	**0.0000**	**241.8976**	**241.8976**	**0.0782**	**0.0000**	**243.8535**

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	4.0000e-004	0.0247	6.5700e-003	1.1000e-004	3.1200e-003	2.0000e-004	3.3200e-003	8.6000e-004	1.9000e-004	1.0500e-003	0.0000	10.9226	10.9226	5.5000e-004	1.7400e-003	11.4540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4400e-003	1.6900e-003	0.0206	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	4.0000e-005	1.9500e-003	0.0000	5.7825	5.7825	1.7000e-004	1.6000e-004	5.8343
Total	**2.8400e-003**	**0.0264**	**0.0271**	**1.7000e-004**	**0.0103**	**2.4000e-004**	**0.0106**	**2.7800e-003**	**2.3000e-004**	**3.0000e-003**	**0.0000**	**16.7052**	**16.7052**	**7.2000e-004**	**1.9000e-003**	**17.2883**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading and Excavation for Pads Phase 1 - 2024

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					0.0171	0.0000	0.0171	1.9000e-003	0.0000	1.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2411	0.2723	5.4000e-004		8.5100e-003	8.5100e-003		7.8300e-003	7.8300e-003	0.0000	47.4224	47.4224	0.0153	0.0000	47.8058
Total	**0.0217**	**0.2411**	**0.2723**	**5.4000e-004**	**0.0171**	**8.5100e-003**	**0.0257**	**1.9000e-003**	**7.8300e-003**	**9.7300e-003**	**0.0000**	**47.4224**	**47.4224**	**0.0153**	**0.0000**	**47.8058**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3900e-003	0.1472	0.0401	6.4000e-004	0.0187	1.2200e-003	0.0200	5.1500e-003	1.1700e-003	6.3200e-003	0.0000	64.5006	64.5006	3.4000e-003	0.0103	67.6448
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2900e-003	1.5200e-003	0.0193	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	3.0000e-005	1.9500e-003	0.0000	5.6376	5.6376	1.5000e-004	1.5000e-004	5.6859
Total	**4.6800e-003**	**0.1487**	**0.0593**	**7.0000e-004**	**0.0260**	**1.2600e-003**	**0.0272**	**7.0700e-003**	**1.2000e-003**	**8.2700e-003**	**0.0000**	**70.1382**	**70.1382**	**3.5500e-003**	**0.0104**	**73.3306**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading and Excavation for Pads Phase 1 - 2024

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					0.0171	0.0000	0.0171	1.9000e-003	0.0000	1.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2411	0.2723	5.4000e-004		8.5100e-003	8.5100e-003		7.8300e-003	7.8300e-003	0.0000	47.4223	47.4223	0.0153	0.0000	47.8058
Total	**0.0217**	**0.2411**	**0.2723**	**5.4000e-004**	**0.0171**	**8.5100e-003**	**0.0257**	**1.9000e-003**	**7.8300e-003**	**9.7300e-003**	**0.0000**	**47.4223**	**47.4223**	**0.0153**	**0.0000**	**47.8058**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3900e-003	0.1472	0.0401	6.4000e-004	0.0187	1.2200e-003	0.0200	5.1500e-003	1.1700e-003	6.3200e-003	0.0000	64.5006	64.5006	3.4000e-003	0.0103	67.6448
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2900e-003	1.5200e-003	0.0193	6.0000e-005	7.2200e-003	4.0000e-005	7.2600e-003	1.9200e-003	3.0000e-005	1.9500e-003	0.0000	5.6376	5.6376	1.5000e-004	1.5000e-004	5.6859
Total	**4.6800e-003**	**0.1487**	**0.0593**	**7.0000e-004**	**0.0260**	**1.2600e-003**	**0.0272**	**7.0700e-003**	**1.2000e-003**	**8.2700e-003**	**0.0000**	**70.1382**	**70.1382**	**3.5500e-003**	**0.0104**	**73.3306**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2024

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	0.0985	0.9683	1.4581	2.3100e-003		0.0354	0.0354		0.0338	0.0338	0.0000	197.1353	197.1353	0.0431	0.0000	198.2116
Total	**0.0985**	**0.9683**	**1.4581**	**2.3100e-003**		**0.0354**	**0.0354**		**0.0338**	**0.0338**	**0.0000**	**197.1353**	**197.1353**	**0.0431**	**0.0000**	**198.2116**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1400e-003	0.0445	0.0155	2.0000e-004	6.7100e-003	2.7000e-004	6.9700e-003	1.9400e-003	2.5000e-004	2.1900e-003	0.0000	19.9127	19.9127	6.3000e-004	2.8800e-003	20.7881
Worker	0.0180	0.0119	0.1512	4.7000e-004	0.0567	3.0000e-004	0.0570	0.0151	2.7000e-004	0.0153	0.0000	44.2867	44.2867	1.2100e-003	1.1700e-003	44.6655
Total	**0.0191**	**0.0564**	**0.1666**	**6.7000e-004**	**0.0634**	**5.7000e-004**	**0.0640**	**0.0170**	**5.2000e-004**	**0.0175**	**0.0000**	**64.1994**	**64.1994**	**1.8400e-003**	**4.0500e-003**	**65.4536**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2024

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	0.0985	0.9683	1.4581	2.3100e-003		0.0354	0.0354		0.0338	0.0338	0.0000	197.1351	197.1351	0.0431	0.0000	198.2114
Total	**0.0985**	**0.9683**	**1.4581**	**2.3100e-003**		**0.0354**	**0.0354**		**0.0338**	**0.0338**	**0.0000**	**197.1351**	**197.1351**	**0.0431**	**0.0000**	**198.2114**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1400e-003	0.0445	0.0155	2.0000e-004	6.7100e-003	2.7000e-004	6.9700e-003	1.9400e-003	2.5000e-004	2.1900e-003	0.0000	19.9127	19.9127	6.3000e-004	2.8800e-003	20.7881
Worker	0.0180	0.0119	0.1512	4.7000e-004	0.0567	3.0000e-004	0.0570	0.0151	2.7000e-004	0.0153	0.0000	44.2867	44.2867	1.2100e-003	1.1700e-003	44.6655
Total	**0.0191**	**0.0564**	**0.1666**	**6.7000e-004**	**0.0634**	**5.7000e-004**	**0.0640**	**0.0170**	**5.2000e-004**	**0.0175**	**0.0000**	**64.1994**	**64.1994**	**1.8400e-003**	**4.0500e-003**	**65.4536**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2025

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	0.0197	0.1963	0.3097	4.9000e-004		6.5900e-003	6.5900e-003		6.3100e-003	6.3100e-003	0.0000	41.9610	41.9610	9.0900e-003	0.0000	42.1883
Total	**0.0197**	**0.1963**	**0.3097**	**4.9000e-004**		**6.5900e-003**	**6.5900e-003**		**6.3100e-003**	**6.3100e-003**	**0.0000**	**41.9610**	**41.9610**	**9.0900e-003**	**0.0000**	**42.1883**

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	2.4000e-004	9.3900e-003	3.2300e-003	4.0000e-005	1.4300e-003	6.0000e-005	1.4800e-003	4.1000e-004	5.0000e-005	4.7000e-004	0.0000	4.1580	4.1580	1.4000e-004	6.0000e-004	4.3409
Worker	3.6100e-003	2.3000e-003	0.0302	1.0000e-004	0.0121	6.0000e-005	0.0121	3.2100e-003	6.0000e-005	3.2600e-003	0.0000	9.1971	9.1971	2.4000e-004	2.3000e-004	9.2726
Total	**3.8500e-003**	**0.0117**	**0.0335**	**1.4000e-004**	**0.0135**	**1.2000e-004**	**0.0136**	**3.6200e-003**	**1.1000e-004**	**3.7300e-003**	**0.0000**	**13.3552**	**13.3552**	**3.8000e-004**	**8.3000e-004**	**13.6135**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction and concrete placement Phase 1 - 2025

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	0.0197	0.1963	0.3097	4.9000e-004		6.5900e-003	6.5900e-003		6.3100e-003	6.3100e-003	0.0000	41.9609	41.9609	9.0900e-003	0.0000	42.1882
Total	**0.0197**	**0.1963**	**0.3097**	**4.9000e-004**		**6.5900e-003**	**6.5900e-003**		**6.3100e-003**	**6.3100e-003**	**0.0000**	**41.9609**	**41.9609**	**9.0900e-003**	**0.0000**	**42.1882**

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	2.4000e-004	9.3900e-003	3.2300e-003	4.0000e-005	1.4300e-003	6.0000e-005	1.4800e-003	4.1000e-004	5.0000e-005	4.7000e-004	0.0000	4.1580	4.1580	1.4000e-004	6.0000e-004	4.3409
Worker	3.6100e-003	2.3000e-003	0.0302	1.0000e-004	0.0121	6.0000e-005	0.0121	3.2100e-003	6.0000e-005	3.2600e-003	0.0000	9.1971	9.1971	2.4000e-004	2.3000e-004	9.2726
Total	**3.8500e-003**	**0.0117**	**0.0335**	**1.4000e-004**	**0.0135**	**1.2000e-004**	**0.0136**	**3.6200e-003**	**1.1000e-004**	**3.7300e-003**	**0.0000**	**13.3552**	**13.3552**	**3.8000e-004**	**8.3000e-004**	**13.6135**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2024

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	3.1900e-003	0.0337	0.0171	6.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	4.8793	4.8793	1.5800e-003	0.0000	4.9188
Total	**3.1900e-003**	**0.0337**	**0.0171**	**6.0000e-005**		**1.4000e-003**	**1.4000e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**4.8793**	**4.8793**	**1.5800e-003**	**0.0000**	**4.9188**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1378	0.1378	0.0000	0.0000	0.1390
Total	**6.0000e-005**	**4.0000e-005**	**4.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1378**	**0.1378**	**0.0000**	**0.0000**	**0.1390**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1900e-003	0.0337	0.0171	6.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	4.8793	4.8793	1.5800e-003	0.0000	4.9188
Total	**3.1900e-003**	**0.0337**	**0.0171**	**6.0000e-005**		**1.4000e-003**	**1.4000e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**4.8793**	**4.8793**	**1.5800e-003**	**0.0000**	**4.9188**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1378	0.1378	0.0000	0.0000	0.1390
Total	**6.0000e-005**	**4.0000e-005**	**4.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1378**	**0.1378**	**0.0000**	**0.0000**	**0.1390**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4600e-003	0.0250	0.0137	5.0000e-005		1.0600e-003	1.0600e-003		9.8000e-004	9.8000e-004	0.0000	3.9923	3.9923	1.2900e-003	0.0000	4.0246
Total	**2.4600e-003**	**0.0250**	**0.0137**	**5.0000e-005**		**1.0600e-003**	**1.0600e-003**		**9.8000e-004**	**9.8000e-004**	**0.0000**	**3.9923**	**3.9923**	**1.2900e-003**	**0.0000**	**4.0246**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1100	0.1100	0.0000	0.0000	0.1109
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1100**	**0.1100**	**0.0000**	**0.0000**	**0.1109**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Crane Use to set Units Phase 1 - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4600e-003	0.0250	0.0137	5.0000e-005		1.0600e-003	1.0600e-003		9.8000e-004	9.8000e-004	0.0000	3.9923	3.9923	1.2900e-003	0.0000	4.0246
Total	**2.4600e-003**	**0.0250**	**0.0137**	**5.0000e-005**		**1.0600e-003**	**1.0600e-003**		**9.8000e-004**	**9.8000e-004**	**0.0000**	**3.9923**	**3.9923**	**1.2900e-003**	**0.0000**	**4.0246**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1100	0.1100	0.0000	0.0000	0.1109
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1100**	**0.1100**	**0.0000**	**0.0000**	**0.1109**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Grading and Excavation for Pads Phase 2 - 2026

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					0.0171	0.0000	0.0171	1.9000e-003	0.0000	1.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0197	0.2116	0.2697	5.4000e-004		7.3000e-003	7.3000e-003		6.7100e-003	6.7100e-003	0.0000	47.4095	47.4095	0.0153	0.0000	47.7929
Total	**0.0197**	**0.2116**	**0.2697**	**5.4000e-004**	**0.0171**	**7.3000e-003**	**0.0244**	**1.9000e-003**	**6.7100e-003**	**8.6100e-003**	**0.0000**	**47.4095**	**47.4095**	**0.0153**	**0.0000**	**47.7929**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3300e-003	0.1430	0.0412	6.1000e-004	0.0187	1.2100e-003	0.0200	5.1500e-003	1.1500e-003	6.3000e-003	0.0000	61.8740	61.8740	3.6200e-003	9.8600e-003	64.9035
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	1.2500e-003	0.0171	6.0000e-005	7.2200e-003	3.0000e-005	7.2500e-003	1.9200e-003	3.0000e-005	1.9500e-003	0.0000	5.3717	5.3717	1.3000e-004	1.3000e-004	5.4143
Total	**4.3700e-003**	**0.1442**	**0.0582**	**6.7000e-004**	**0.0260**	**1.2400e-003**	**0.0272**	**7.0700e-003**	**1.1800e-003**	**8.2500e-003**	**0.0000**	**67.2457**	**67.2457**	**3.7500e-003**	**9.9900e-003**	**70.3178**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Grading and Excavation for Pads Phase 2 - 2026

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					0.0171	0.0000	0.0171	1.9000e-003	0.0000	1.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0197	0.2116	0.2697	5.4000e-004		7.3000e-003	7.3000e-003		6.7100e-003	6.7100e-003	0.0000	47.4095	47.4095	0.0153	0.0000	47.7928
Total	**0.0197**	**0.2116**	**0.2697**	**5.4000e-004**	**0.0171**	**7.3000e-003**	**0.0244**	**1.9000e-003**	**6.7100e-003**	**8.6100e-003**	**0.0000**	**47.4095**	**47.4095**	**0.0153**	**0.0000**	**47.7928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3300e-003	0.1430	0.0412	6.1000e-004	0.0187	1.2100e-003	0.0200	5.1500e-003	1.1500e-003	6.3000e-003	0.0000	61.8740	61.8740	3.6200e-003	9.8600e-003	64.9035
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	1.2500e-003	0.0171	6.0000e-005	7.2200e-003	3.0000e-005	7.2500e-003	1.9200e-003	3.0000e-005	1.9500e-003	0.0000	5.3717	5.3717	1.3000e-004	1.3000e-004	5.4143
Total	**4.3700e-003**	**0.1442**	**0.0582**	**6.7000e-004**	**0.0260**	**1.2400e-003**	**0.0272**	**7.0700e-003**	**1.1800e-003**	**8.2500e-003**	**0.0000**	**67.2457**	**67.2457**	**3.7500e-003**	**9.9900e-003**	**70.3178**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

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	0.1151	1.1143	1.7495	2.7400e-003		0.0362	0.0362		0.0346	0.0346	0.0000	232.8585	232.8585	0.0528	0.0000	234.1790
Total	**0.1151**	**1.1143**	**1.7495**	**2.7400e-003**		**0.0362**	**0.0362**		**0.0346**	**0.0346**	**0.0000**	**232.8585**	**232.8585**	**0.0528**	**0.0000**	**234.1790**

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	9.5000e-004	0.0387	0.0133	1.7000e-004	5.9400e-003	2.3000e-004	6.1800e-003	1.7200e-003	2.2000e-004	1.9400e-003	0.0000	16.9786	16.9786	5.8000e-004	2.4600e-003	17.7255
Worker	0.0142	8.7200e-003	0.1188	3.9000e-004	0.0502	2.4000e-004	0.0505	0.0134	2.2000e-004	0.0136	0.0000	37.3932	37.3932	9.0000e-004	9.2000e-004	37.6896
Total	**0.0152**	**0.0474**	**0.1321**	**5.6000e-004**	**0.0562**	**4.7000e-004**	**0.0567**	**0.0151**	**4.4000e-004**	**0.0155**	**0.0000**	**54.3718**	**54.3718**	**1.4800e-003**	**3.3800e-003**	**55.4151**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2026

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	0.1151	1.1143	1.7495	2.7400e-003		0.0362	0.0362		0.0346	0.0346	0.0000	232.8583	232.8583	0.0528	0.0000	234.1787
Total	**0.1151**	**1.1143**	**1.7495**	**2.7400e-003**		**0.0362**	**0.0362**		**0.0346**	**0.0346**	**0.0000**	**232.8583**	**232.8583**	**0.0528**	**0.0000**	**234.1787**

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	9.5000e-004	0.0387	0.0133	1.7000e-004	5.9400e-003	2.3000e-004	6.1800e-003	1.7200e-003	2.2000e-004	1.9400e-003	0.0000	16.9786	16.9786	5.8000e-004	2.4600e-003	17.7255
Worker	0.0142	8.7200e-003	0.1188	3.9000e-004	0.0502	2.4000e-004	0.0505	0.0134	2.2000e-004	0.0136	0.0000	37.3932	37.3932	9.0000e-004	9.2000e-004	37.6896
Total	**0.0152**	**0.0474**	**0.1321**	**5.6000e-004**	**0.0562**	**4.7000e-004**	**0.0567**	**0.0151**	**4.4000e-004**	**0.0155**	**0.0000**	**54.3718**	**54.3718**	**1.4800e-003**	**3.3800e-003**	**55.4151**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

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	0.0424	0.4109	0.6451	1.0100e-003		0.0134	0.0134		0.0128	0.0128	0.0000	85.8585	85.8585	0.0195	0.0000	86.3453
Total	**0.0424**	**0.4109**	**0.6451**	**1.0100e-003**		**0.0134**	**0.0134**		**0.0128**	**0.0128**	**0.0000**	**85.8585**	**85.8585**	**0.0195**	**0.0000**	**86.3453**

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	3.4000e-004	0.0141	4.8500e-003	6.0000e-005	2.1900e-003	9.0000e-005	2.2800e-003	6.3000e-004	8.0000e-005	7.1000e-004	0.0000	6.1308	6.1308	2.2000e-004	8.9000e-004	6.4007
Worker	4.9600e-003	2.9500e-003	0.0416	1.4000e-004	0.0185	8.0000e-005	0.0186	4.9200e-003	8.0000e-005	5.0000e-003	0.0000	13.4896	13.4896	3.0000e-004	3.2000e-004	13.5932
Total	**5.3000e-003**	**0.0171**	**0.0465**	**2.0000e-004**	**0.0207**	**1.7000e-004**	**0.0209**	**5.5500e-003**	**1.6000e-004**	**5.7100e-003**	**0.0000**	**19.6204**	**19.6204**	**5.2000e-004**	**1.2100e-003**	**19.9939**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Buiding Construction including offsite work and concrete placement Phase 2 - 2027

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	0.0424	0.4109	0.6451	1.0100e-003		0.0134	0.0134		0.0128	0.0128	0.0000	85.8584	85.8584	0.0195	0.0000	86.3452
Total	**0.0424**	**0.4109**	**0.6451**	**1.0100e-003**		**0.0134**	**0.0134**		**0.0128**	**0.0128**	**0.0000**	**85.8584**	**85.8584**	**0.0195**	**0.0000**	**86.3452**

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	3.4000e-004	0.0141	4.8500e-003	6.0000e-005	2.1900e-003	9.0000e-005	2.2800e-003	6.3000e-004	8.0000e-005	7.1000e-004	0.0000	6.1308	6.1308	2.2000e-004	8.9000e-004	6.4007
Worker	4.9600e-003	2.9500e-003	0.0416	1.4000e-004	0.0185	8.0000e-005	0.0186	4.9200e-003	8.0000e-005	5.0000e-003	0.0000	13.4896	13.4896	3.0000e-004	3.2000e-004	13.5932
Total	**5.3000e-003**	**0.0171**	**0.0465**	**2.0000e-004**	**0.0207**	**1.7000e-004**	**0.0209**	**5.5500e-003**	**1.6000e-004**	**5.7100e-003**	**0.0000**	**19.6204**	**19.6204**	**5.2000e-004**	**1.2100e-003**	**19.9939**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Crane Use to set Units Phase 2 - 2027

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	5.4700e-003	0.0554	0.0304	1.0000e-004		2.3600e-003	2.3600e-003		2.1700e-003	2.1700e-003	0.0000	8.8718	8.8718	2.8700e-003	0.0000	8.9435
Total	**5.4700e-003**	**0.0554**	**0.0304**	**1.0000e-004**		**2.3600e-003**	**2.3600e-003**		**2.1700e-003**	**2.1700e-003**	**0.0000**	**8.8718**	**8.8718**	**2.8700e-003**	**0.0000**	**8.9435**

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	9.0000e-005	5.0000e-005	7.2000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2336	0.2336	1.0000e-005	1.0000e-005	0.2354
Total	**9.0000e-005**	**5.0000e-005**	**7.2000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2336**	**0.2336**	**1.0000e-005**	**1.0000e-005**	**0.2354**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Crane Use to set Units Phase 2 - 2027

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	5.4700e-003	0.0554	0.0304	1.0000e-004		2.3600e-003	2.3600e-003		2.1700e-003	2.1700e-003	0.0000	8.8718	8.8718	2.8700e-003	0.0000	8.9435
Total	**5.4700e-003**	**0.0554**	**0.0304**	**1.0000e-004**		**2.3600e-003**	**2.3600e-003**		**2.1700e-003**	**2.1700e-003**	**0.0000**	**8.8718**	**8.8718**	**2.8700e-003**	**0.0000**	**8.9435**

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	9.0000e-005	5.0000e-005	7.2000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2336	0.2336	1.0000e-005	1.0000e-005	0.2354
Total	**9.0000e-005**	**5.0000e-005**	**7.2000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2336**	**0.2336**	**1.0000e-005**	**1.0000e-005**	**0.2354**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.5400e-003	1.8000e-003	0.0152	3.0000e-005	3.7000e-003	3.0000e-005	3.7200e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.1567	3.1567	2.1000e-004	1.3000e-004	3.2021
Unmitigated	1.5400e-003	1.8000e-003	0.0152	3.0000e-005	3.7000e-003	3.0000e-005	3.7200e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.1567	3.1567	2.1000e-004	1.3000e-004	3.2021

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	4.00	0.00	0.00	9,880	9,880
Total	4.00	0.00	0.00	9,880	9,880

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

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

Mitigated

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

9.0 Operational Offroad

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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