DOCKETED

Docket Number:	24-OPT-05
Project Title:	Corby Battery Energy Storage System Project
TN #:	259885
Document Title:	Volume 2 App 4-3 Air Quality Appendices
Description:	N/A
Filer:	Doug Urry
Organization:	Tetra Tech
Submitter Role:	Applicant Consultant
Submission Date:	11/4/2024 2:12:36 PM
Docketed Date:	11/4/2024

APPENDIX 4.3-A: AIR QUALITY AND GREENHOUSE GAS EMISSIONS ANALYSIS

AIR QUALITY AND GREENHOUSE GAS TECHNICAL REPORT

Corby Battery Energy Storage System Project
Solano County, California

October 2024

Prepared for

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
BESS	battery energy storage system
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAP	Climate Action Plan
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CI	*Coccidioides immitus*
CO	carbon monoxide
CO_2	carbon dioxide
CO_{2e}	CO_2 equivalent
DPM	diesel particulate matter
EPA	U.S. Environmental Protection Agency
FR	*Federal Register*
gen-tie	interconnection generation tie
GHG	greenhouse gas
GWP	global warming potential
HAP	hazardous air pollutant
HFC	hydrofluorocarbon
HRA	health risk assessment
I-80	Interstate 80
kV	kilovolt
MEI	maximally exposed individual
MPO	metropolitan planning organization

MT	metric ton
MTC	Metropolitan Transportation Commission
MW	megawatt
MWh	megawatt-hour
NAAQS	National Ambient Air Quality Standards
N_2O	nitrous oxide
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
O_3	ozone
O&M	operations and maintenance
OEHHA	Office of Environmental Health Hazard Assessment
Pb	lead
PFC	perfluorocarbons
PG&E	Pacific Gas and Electric
PM_{10}	particulate matter less than 10 microns
$PM_{2.5}$	particulate matter less than 2.5 microns
Project	Corby Battery Energy Storage System Project
RACT	Reasonably Available Control Technology
ROG	reactive organic gases
RPS	Renewable Portfolio Standard
SB	Senate Bill
SF_6	sulfur hexafluoride
SFNA	Sacramento Federal Non-attainment Area
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SVAB	Sacramento Valley Air Basin
TAC	Toxic Air Contaminants
TMS	thermal management system
VOC	volatile organic compound
YSAQMD	Yolo Solano Air Quality Management District

1.0 INTRODUCTION

1.1 Purpose

Tetra Tech has prepared this air quality and greenhouse gas (GHG) analysis report to evaluate potential air quality and GHG impacts associated with the proposed Corby Battery Energy Storage System Project (Project). This analysis was prepared in accordance with the Yolo Solano Air Quality Management District (YSAQMD) *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD 2007). This report has been prepared to support an environmental review with the California Energy Commission (CEC) as lead agency for the Project. The California Air Resources Board (CARB) and the YSAQMD's methods, standards, and significance thresholds used in this analysis are considered appropriate for determining whether impacts require mitigation measures to be implemented.

The California Emissions Estimator Model (CalEEMod) was used to calculate the emissions associated with both construction activities and operations and maintenance of the facility. The total Project construction and operational emissions were compared to the YSAQMD threshold criteria to make a determination of significance.

For the construction phase of the Project, emissions from the combustion of fuel in grading and construction equipment were calculated based on the equipment used, length of time for a specific construction task, equipment power type (gasoline or diesel engine), horsepower, and percentage of time in use as estimated by the Project, as well as equipment emission factors, and load factors. Motor vehicle exhaust and fugitive dust emissions associated with worker commutes and travel were calculated based on available information regarding these activities. Fugitive dust (particulate matter less than 10 microns [PM_{10}] and less than 2.5 microns [$PM_{2.5}$]) emissions would result from wind erosion of exposed soil and soil storage piles, grading operations, and vehicles traveling on paved and unpaved roads and surfaces. These emissions were calculated based on U.S. Environmental Protection Agency (EPA) emissions factors contained in CalEEMod and construction information provided to Tetra Tech by the Project (EPA 2006a, 2006b, 2011).

For the Project operation and maintenance phase, motor vehicle exhaust emissions were calculated for future conditions, utilizing information on facility operations provided to Tetra Tech by the Project.

A discussion of GHGs and their potential effects on global climate change is also included. Emissions of carbon dioxide (CO_2), a key GHG identified in Assembly Bill (AB) 32, and other GHGs such as methane (CH_4) and nitrous oxide (N_2O) from direct and indirect Project-related sources were calculated. Tetra Tech calculated the construction-related GHG emissions commensurate with provided Project-specific information. Standard measures for construction activities were identified and incorporated as part of the Project's standard conditions. Potential GHG impacts and benefits associated with the proposed energy storage Project were calculated and compared to the YSAQMD threshold criteria to make a determination of significance.

1.2 Project Description

The Project consists of constructing and operating a 300-megawatt (MW), 1200-megawatt-hour battery energy storage system (BESS), associated Project substation, inverters, and other ancillary facilities, such as fencing, sound barrier, roads, stormwater retention basins, storage containers, and a supervisory control and data acquisition system. The Project will connect to the Pacific Gas and Electric (PG&E) Vaca-Dixon Substation, northwest of the Project site and across Interstate 80 (I-80), via a 1.1-mile-long 230-kilovolt (kV) generation tie (gen-tie) line, portions of which would be installed overhead and underground.

Site access will be provided via new connections to Byrnes Road adjacent to the eastern Project site boundary. Internal site maintenance roads will also be installed to allow access throughout the Project site during operations and maintenance (O&M). Once constructed, the Project will operate 7 days per week, 365 days per year. The facility will be operated by Corby Energy Storage, LLC remotely. Only occasional, on-site maintenance is expected to be required following commissioning, such as conducting routine visual inspections, executing minor repairs, and responding to needs for plant adjustment.

1.3 Regional and Local Setting

The Project site includes the entirety of the Project parcel (Assessor's Parcel Number 0141-030-090) totaling approximately 40.3 acres, including the BESS, Project substation, roads, security fencing, sound barrier, and drainage facilities.

The Project site is located in the northwestern corner of Section 6, Township 6 North, Range 1 East, just outside the City of Vacaville, California, U.S. Geological Survey 7.5-minute topographic quadrangle and will connect to PG&E's Vaca-Dixon Substation, northwest of the Project site and across I-80, via a 1.1-mile-long 230-kV gen-tie line, portions of which would be installed overhead and underground (see Figure 1). The Project parcel is bound on all sides by existing agricultural lands, with a rural residence located across Kilkenny Road directly to the north. Additional rural residences also exist in the project vicinity, both to the south and west of the Project site.

2.0 AIR QUALITY

2.1 Environmental Setting

2.1.1 Climate and Topography

The Project is located within the Sacramento Valley Air Basin (SVAB), which includes all of Shasta, Tehama, Glenn, Colusa, Butte, Sutter, Yuba, Sacramento, and Yolo Counties; the westernmost portion of Placer County; and the northeastern half of Solano County. The dimensions of the Basin are approximately 216 miles from north to south and 95 miles east to west at the widest part. The SVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mountain Range and the northern portion of the Sierra Nevada Mountains.

The Sacramento Valley is in a Mediterranean Climate Zone, characterized by hot and dry summers with maximum temperatures that often exceed 100 degrees Fahrenheit, and mild winters. The Valley is often subject to temperature inversion that, coupled with topographic barriers and hot summer temperatures, create a high potential for air pollution problems.

2.1.2 Pollutants and Effects

The Clean Air Act (CAA) requires EPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants. EPA calls these "criteria" air pollutants because it regulates them by developing health-based (primary) or environmentally-based (secondary) standards. Additionally, California Ambient Air Quality Standards (CAAQS) have been established for the criteria air pollutants. California law continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS due to federal penalties for failure to meet federal attainment deadlines (CARB 2024a). California law does not require that CAAQS be met by specified dates as is the case with NAAQS. Rather, it requires incremental progress toward attainment (CARB 2024a).

The six criteria air pollutants are summarized below.

Nitrogen Oxides (NO_X) are a group of gaseous nitrogen compounds that are precursors to the formation of ozone and particulate matter. Nitrogen dioxide (NO_2) and nitric oxide (NO) result primarily from the combustion of fossil fuels with ambient air. NAAQS and CAAQS have been established specifically for NO_2, but not for other NO_X compounds.

Ozone (O_3) is a secondary pollutant that is formed from the reaction of NO_X and volatile organic compounds (VOC) precursors in the presence of sunlight. Ozone exists naturally in the stratosphere, shielding Earth from harmful ultraviolet radiation. However, at ground-level, ozone causes adverse health effects and is a major component of smog. High concentrations have been tied to respiratory ailments and cardiovascular disease, as well as damage to natural ecosystems, agricultural crops, and materials such as rubber, paint, and plastics.

> **Reactive organic gases (ROG)**[1] are composed of hydrocarbon compounds that contribute to the formation of smog through atmospheric chemical reactions. ROG are emitted from fuel combustion and industrial and agricultural processes. A number of ROG compounds are listed under California's AB 2588 air toxics provisions.

Particulate Matter (PM) comprises solid particles and liquid droplets, made up of acids, organic chemicals, metals, and soil or dust particles. Particles that are 10 micrometers in aerodynamic diameter or smaller (PM_{10}) are a potential human health concern because they can enter the lungs (i.e., inhalable PM), which can affect the heart and cause adverse health effects. They can be emitted directly to the atmosphere as well as formed in the atmosphere by chemical reactions among precursors. PM_{10} can be further categorized based on particle size:

> **Fine particles** are 2.5 micrometers in aerodynamic diameter or smaller ($PM_{2.5}$) and are generally emitted by combustion sources like motor vehicles, power generation facilities, industrial processes, and wood burning.

[1] CARB defines both VOC and ROG as, "any compound of carbon excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions (CARB 2009). For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions. ROG is henceforth used in this report.

Inhalable coarse particles ($PM_{2.5}$-PM_{10}) are between 2.5 and 10 micrometers in aerodynamic diameter. Sources of emissions include roads (both unpaved and paved), farming activities, and windblown dust as well as combustion sources.

Carbon Monoxide (CO) is an odorless, colorless gas formed by the incomplete combustion of fuels. The main source of CO is on-road motor vehicles. Therefore, CO problems tend to be localized in urban areas rather than across the entire air basin. The combination of motor vehicle fleet turnover and progressively more stringent automotive emission controls over time have resulted in CO emissions declining for decades.

Sulfur Dioxide (SO_2) is a colorless gas formed by the combustion of fossil fuels that contain sulfur. The mandated use of low-sulfur fuel has reduced the emissions of this pollutant over time.

Lead (Pb) is a metal that is a natural constituent of air, water, and the biosphere. Sources of lead emissions include ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. Leaded motor vehicle gasoline, previously a major source of airborne lead was phased out as result of EPA's regulatory effort to reduce ambient concentrations.

2.1.3 Valley Fever

Valley Fever is an infection caused by inhalation of *Coccidioides immitus* (*C. immitus* or CI) fungus spores. The fungus grows in the soil in areas of California and the southwestern United States. Fungus spores lie dormant in the soil until they are disturbed by wind, vehicles, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who are exposed to wind and dust outdoors are most prone to contracting Valley Fever. Infections can result in mild influenza-like symptoms, such as fever, cough, chest pain, muscle or joint aches, night sweats, and rash. Rarely, in more serious cases, it can infect the brain, joints, bone, skin or other organs, or cause death.

In California, the number of reported Valley Fever cases has greatly increased in recent years with the number of cases tripling from 2015 to 2019 (CDC 2022). The number of Valley Fever cases in the United States has also been steadily increasing over the past few years with a rate of 18 cases per 100,000 people in 2020, and about 20 cases per 100,000 people in 2021 (CDPH 2022).

Currently, no vaccine is available to prevent this infection, but antifungal medications are available for treatment, particularly for severe disease. Further, there is no effective way to detect and monitor CI growth patterns in the soil. Thus, controlling the growth of the fungus in the environment to reduce the risk to individuals is currently not a viable option. Even if the fungus is present in the soil, earth-moving activities may not result in an increased incidence of Valley Fever. Propagation of Coccidioides is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells.

2.1.4 Sensitive Receptors

Sensitive receptors are segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems related to respiratory distress). Land uses often identified as sensitive receptors include schools, parks, playgrounds, daycare centers, nursing homes, hospitals, and residential communities. The greatest potential for exposure to air pollutants would occur during construction, when the ground would be disturbed from grading and delivery of materials. The construction emissions presented in this analysis are based on worst-case conditions, assuming maximum construction activity would occur simultaneously. In reality, exposure to emissions would vary substantially throughout construction, and would depend on the staging of the work being conducted over time, location of work relative to receptors, and weather conditions.

As stated previously, the Project parcel is bound on all sides by existing agricultural lands interspersed with sparse rural residences, the closest being located across Kilkenny Road directly to the north. Additional rural residences also exist in the project vicinity, both to the south and west of the Project site. The Project site is located approximately 250 feet southeast of the City of Vacaville jurisdictional boundary, and approximately 5 miles northeast of the city center. I-80 is approximately 0.6-mile northwest of the Project site.

Additionally, for the purpose of conducting the health risk assessment (HRA), off-site worker receptors and sensitive receptors were identified for the Project. Receptors used in the analysis are described in later sections.

2.2 Air Quality Regulatory Setting

Ambient air quality standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. They are designed to protect those people most susceptible to respiratory distress (i.e., sensitive receptors), such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The following discussion describes the regulatory authority of the federal, state, and local jurisdictions. The federal CAA, the California Clean Air Act (CCAA), and the Air Quality Management Plan, prepared and adopted by the YSAQMD, regulate air quality in the air basin. Federal and State standards are shown in Table 1, State and National Ambient Air Quality Standards.

2.2.1 Federal Regulations

2.2.1.1 Criteria Air Pollutants

The federal CAA (42 United States Code Sections 7401-7675) is a comprehensive federal law that regulates air emissions from area, stationary, and mobile sources and requires the adoption of the NAAQS to protect public health and welfare from the effects of air pollution. The federal CAA Amendments of 1990 required that the EPA review all NAAQS with respect to health impacts and propose modifications or new rules as appropriate. In addition, the amendments of the 1990 federal CAA are associated with the attainment and maintenance of air quality standards, permits and enforcement, toxic air pollutants, acid deposition, stratospheric ozone protection, and motor vehicles and fuels.

NAAQS are currently assigned to SO_2, CO, NO_2, O_3, PM_{10}, $PM_{2.5}$, and lead. These pollutants are designated criteria pollutants.

2.2.1.2 Hazardous Air Pollutants

The 1977 federal CAA amendments required the EPA to identify National Emission Standards for Hazardous Air Pollutants (HAPs) to protect public health and welfare. HAPs include certain volatile organic compounds, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. The 1990 federal CAA Amendments, which expanded the control program for HAPs, identified 189 substances and chemical families as HAPs. Over the years, the list has been modified. Currently, there are 187 federally regulated HAPs.

2.2.2 State Regulations

2.2.2.1 Criteria Air Pollutants

The CCAA passed by the California Legislature and signed into law by the Governor in 1988 assigns state-specific ambient air quality standards that had originally been established in part in 1959 by the California Department of Public Health. The California standards are, in most cases, more stringent than federal standards. The goal of the CCAA is to attain state air quality standards by the earliest practical date. Because California established Ambient Air Quality Standards several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology in much of California, there can be a considerable difference between CAAQS and NAAQS. Those standards currently in effect in California are shown on Table 1, State and National Ambient Air Quality Standards.

The CCAA requires each air pollution control district of an air basin designated as nonattainment of state ambient air quality standards to prepare and submit a plan for attaining and maintaining state standards (specifically, an Air Quality Management Plan).

After further review of the relationship between fine particulate matter and human health effects, the CARB adopted new state standards on June 20, 2002, for $PM_{2.5}$. No specific control programs are in place to achieve the more stringent standard. However, it does represent an air quality goal intended to dramatically reduce the adverse health effects from fine-particle air pollution.

Table 1. State and National Ambient Air Quality Standards

		CAAQS[1/]		NAAQS[2/]		
Pollutant	**Averaging Time**	**Concentration[3/]**	**Method[4/]**	**Primary[3/, 5/]**	**Secondary [3,/ 6/]**	**Method[7/]**
Ozone (O_3)	1 Hour	0.09 ppm (180 $\mu g/m^3$)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 $\mu g/m^3$)		0.070 ppm (147 $\mu g/m^3$)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 $\mu g/m^3$	Gravimetric or Beta Attenuation	150 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 $\mu g/m^3$		—		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	—	—	35 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 $\mu g/m^3$	Gravimetric or Beta Attenuation	9.0 $\mu g/m^3$	15 $\mu g/m^3$	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO2)[8/]	1 Hour	0.18 ppm (339 $\mu g/m^3$)	Gas Phase Chemilumin-escence	100 ppb (188 $\mu g/m^3$)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 $\mu g/m^3$)		0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[9/]	1 Hour	0.25 ppm (655 $\mu g/m^3$)	Ultraviolet Fluorescence	75 ppb (196 $\mu g/m^3$)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 $\mu g/m^3$)	
	24 Hour	0.04 ppm (105 $\mu g/m^3$)		0.14 ppm (365 $\mu g/m^3$)[9]	—	
	Annual Arithmetic Mean	—		0.30 ppm (for certain areas)[9]	—	
Lead (Pb)[10/, 11/]	30 Day Average	1.5 $\mu g/m^3$	Atomic Absorption	—	—	—
	Calendar Quarter	—		1.5 $\mu g/m^3$ (for certain areas)[9]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Visibility Reducing Particles[12/]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates (SO_4)	24 Hour	25 $\mu g/m^3$	Ion Chromatography			

Pollutant	Averaging Time	CAAQS[1/]		NAAQS[2/]		
		Concentration[3/]	Method[4/]	Primary[3/, 5/]	Secondary [3,/ 6/]	Method[7/]
Hydrogen Sulfide	24 Hour	0.03 ppm (42 μg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10/]	24 Hour	0.01 ppm (26 μg/m^3)	Gas Chromatography			

Source: CARB (2016); EPA (2024a)

1/ California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter (PM_{10}, and $PM_{2.5}$) and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

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 eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the 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. The torr (symbol: Torr) is a non-SI unit of pressure with the ratio of 760 to 1 standard atmosphere, chosen to be roughly equal to the fluid pressure exerted by a millimeter of mercury, i.e., a pressure of 1 Torr is approximately equal to one millimeter of mercury. 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 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/ 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.

9/ On June 2, 2010, a new 1-hour SO_2 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 SO_2 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.

10/ CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects that are determined. These actions allow implementing control measures at levels below the ambient concentrations specified for these pollutants.

11/ The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m^3 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.

12/ In 1989, the Air Resources Board 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.

2.2.2.2 Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California Toxic Air Contaminants (TAC) list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the Federal HAPs. The Air Toxics ”Hot Spots” Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform an HRA, and if specific thresholds are exceeded, facilities are required to communicate the results to the public in the form of notices and public meetings.

Diesel particulate matter (DPM), a mixture of solid particles in diesel engine exhaust, is classified as a carcinogen and TAC in California. Long-term exposure to DPM poses the highest cancer risk of any TAC evaluated by the Office of Environmental Health Hazard Assessment (OEHHA). CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from DPM. Exposure to DPM is highest near roads and freeways, truck loading and unloading operations, and diesel-powered machinery operations. Exposure to diesel exhaust in general can have immediate health effects such as irritation to the eyes, nose, throat, and lungs. It can also cause coughs, headaches, light-headedness, and nausea (OEHHA 2023).

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. The regulation is anticipated to result in an 80 percent decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. In 2020, CARB adopted the Advanced Clean Truck Regulations that requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California will be zero emission.

Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, On-Road Heavy Duty (New) Vehicle Program, In-Use Off-Road Diesel Vehicle Regulation, and New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several airborne toxic control measures reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 California Code of Regulations [CCR] 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

State Implementation Plans

The federal CAA requires all states to submit a State Implementation Plan (SIP) to EPA. SIPs are not single documents. They are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. Many of California's SIPs and attainment plans rely on the same core set of control strategies described above, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. State law designates CARB as the lead agency for all purposes related to SIPs and attainment plans. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards those revisions to EPA for approval and publication in the Federal Register.

The law also requires submission of attainment plans for areas that are designated nonattainment with respect to the NAAQS. These attainment plans are comprehensive plans that describe how a Federal nonattainment area will attain and maintain the particular NAAQS standard(s) it does not conform to. Once the area is redesignated as attainment for the NAAQS in question, a maintenance area classification is required for a period of 20 years to provide assurance the area will continue to be in attainment, and SIPs must be submitted under this maintenance area classification.

2.2.3 Regional and Local Regulations

2.2.3.1 Yolo Solano Quality Management District

The CARB coordinates and oversees both state and federal air pollution control programs in California and has divided the state into 15 air basins. Significant authority for air quality control within each basin has been given to local Air Pollution Control Districts or Air Quality Management Districts that regulate stationary source emissions and develop local nonattainment plans. The YSAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SVAB. The YSAQMD jurisdiction includes all of Yolo County and the northeast portion of Solano County, including Vacaville, Dixon, and Rio Vista.

YSAQMD is included in the Sacramento Federal Non-attainment Area (SFNA) by the EPA. The SFNA includes Sacramento and Yolo Counties, the western portion of El Dorado and Placer Counties, the southern portion of Sutter County, and the northeastern portion of Solano County. The District has developed the following plans to attain state and federal standards for ozone and particulate matter:

- **1-Hour Ozone**. The SFNA was designated as “severe” nonattainment for the now-revoked 1979 1-hour ozone NAAQS. On October 18, 2012, EPA made a finding that the SFNA attained the revoked 1-hour ozone NAAQS (77 *Federal Register* [FR] 64036). The Sacramento Metropolitan Air Quality Management District (SMAQMD) initially submitted a 1-hour Ozone Attainment Determination Request to EPA in April 2010 (SMAQMD 2010). After issuing its proposed determination for public comment (76 FR 28696), EPA requested additional information which was provided in August 2012. EPA did not act on the request and asked the SMQAMD to update the request under the redesignation substitution request guidelines adopted for the 2008 ozone NAAQS (80 FR 12264). On August 24, 2017, SMAQMD submitted the Sacramento Federal Ozone Nonattainment Area Redesignation Substitution Request for the 1979 1-Hour Ozone Standard in response to the request.
- **8-Hour Ozone**. The EPA promulgated 8-hour ozone NAAQS in 1997, 2008, and 2015, with each successive rule promulgating more stringent NAAQS. The applicable plan is the Sacramento Regional 2015 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan, which was prepared by the SMAQMD staff from the Monitoring, Plan, and Rules Division as a joint project with the YSAQMD and neighboring air districts. The SFNA is classified as a “serious” nonattainment area for the 2015 standard. However, the SFNA has made great strides reducing ozone concentrations as it progresses to meeting its clean air goals and is currently expected to demonstrate attainment by the end of 2032 (SMAQMD 2023). On August 9, 2020, the District published the “Reasonably Available Control Technology (RACT) State

Implementation Plan (SIP) Analysis for the 2015 Federal Ozone Standard" (YSAQMD 2020). The CAA requires certain categories of emission sources in ozone nonattainment areas to implement control methods that meet RACT (YSAQMD 2020).

- **$PM_{2.5}$.** The Sacramento region was able to show that the 24-hour $PM_{2.5}$ standard had been achieved during the 2009-2011 period, thereby demonstrating compliance for three consecutive years. Following this, the YSAQMD and the other air districts of the region subsequently prepared the Proposed $PM_{2.5}$ Implementation/Maintenance Plan and Redesignation Request for Sacramento $PM_{2.5}$ Nonattainment Area (SMAQMD 2013). However, there were some $PM_{2.5}$ exceedances that occurred in late 2012 before the plan was forwarded to EPA. On May 10, 2017, EPA found that the area attained the 2006 $PM_{2.5}$ standard by the attainment date of December 31, 2015 (82 FR 21711). This finding was based on complete, quality-assured and certified $PM_{2.5}$ monitoring data for 2013 to 2015. The $PM_{2.5}$ Maintenance Plan and Redesignation Request will be updated and submitted in the future based on the clean data finding made by the EPA. The YSAQMD and the rest of the Sacramento Region are consistently below the 2012 annual standard for $PM_{2.5}$. The promulgation of the 2024 NAAQS will eventually require EPA to designate the attainment status within two years (i.e., by May 2026).

The YSAQMD's primary means of implementing air quality plans is by adopting and enforcing rules and regulations. Stationary sources within the jurisdiction are regulated by the YSAQMD's permit authority and through its review and planning activities. Unlike stationary source projects, which encompass very specific types of equipment, process parameters, throughputs, and controls, air emissions sources from land use development projects are primarily mobile sources (i.e., construction equipment and motor vehicles) and area sources (small dispersed stationary and other non-mobile sources), including exempt sources (i.e., no permit required) such as consumer products, landscaping equipment, furnaces, and water heaters. Mixed-use land development projects may include nonexempt sources, including devices such as stationary internal combustion engines (i.e., backup power generators), small to large boilers, gas stations, or asphalt batch plants.

Notwithstanding nonexempt stationary sources, which would be permitted on a case-by-case basis, the following YSAQMD regulations generally apply to land use development projects:

<u>Regulation II. Prohibition, Exceptions – Requirements</u>

- Rule 2.1. Control of Emissions. The purpose of this rule is to control the emission of material which may be the cause of air pollution.
- Rule 2.5. Nuisance. This rule prohibits the discharge of air contaminants or other materials in quantities that may cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or that endanger the comfort, repose, health, or safety of any such person or the public.
- Rule 2.11. Particular Matter Concentrations. This rule prohibits the release or discharge into the atmosphere from any single source operation, dust, fumes, or total suspended particulate matter emissions in excess of 0.1 grain per cubic foot of gas at dry standard conditions.

2.2.3.2 Solano County General Plan

The Solano County General Plan, adopted by the Solano County Board of Supervisors on August 5, 2008, and by the voters of Solano County on November 4, 2008, is a guide for both development and conservation within the unincorporated county through 2030 (Solano County 2008). The following goals, policies, and implementation programs from Chapter 5, Public Health and Safety, are applicable for the Project:

Goal HS. G-2. Improve air quality in Solano County, and by doing so, contribute to improved air quality in the region.

Policy HS.P-43. Support land use, transportation management, infrastructure and environmental planning programs that reduce vehicle emissions and improve air quality.

Policy HS.P-44. Minimize health impacts from sources of toxic air contaminants, both stationary (e.g., refineries, manufacturing plants) as well as mobile sources (e.g., freeways, rail yards, commercial trucking operations).

Policy HS.P-45. Promote consistency and cooperation in air quality planning efforts.

Implementation Program HS.I-52. Require that when development proposals introduce new significant sources of toxic air pollutants, they prepare a health risk assessment as required under the Air Toxics “Hot Spots” Act (AB 2588, 1987) and, based on the results of the assessment, establish appropriate land use buffer zones around those areas posing substantial health risks.

Implementation Program HS.I-54. Require the implementation of best management practices to reduce air pollutant emissions associated with the construction of all development and infrastructure projects.

Implementation Program HS.I-58. Use the guidelines presented in the CARB’s *Air Quality and Land Use Handbook: A Community Health Perspective*, or the applicable Air Quality Management District guidelines and recommendations available at the time, when establishing buffers around sources of toxic air contaminants or odorous emissions

Implementation Program HS.I-59. Assess air quality impacts using the latest version of the California Environmental Quality Act Guidelines and guidelines prepared by the applicable Air Quality Management District.

2.3 Regional And Local Air Quality Conditions

2.3.1 Sacramento Valley Air Basin Attainment Status

In an effort to protect human health and welfare, the CARB and EPA have established Ambient Air Quality Standards. Areas are considered in “attainment” if standards are met and “nonattainment” if they are not met. For ozone, nonattainment status is further classified as marginal, moderate, serious, severe, or extreme. For PM_{10} and $PM_{2.5}$, nonattainment status is further classified as moderate or serious.

At the federal level, Solano County is designated as a severe nonattainment area for the 2008 8-hour ozone standard, a serious nonattainment area for the 2015 8-hour ozone standard, and a moderate nonattainment area for the 2006 24-hour $PM_{2.5}$ standard. At the state level, the SVAB is designated as a nonattainment area for ozone and respirable particulate matter. The attainment classifications for the criteria pollutants are presented in Table 2.

Table 2. San Joaquin Valley Attainment Status (Solano County)

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone (1-Hour)	No Federal Standard	Nonattainment/Severe
Ozone (8-Hour)	Nonattainment/Severe (2008); Serious (2015)	Nonattainment
NO_2	Attainment/Unclassified	Attainment
CO	Attainment/Unclassified	Attainment/Unclassified
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment/Moderate	Nonattainment
SO_2	Attainment/Unclassified	Attainment
Lead	Attainment/Unclassified	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: EPA (2024b) and CARB (2022a)

2.3.2 Local Ambient Air Quality

An extensive air monitoring network operated by YSAQMD, CARB, and the U.S. National Park Service measures concentrations of air pollutants to determine attainment status as well as generate air quality forecasts.

YSAQMD monitors ambient air quality for ozone, PM_{10}, and $PM_{2.5}$. The closest monitor measuring ozone concentrations is the Vacaville-Ulatis Drive monitoring station, located approximately 3 miles southwest of the Project site. For PM_{10}, the closest monitor is the Vacaville-Merchant Street monitoring station located approximately 5 miles southwest of the Project site. Finally, for $PM_{2.5}$, the closest monitor is the Woodland-Gibson Road monitoring station located approximately 18 miles northwest of the Project site. For the purposes of this analysis, these monitoring locations were considered to be conservatively representative of the air quality in the immediate vicinity of the Project. Table 3 summarizes the most recent air quality data from 2021 through 2023 with the number of days exceeding the ambient air quality standards.

Table 3. Local Ambient Air Quality Monitoring Data

Averaging Period	2021	2022	2023
Ozone (O_3) – Vacaville-Ulatis, California Monitoring Station (AQS Site ID: 06-095-3003)			
1-hour Maximum Concentration (ppm)	0.095	0.086	0.075
Number of days exceeding CAAQS = **0.09 ppm**	1	0	0
8-hour Maximum Concentration	0.078	0.068	0.069
Number of days exceeding CAAQS = **0.070 ppm**	2	0	0
Number of days exceeding NAAQS = **0.070 ppm**	2	0	0
Inhalable Particulate Matter (PM_{10}) – Vacaville-Merchant Street, California Monitoring Station (AQS Site ID: (06-095-3001)			
24-hour Maximum Concentration (µg/m³)	50.0	33.4	37.6
Number of days exceeding CAAQS = **50 µg/m³**	0	0	0
Number of days exceeding NAAQS = **150 µg/m³**	0	0	0
Annual Average Concentration (µg/m³) (**20 µg/m³ CAAQS**)	*	12.3	*
Fine Particulate Matter ($PM_{2.5}$) – Woodland-Gibson Road, California Monitoring Station (AQS Site ID: 06-113-1003)			
24-hour Maximum Concentration (µg/m³)	33.8	34.8	37.0
Number of days exceeding NAAQS = **35 µg/m³**	0	0	1
Annual Average Concentration (µg/m³) (**12 µg/m³ NAAQS**)[1]	8.8	8.3	7.4

Notes: µg/m³ – microgram per cubic meter; CAAQS – California Ambient Air Quality Standards; NAAQS – National Ambient Air Quality Standards; ppb – parts per billion; ppm – parts per million

1/ Applicable standard for years 2021- 2023. This has since been revised to 9 µg/m³ effective May 6, 2024 (89 FR 16202, Reconsideration of the National Ambient Air Quality Standards for Particulate Matter).

* means that there was insufficient data available to determine the value.

Sources: CARB (2024b) and EPA (2024c)

2.4 Significance Criteria and Methodology

2.4.1 Thresholds of Significance

2.4.1.1 California Environmental Quality Act Guidelines

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which indicates that a project has significant air quality impact if it will:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under applicable federal or state ambient air quality standards.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

2.4.1.2 Yolo Solano Air Quality Management District

The *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD 2007) has established emissions-based thresholds of significance for criteria pollutants, which are shown in Table 4.

Table 4. YSAQMD Air Quality Thresholds of Significance – Criteria Pollutants

Pollutant	Thresholds of Significance
ROG	10 tons/year
NO_X	10 tons/year
PM_{10}	80 lbs/day
CO	Violation of a state ambient air quality standard for CO

CO – carbon monoxide; NOx – nitrogen oxides; PM10 – particulate matter less than 10 microns in diameter; ROG – reactive organic gas

Source: YSAQMD (2007)

In addition to the annual emissions mass thresholds described in Table 4, the YSAQMD has also established additional thresholds of significance for toxics, odors, and cumulative

Toxic Air Contaminants

The YSAQMD has established thresholds of significance for TAC emissions from development projects. Projects that have the potential to expose the public to TACs in excess of the following thresholds would be considered to have a significant air quality impact:

- Probability of contracting cancer for the maximally exposed individual (MEI) equals or exceeds 10 in 1 million people.
- Ground level concentrations of non-carcinogenic TACs would result in a hazard index equal to 1 for the MEI or greater.

These thresholds are not applicable to TACs from mobile sources (YSAQMD 2007).

Cumulative Impact Threshold

As per YSAQMD (2007), any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative impact. For CO, impacts are cumulatively significant when modeling shows that the combined emissions from the project and other existing and planned projects (i.e., background concentration) will exceed the CAAQS.

Odors

As described in YSAQMD (2007), "a project may reasonably be expected to have a significant adverse odor impact where it generates odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property."

2.4.2 Approach and Methodology

Air quality and global climate change impacts associated with the proposed Project are related to emissions that would occur during its construction and subsequent operation. The principal sources of pollutants during construction would be earth-moving activities, construction equipment, trucks bringing materials to and from the site, and construction crew commuting vehicles. There are numerous air quality modeling tools available to assess air quality impacts of the Project. Emissions were estimated using CalEEMod (Version 2022.1.1.21). The model contains data specific to each

California air basin. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. For calculation of on-road (off-site) mobile sources, CalEEMod uses the EMFAC 2021 emissions model (CAPCOA 2022).

2.4.2.1 Construction

The construction processes are anticipated to occur during a period of approximately 14 months, starting in early 2026. Project construction will consist of five primary stages (see Table 5, Construction Schedule), with several stages overlapping with one another. Grading will occur on the site to achieve the required surface conditions. The total graded area for the Project site will be approximately 18.5 acres. The site grading will require approximately 24,550 cubic yards of import fill. The Project will implement dust control practices such as watering.

Construction will primarily occur during daylight hours, Monday through Friday between 7:00 a.m. and 5:00 p.m. as required to meet the construction schedule. Additional hours or days may be necessary to facilitate the schedule. It was assumed that construction equipment will operate for 5 days per week during Project construction.

The onsite construction workforce required for the Project is approximately 78 workers, with a peak workforce of approximately 131 individuals. The Project will also include hauling, vendor, and onsite trucks that will be used for transporting materials onsite and/or offsite during construction. Vehicle use of area roadways resulting from Project construction activities will be limited to the 14-month construction period, as workers and materials are transported to and from the Project site.

Construction scenario assumptions, including phasing, equipment, and vehicle trips, were based on information provided by Corby Energy Storage, LLC. CalEEMod divides the construction processes into phases, which can be modified to fit Project specifications.

During construction of the Project, water will be required for common construction-related purposes, including (but not necessarily limited to) dust suppression, soil compaction, and grading. Temporary onsite water tanks and water trucks will provide water for construction needs. Additionally, construction will generate an average of approximately 80 cubic yards of nonhazardous solid waste per week over the 14-month construction period.

Each construction phase has the potential to generate the following: (1) fugitive dust emissions resulting from soil disturbance activity; (2) emissions of air pollutants from fuel combustion in construction equipment; and (3) emissions of air pollutants from fuel combustion in vehicles used for worker commute, equipment deliveries, and material hauling.

Table 5 shows the construction schedule, and Table 6 shows the construction equipment and vehicle trips.

Table 5. Construction Schedule

Stage	Description	Duration (Days)
1	Site preparation	43
2	Grading	64
3	Battery/Container Installation	152
4	Gen-tie Site Preparation (orchard removal)	10
5	Substation Installation	131
6	Gen-tie Foundations, Tower Erection, and Underground Installation	131
7	Gen-tie Stringing and Pulling	65
8	Commissioning	63
9	Generator Only Phase - Construction	304

Table 6. Construction Equipment and Vehicle Trips Per Phase

Construction Phase	Equipment			Daily Worker Vehicle Trips[1/]	Daily Vendor Trips[1/]	Total Haul Truck Trips[1/]	Onsite Truck Trips[1/]
	Equipment Type	Quantity	Usage Hours				
Site Preparation	Rubber Tired Loaders	1	8	16	8	20	8
	Skid Steer Loaders	1	4				
	Tractors/Loaders/	1	4				
Grading	Graders	1	8	80	16	87[2/]	40
	Plate Compactors	1	6				
	Rollers	1	6				
	Rubber Tired Loaders	1	6				
	Skid Steer Loaders	1	6				
	Tractors/Loaders/	1	8				
	Onsite water trucks	1	8				
Battery/ Container Installation	Cranes	2	8	120	30	30	10
	Air Compressors	2	6				
	Excavators	2	8				
	Plate Compactors	2	4				
	Generator Sets	2	8				
	Rollers	1	8				
	Rough Terrain Forklifts	1	8				
	Skid Steer Loaders	2	6				
	Tractors/Loaders/	2	6				
Gen tie Site Prep (Orchard Removal)	Dozers	2	8	10	0	13	2
	Excavators	1	8				
	Stump Grinder	1	8				
Substation Installation	Air Compressors	1	8	80	40	20	0
	Aerial Lifts	4	4				
	Bore/Drill Rigs	1	2				
	Cranes	1	4				
	Excavators	1	8				

Construction Phase	Equipment			Daily Worker Vehicle Trips[1/]	Daily Vendor Trips[1/]	Total Haul Truck Trips[1/]	Onsite Truck Trips[1/]
	Equipment Type	Quantity	Usage Hours				
	Generator Sets	1	4				
	Rollers	1	6				
	Rough Terrain Forklifts	1	6				
	Rubber Tired Dozers	1	8				
	Tractors/Loaders/ Backhoes	1	6				
	Trenchers	2	8				
	Skid Steer Loaders	1	6				
Gen-tie Foundations, Tower Erection, and Underground Installation	Air Compressors	2	6	80	16	46[2/]	10
	Cranes	1	8				
	Forklifts	1	6				
	Pumps	2	4				
	Welders	2	8				
	Bore/Drill Rigs	1	4				
	Excavators	1	6				
	On-site water trucks	1	8				
Gen-tie Stringing and Pulling	Aerial Lifts	2	6	80	16	20	10
	Tractors/Loaders/	2	6				
Commissioning	N/A	N/A	N/A	150	40	0	20
Generator Only Phase-Construction	Generator Sets	2	8	0	0	0	0

1/ Number reflects daily one-way trips.
2/ Number includes water truck and import fill trips

2.4.2.2 Operation

Once constructed, the Project will operate 7 days per week, 365 days per year. The Project will be outfitted with a suite of sensors, monitoring equipment, and communications gear as part of the Project's supervisory control and data acquisition system. This allows the facility to be monitored in real time remotely.

The Project will require up to six workers to support onsite and offsite O&M and administrative support functions. Onsite O&M activities will consist of performing routine visual inspections, executing minor repairs, and responding to needs for plant adjustment. On intermittent occasions, additional workers may be required for repairs or replacement of equipment or other specialized maintenance. However, due to the self-operating nature of the facility, such actions will likely occur infrequently. One major maintenance inspection will also take place annually, requiring approximately 20 personnel for approximately one week. In addition, approximately every 2 to 3 years the Project will require battery augmentation to maintain Project capacity; a crew of approximately 20 additional workers will be onsite for approximately 3 months to install and connect additional batteries. O&M vehicles will include light-duty trucks (e.g., pickup, flatbed) and other light equipment for maintenance. Large or heavy equipment will not be used during normal operation, but may be brought to the facility infrequently for equipment repair or replacement.

Operational emissions were estimated using CalEEMod to include area, energy, and mobile source emissions. Operational assumptions, including equipment, solid waste, and water usage were based on information provided by Corby Energy Storage, LLC.

2.4.2.3 Ambient Air Quality Analysis

Per YSAQMD (2007), an Ambient Air Quality Analysis was performed for onsite construction and operation CO emissions. Additionally, for evaluating health risk associated with TACs, air quality impacts from DPM (represented by exhaust PM_{10}) were assessed. Emissions were simulated as three area sources covering the Project areas associated with the BESS, substation, and gen-tie corridor. The modeling inputs are summarized below:

- AERMOD was executed using the latest version of the model (v23132) with the EPA regulatory default option.
- Five years of meteorological data (2017–2021) comprising Vacaville, California, surface observations with concurrent upper air data from Oakland, California, were obtained from CARB in AERMOD-ready processed format. This meteorological data set was used to estimate the maximum concentrations by the refined AERMOD modeling to best represent a maximum predicted concentration that can occur considering varying hourly meteorology over a 5-year period.
- The area sources were characterized to have a release height of 2.55 meters with an initial vertical dimension of 2.37 meters (EPA 2012). Annual mitigated construction equipment emissions were determined from CalEEMod and assigned to the area source. The HROFDAY factor in AERMOD was used to reflect the construction schedule (7:00 a.m.–7:00 p.m. Monday through Friday).
- Receptors were placed along the property fence line at 20-meter intervals. A nested grid of receptors was developed using the following spacing: 100-meter spacing out to 2,000 meters, and 1,000-meter spacing out to 20,000 meters in accordance with the OEHHA (2015) Air Toxics Hot Spots Program Risk Assessment Guidance. Additionally, discrete receptors were placed to capture DPM concentrations at select points of interest. These include residences, off-site worker locations, and sensitive receptors.
- Receptor elevations were determined by using National Elevation Data processed with the AERMAP v18181 terrain preprocessor.

The AERMOD dispersion modeling results are provided in Attachment B, Dispersion Modeling. Electronic files can be made available upon request.

2.4.2.4 Health Risk Assessment

An HRA was conducted for Project construction DPM emissions using HARP2 based on values from AERMOD. Therefore, the discussion of dispersion modeling input parameters in the Section 2.4.2.3 also applies to the HRA. As per YSAQMD (2007), cancer and non-cancer risks associated with the MEI were calculated. The point of maximum impact is expected to occur at the Project boundary due to the near-surficial release height of the vehicle exhaust. The OEHHA default values for fraction at home, breathing rates, etc., were used for exposure calculations in HARP2. Since operational activities will be limited to routine inspection and maintenance, which would have negligible emissions, no quantitative HRA was performed. HARP2 output files are provided in Attachment C, Health Risk Assessment.

2.5 Impact Analysis

2.5.1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. The Project will not conflict with existing land uses or result in population growth. The Project will comply with all applicable YSAQMD rules and regulations. In addition, the Project will not result in a long-term increase in the number of trips or increase the overall vehicle miles traveled in the area. Worker vehicle trips, vendor trucks, and haul trucks will be generated during the proposed construction activities but will cease after construction is completed. Criteria pollutant emissions during construction will be below the applicable YSAQMD significance thresholds. The Project will implement best management practices for controlling fugitive dust emissions in accordance with HS.I-54 in the Solano County General Plan (Solano County 2008).

During the longer-term operational phase, the Project will have routine inspection and maintenance activities that will result in a net increase in emissions. However, this increase in emissions will not exceed any significance threshold or violate any YSAQMD rule or regulation. Therefore, impacts will be less than significant.

2.5.2 Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. As stated previously, the YSAQMD has established significance thresholds to address pollution sources associated with general construction activities, such as the operation of onsite construction equipment, fugitive dust from site grading activities, and travel by construction workers. Based on these recommended thresholds, the proposed Project will result in a significant contribution to localized ambient air quality if emissions were to exceed the established thresholds.

The Project will include control of dust emissions generated during grading activities. Measures for dust control applied in CalEEMod for this analysis include the following:

- Watering of exposed surfaces up to three times per day,
- Watering of unpaved construction roads up to two times per day, and
- Implementation of vehicle speed on unpaved roads (assumes a CalEEMod default speed of 25 miles per hour).

Table 7 presents the estimated maximum annual emissions generated during construction of the Project, which will occur during 2026. Table 8 presents the estimated onsite maximum daily emissions generated during construction of the Project. Emissions with and without Tier 4 mitigation and dust control reductions are presented. Detailed emission calculations are provided in Attachment A.

Table 7. Estimated Maximum Annual Construction Criteria Air Pollutant Emissions

Total Project Emissions	Emissions (tons)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
No Reductions	0.65	5.92	10.84	0.02	5.92	0.83
Dust Control Reductions	0.65	5.92	10.84	0.02	2.02	0.44
YSAQMD Threshold (tons/year)	*10*	*10*	--	--	--	--
Threshold Exceeded?	**No**	**No**	**N/A**	**N/A**	**N/A**	**N/A**

CO – carbon monoxide; NO_x – nitrogen oxides; PM2.5 – particulate matter less than 2.5 microns in diameter; PM_{10} – particulate matter less than 10 microns in diameter; ROG – reactive organic gas; SOx – sulfur oxides

Table 8. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Total Project Emissions	Emissions (lbs/day)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
No Reductions	8.12	70.21	131.67	0.20	100.76	12.85
Dust Control Reductions	8.12	70.21	131.67	0.20	31.61	5.94
YSAQMD On-site Emissions Threshold	--	--	--	--	*80*	--
Threshold Exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**No**	**N/A**

CO – carbon monoxide; NO_x – nitrogen oxides; PM2.5 – particulate matter less than 2.5 microns in diameter; PM_{10} – particulate matter less than 10 microns in diameter; ROG – reactive organic gas; SOx – sulfur oxides

As shown in Table 7, annual construction emissions will not exceed the YSAQMD annual significance thresholds for ROG and NO_x. Maximum daily PM_{10} construction emissions will not exceed YSAQMD's significance threshold of 80 pounds/day with the use of dust mitigation measures (Table 8).

Project operational emissions were estimated using CalEEMod to include mobile, area, stationary, and off-road source emissions. This includes potential emissions from worker commutes, and heavy trucks used during maintenance.

Table 9 presents the estimated maximum annual operational emissions in tons per year with a comparison to YSAQMD thresholds. Detailed emissions calculations are provided in Attachment A.

Table 9. Estimated Maximum Annual Operational Criteria Air Pollutant Emissions

Emission Source	Emissions (tons per year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area, Mobile, Stationary and Offroad	0.44	0.01	0.37	<0.01	0.002	<0.001
YSAQMD Threshold	*10*	*10*	--	--	--	--
Threshold Exceeded?	**No**	**No**	**N/A**	**N/A**	**N/A**	**N/A**

CO – carbon monoxide; NO_x – nitrogen oxides; PM2.5 – particulate matter less than 2.5 microns in diameter; PM_{10} – particulate matter less than 10 microns in diameter; ROG – reactive organic gas; SOx – sulfur oxides

Table 10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	Emissions (lbs/day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area, Mobile, Stationary and Offroad	2.88	0.09	4.24	<0.001	0.02	0.01
YSAQMD Threshold	--	--	--	--	*80*	--
Threshold Exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**No**	**N/A**

CO – carbon monoxide; NO_x – nitrogen oxides; PM2.5 – particulate matter less than 2.5 microns in diameter; PM_{10} – particulate matter less than 10 microns in diameter; ROG – reactive organic gas; SOx – sulfur oxides

As shown in Tables 9 and 10, operational emissions will not exceed the YSAQMD thresholds for ROG, NO_X, and PM_{10}.

Additionally, based on the ambient air quality modeling, predicted impacts for construction and operations CO emissions are below the CAAQS (Table 11). Therefore, impacts will be less than significant. AERMOD results and input files are provided in Attachment B.

Table 11. Carbon Monoxide Impacts

Project Emissions	Modeled Impact (ppm)[1/]	
	1 hour	8 hour
Construction	4.49	2.06
Operation	2.33	1.61
CAAQS (ppm)	20	9
Above the CAAQS?	**No**	**No**

1/ Values include background CO concentrations obtained from 100 Bercut Drive, Sacramento, CA monitoring station (AQS ID- 060670015)

2.5.3 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)?

Less Than Significant Impact. As discussed previously, the Project will result in an increase in short-term emissions related to construction and an increase in long-term operational emissions for those pollutants and precursors (ROG and NO_X) for which the YSAQMD is in nonattainment (O_3 and $PM_{2.5}$). However, the cumulative emissions associated with the Project will not be considerable because the emissions will be less than YSAQMD thresholds. Under this condition, the Project will not make a cumulatively considerable contribution during construction or operations. Therefore, impacts will be less than significant.

2.5.4 Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The Project consists of construction of a BESS facility that may have the potential to affect nearby sensitive receptors. As stated previously, the nearest rural residences are located across Kilkenny Road directly to the north and along Kilkenny Road to the west. Additional rural residences also exist in the Project vicinity; to the north, south, and east of the Project BESS area; and northeast of the PG&E Vaca-Dixon Substation. The nearest worker receptors will potentially be located just east of the BESS area with additional workers located to the southeast and northeast of the Project site. Other sensitive receptors include assisted living facilities, a hospital, and a school located west of the Project, across I-80.

YSAQMD identifies significance thresholds for TAC that are based on localized impacts. These include a cancer risk greater than 10 in 1 million for the MEI, and a chronic and acute hazard index (i.e., ratio of concentrations to Reference Exposure Levels) of one or more. The primary TAC emitted from construction activities is diesel PM (as PM_{10}). An HRA was performed to estimate the potential cancer and chronic risk (characterized by a hazard index) at the maximally exposed receptors. Acute risk was not evaluated since OEHHA has not established an acute Reference Exposure Level for DPM. While HRAs generally focus on sensitive receptors (e.g., residences, schools, and hospitals), a full receptor grid surrounding the Project site was also included. Based on the HRA, the Project is expected to have a cancer risk less than 10 in one million at all MEIs, and a chronic hazard index less than 1 (Table 12). Therefore, impacts will be less than significant. Because operational activities will be limited to routine inspection and maintenance, an operational HRA was not required, and the impact will therefore be less than significant.

Table 11. Health Risk Assessment for Mitigated Construction Emissions

Maximum Impact Receptor	Cancer Risk (Persons per Million)	Chronic Hazard Index	Receptor Coordinates (UTM NAD 83 Zone 10)		Distance to Project Boundary (miles)
			Easting (meters)	Northing (meters)	
PMI*	0.77	0.060	594464.30	4251031.29	0
MEIR-1	7.92	0.009	595415.77	4250279.25	0.03
MEIR-2	1.66	0.002	594931.91	4250179.68	0.05
MEIR-3	2.36	0.003	595411.52	4250453.65	0.13
MEIR-4	2.20	0.002	595511.46	4250501.92	0.17
MEIR-5	1.28	0.001	595498.54	4250667.12	0.27
MEIR-6	1.45	0.002	594766.45	4251527.66	0.31
MEIR-7	0.60	0.001	595687.62	4249132.47	0.32
MEIR-8	0.32	<0.001	596049.90	4249314.63	0.37
MEIR-9	0.56	0.001	596300.42	4250254.46	0.48
MEIW-1	0.08	0.006	595615.79	4250198.89	0.05
MEIW-2	0.02	0.002	595611.93	4249482.52	0.10
MEIW-3	0.06	0.004	594302.81	4250769.11	0.13
MEIW-4	0.01	0.001	593892.01	4250441.84	0.44
MEIW-5	0.01	0.001	595985.30	4250979.75	0.54
Sensitive Receptor-1	0.003	<0.001	593411.06	4251932.94	0.80
Sensitive Receptor-2	0.003	<0.001	593289.01	4251915.51	0.87
Sensitive Receptor-3	0.002	<0.001	593034.82	4250164.60	0.98
Sensitive Receptor-4	0.09	<0.001	592775.99	4249427.13	1.25
Sensitive Receptor-5	0.01	<0.001	592634.24	4249800.03	1.27
YSAQMD threshold	***10***	***1***	**--**	**--**	**--**

* Point of Maximum Impact (PMI) occurs at Project Boundary
NAD 83 – North American Datum of 1983; UTM – Universal Transverse Mercator

2.5.5 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. During Project-related construction activities, various diesel-powered vehicles and equipment could create minor odors. These odors are not likely to be noticeable beyond the immediate vicinity and will be temporary and short-lived. Therefore, construction odor impacts will be less than significant. Long-term odors are associated typically with industrial projects involving use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes. Odors also are associated with such uses as sewage treatment facilities and landfills. The Project involves no elements related to these types of uses. Therefore, no long-term odor impacts will occur with Project implementation.

3.0 GREENHOUSE GAS EMISSIONS

3.1 Environmental Setting

3.1.1 The Greenhouse Effect

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. A GHG is any gas in the atmosphere that absorbs infrared radiation. As solar radiation enters the earth's atmosphere, a portion of the radiation is absorbed by the earth's surface, and a portion is reflected back through the atmosphere into space. The absorbed radiation is eventually emitted from the earth into the atmosphere, not as solar radiation, but as infrared radiation. Most solar radiation passes through GHGs; infrared radiation is selectively absorbed or "trapped" by GHGs as heat and then reradiated back toward the earth's surface, warming the lower atmosphere and the earth's surface. This phenomenon, known as the "greenhouse effect," is beneficial for maintaining a habitable climate on the earth. As the atmospheric concentrations of GHGs rise, however, the average temperature of the lower atmosphere gradually increases, thereby increasing the potential for indirect effects such as a decrease in precipitation as snow, a rise in sea level, and changes to plant and animal species and habitat.

Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed globally. Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, scientific evidence reveals that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered through ocean uptake, uptake by northern hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46 percent of human-caused CO_2 emissions remains stored in the atmosphere. The quantity of GHGs that it takes to ultimately result in climate change is not known precisely, although scientific evidence strongly indicates no single project would be expected to contribute measurably to a noticeable incremental change in the global average temperature.

3.1.2 Greenhouse Gases and Global Warming Potential

GHGs are emitted by natural processes and human activities. Natural GHG sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Human activities known to emit GHGs include industrial manufacturing, utilities, transportation, residential, and agricultural activities. The GHGs that enter the atmosphere because of human activities are CO_2, CH_4, N_2O, and fluorinated carbons (hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]).

CO_2 is an odorless, colorless gas with both natural and anthropogenic sources. Examples of natural sources are respiration of bacteria, plants, and animals, evaporation from oceans, and decomposition of organic matter. Human activities that emit CO_2 include burning coal, oil, natural gas, and wood.

CH_4 is a flammable gas that is the main component of natural gas. When burned in the presence of oxygen, CO_2 and water are released. There are no direct health effects from exposure to CH_4. Sources of CH_4 include decay of organic material, natural gas fields, cattle, and landfills.

N_2O is a colorless gas that can cause euphoria, dizziness, and slight hallucinations when exposed to higher concentrations. Sources include agricultural sources (e.g., microbial processes in soil and water, fertilizer) and industrial processes (e.g., fossil fuel-fired power plants, vehicle emissions, nylon production).

Fluorinated gases are synthetic and emitted from a variety of industrial processes. HFCs are human-made chemicals used as a substitute for chlorofluorocarbons for automobile air conditioners and refrigerants.

PFCs are very stable in the lower atmosphere and have long lifetimes (between 10,000 and 50,000 years). The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

SF_6 is an inorganic, colorless, odorless, nontoxic, nonflammable gas used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.

Global Warming Potential

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of one kilogram of a trace substance relative to that of one kilogram of a reference gas. The reference gas used is CO_2. Therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e). It was assumed that the GWP for CH_4 is 25 (which means that emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), the GWP for N_2O is 298, and the GWP for SF_6 is 22,800 based on the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC 2007). These GWPs are also codified by the EPA in 40 CFR 98.

3.2 Air Quality Regulatory Setting

3.2.1 Federal Regulations

3.2.1.1 Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, that CO_2 is an air pollutant as defined under the CAA, and that the EPA has the authority to regulate emissions of GHGs. Responding to the mounting issue of climate change, the EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions.

3.2.1.2 Mandatory Greenhouse Gas Reporting Rule (40 CFR 98)

On September 22, 2009, the EPA issued a final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. In general, this national reporting requirement provides the EPA with accurate and timely GHG emissions data from facilities that emit 25,000 MT or more of CO_2 per year. These publicly available data allow the reporters to track their own emissions, compare them to similar facilities, and help identify cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial GHGs along with vehicle and engine manufacturers report at the corporate level. An estimated 85 percent of the total United States GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

3.2.1.3 Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act

On December 7, 2009, the EPA adopted its Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA (Endangerment Finding). The Endangerment Finding is based on Section 202(a) of the CAA, which states that the Administrator (of EPA) should regulate and develop standards for "emission[s] of air pollution from any class or classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." The rule addresses Section 202(a) in two distinct findings. The first addresses whether the concentrations of the six key GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the health and welfare of current and future generations. The second addresses whether the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and therefore the threat of climate change.

The Administrator found that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are most likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wildfires, droughts, sea level rise, and higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The Administrator also found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHGs fit within the CAA definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but rather allow the EPA to define the GHG standards proposed earlier in 2009 for new light-duty vehicles as part of the joint rulemaking with the U.S. Department of Transportation.

Various subsequent federal rulemakings limit GHG emissions from fossil fuel-fired power plants through EPA's major stationary source permitting program and through EPA's New Source Performance Standards. These rulemakings have been subject to court challenges and political manipulation, such that applicants for air permits are required to evaluate the current status of the regulatory requirements at the time of application filing. These GHG rules do not apply to the activities associated with the Project.

3.2.1.4 Presidential Executive Orders 13990 and 14008

Executive Order 13990 (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis), issued on January 20, 2021, directs all federal executive departments and agencies to immediately review and take action to address the promulgation of federal regulations and other actions that conflict with important national objectives and to immediately commence work to confront the climate crisis (86 FR 7037; 2021).

Executive Order 14008 (Tackling the Climate Crisis at Home and Abroad), issued on January 27, 2021, declares the Administration's policy to build resilience against the impacts of existing climate change and projected changes according to current trajectories in both the United States and with other countries abroad (86 FR 7619; 2021).

3.2.2 State Regulations

3.2.2.1 California Air Resources Board

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. Various Statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO_2e and produced 424 million gross metric tons of CO_2e in 2017. In the United States, transportation, industrial operations, and utility sectors produce over 75 percent of all GHGs emitted.

The State legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation.

Assembly Bill 1493

In 2002, California passed AB 1493, which requires CARB to develop and implement regulations to reduce automobile and light truck GHG emissions beginning with the 2009 model year.

Executive Order S-3-05

In June 2005, Executive Order S-3-05 was signed to reduce California's GHG emissions to: (1) 2000 levels by 2010; (2) 1990 levels by the 2020; and (3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of AB 32, the Global Warming Solutions Act of 2006.

Assembly Bill 32 (California Global Warming Solutions Act of 2006), Senate Bill 32 , Assembly Bill 197, and Related

The California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 to 38599) establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires the State to create an opportunity for interested parties to comment on the scoping plan by conducting public workshops which are required in regions with low-income communities and minority populations. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. In 2016, statewide GHG emissions fell below the levels recorded in 1990, 4 years ahead of schedule.

To achieve the goals of AB 32, CARB adopted a Scoping Plan, which includes market mechanisms and rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines an adopted role of a cap-and-trade program.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other federal actions.

Executive Order B-30-15 (April 29, 2015) set an "interim" statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030 and directed state agencies with jurisdiction over GHG emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels. Specifically, the Executive Order directed CARB to update the Scoping Plan to express this 2030 target in metric tons.

CARB's "2022 Scoping Plan for Achieving Carbon Neutrality" (CARB 2022b) was adopted on December 15, 2022. The Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacing fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world.

The Scoping Plan addresses AB 1279, SB 905, SB 1065, SB 1075, and other legislation and executive orders addressing GHG reductions in various manufacturing sectors and managing natural lands.

In 2022, California passed AB 1279 (California Crisis Act), which introduced a statewide policy to achieve net zero GHG emissions by 2045 and maintain net negative GHG emissions thereafter. Furthermore, AB 1279 ensures that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. This bill would require the state board to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California, as specified. As stated above, these policies were incorporated into the 2022 Scoping Plan.

SB 905 requires the state board, along with appropriate state and local agencies, to "adopt regulations for a unified permit application for the construction and operation of carbon dioxide capture, removal, or sequestration projects" by January 1. 2025. The state board is required to develop a public database to track such projects.

SB 1075 requires the state board to specify information relative to the deployment, development, and use of hydrogen as part of the evaluation posted to the state board's internet website by June 1, 2024. Additionally, the Energy Commission is expected "to study and model potential growth for hydrogen and its role in decarbonizing" as part of the 2023 and 2025 editions of the integrated energy policy report.

SB 1206 mandates a stepped sales prohibition on newly produced high-GWP HFCs to transition California's economy toward recycled and reclaimed HFCs for servicing existing HFC-based equipment. Additionally, SB 1206 also requires CARB to develop regulations to increase the adoption of very low GWP (i.e., GWP < 10) and no-GWP technologies in sectors that currently rely on higher-GWP HFCs.

In 2002, SB 1078 established a Renewable Portfolio Standard (RPS), which required an annual increase in renewable generation by utilities with a goal of 20 percent renewable generation by 2010. SB X1-2 expanded the RPS by establishing a renewable energy target of 20 percent of the total electricity sold to retail customers in California per year by 2013, and 33 percent by 2020 and subsequent years. SB 350 further expanded the RPS by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year by 2030. SB 100 mandates that the California Public Utilities Commission, CEC, and CARB plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. The statute requires these agencies to issue a joint policy report on SB 100 every 4 years. The first of these reports was issued in 2021. This Scoping Plan reflects the SB 100 Core Scenario resource mix with a few minor updates. This bill also updates the state's RPS to include the following interim targets:

- 44 percent of retail sales procured from eligible renewable sources by December 31, 2024;
- 52 percent of retail sales procured from eligible renewable sources by December 31, 2027; and
- 60 percent of retail sales procured from eligible renewable sources by December 31, 2030.

Executive Order B-55-18 and SB 100 (100 Percent Clean Energy Act of 2018)

SB 100, also known as the California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases and as the 100 Percent Clean Energy Act of 2018, was approved by the California legislature and signed by Governor Brown in September 2018. SB 100 declares that CARB should plan for 100 percent total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by the end of 2045. As stated above, SB 100 also set interim goals, accelerating the RPS requirement to 50 percent from renewable energy sources by 2026 and 60 percent by 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045 and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency, California Environmental Protection Agency, the Department of Food and Agriculture, and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

Senate Bill 375

SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. CARB adopted the vehicular GHG emissions reduction targets, in consultation with the metropolitan planning organizations (MPOs), which require a 7 to 8 percent reduction by 2020 and a 13 to 16 percent reduction by 2035, for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. The Metropolitan Transportation Commission (MTC) is the federally designated MPO for Solano County.

3.2.3 Regional and Local Regulations

3.2.3.1 Yolo Solano Air Quality Management District

YSAQMD does not provide any specific guidance for assessing the impacts of GHGs from land use projects located within its boundary.

3.2.3.2 Association of Bay Area Governments

The Association of Bay Area Governments (ABAG) is the comprehensive regional planning agency and council of governments serving nine counties and 101 cities and towns of the San Francisco Bay region including Solano County. As stated earlier, MTC is the federally designated MPO for Solano County that is required to prepare a Sustainable Community Strategy in their Regional Transportation Plan. Per state law, MTC and ABAG share joint responsibility for the long-range regional plan, called

Plan Bay Area, and they develop the plan with local and regional partner agencies. This plan must be updated every 4 years. ABAG and MTC adopted Plan Bay Area 2050 in October 2021. This plan contains strategies across different elements such as housing, the economy, transportation, and the environment that were designed based on the vision for a more equitable and resilient future for Bay Area residents. When implemented together as one package of policies and investments, the 35 plan strategies reduce GHG emissions by focusing housing and commercial construction in walkable, transit-accessible places; investing in transit and active transportation; and shifting the location of jobs to encourage shorter commutes (MTC and ABAG 2021). As of June 2024, Plan Bay Area 2050+, which is a limited and focused update to Plan Bay Area 2050, is being developed.

3.2.3.3 Solano County

Following the 2008 update to the General Plan, which recognized the threat of global climate change, the County adopted its Climate Action Plan (CAP). This plan recommends several measures and actions that the community can take to reduce both emissions and communitywide contributions to global climate change. The CAP includes a communitywide GHG emissions reduction target of 20 percent below 2005 baseline emission levels by 2020 (Solano County 2011). The County has not adopted an updated CAP.

3.3 Significance Criteria and Methodology

3.3.1 Thresholds of Significance

The state of California has developed guidelines to address the significance of GHG impacts based on Appendix G of the CEQA Guidelines, which indicates that a project has significant air quality impact if the project:

- Generates GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and
- Conflicts with an applicable plan, policy, or regulations adopted for the purpose of reducing the emissions of GHGs.

YSAQMD has not established a threshold of significance for GHGs. As it is unlikely that any one project would substantially contribute to global climate change, the District considers GHG impacts to be cumulative in nature, and lead agencies evaluate whether a project’s incremental direct and indirect GHG emissions are cumulatively considerable. According to the District, if the lead agency jurisdiction has adopted a CAP or General Plan goals and policies with regard to GHGs, the environmental review should base its analysis on the provisions of those documents. If the lead agency jurisdiction has not adopted a CAP or General Plan goals and policies, then the District recommends that lead agencies consider a project’s total emissions in relation to the AB 32 and AB 32 Scoping Plan goals (and additional state goals as they are adopted) or the thresholds established by other jurisdictions.

Although Solano County has adopted a CAP, it does not identify any quantitative thresholds for significance evaluation. Therefore, the interim threshold for operational emissions of industrial projects proposed by the California Air Pollution Control Officers Association (CAPCOA) is used herein

(CAPCOA 2008). This threshold is consistent with California's climate-stabilization target (identified in AB 32).

Following CAPCOA's analysis of development applications in various cities, it was determined that the threshold of 900 MT CO_2e per year would achieve the objective of 90 percent capture and ensure that new development projects would keep the state of California on track to meet the goals of AB 32. The 900 MT CO_2e threshold is applied to evaluate whether the project would generate GHG emissions that may have a significant impact on the environment.

3.3.2 Approach and Methodology

A GHG analysis is required to be included in CEQA documents for all non-exempt projects. YSAQMD supports the use of the interim thresholds as established by the CAPCOA when adopted thresholds are not applicable. A new threshold has not been established to meet SB 32 targets beyond 2020. Additionally, based on the SCAQMD *Draft Guidance Document – Interim CEQA GHG Significance Threshold*, Project construction emissions can be amortized by calculating total construction period emissions and dividing by the 30-year lifetime of the Project (SCAQMD 2008).

For this Project, the primary source of GHGs is the combustion of fuel in construction equipment, in motor vehicles used to haul materials, and in motor vehicles used by workers commuting to and from the site.

There are three primary GHGs emitted from fuel combustion: CO_2, CH_4, and N_2O. GHG emissions are presented as CO_2e and are computed based on GWP. The CH_4 GWP is 25 times that of CO_2, and the N_2O GWP is 298 times that of CO_2. Mathematically, the CO_2e can be represented by the following equation:

$$CO_2e \text{ Emissions} = CO_2 \text{ Emissions} + 25 \times CH_4 \text{ Emissions} + 298 \times N_2O \text{ Emissions}$$

The CalEEMod model was used to estimate the GHG emissions during the construction phase of the proposed Project. Based on the construction schedule, types and quantities of construction equipment, and haul trucks, etc., the maximum CO_2e emissions were estimated. The CalEEMod model quantifies CO_2, CH_4, and N_2O emissions, as well as common refrigerant GHG emissions. For typical diesel-fueled combustion equipment used in construction activities, the emissions factors adjusted with global warming equivalence are the following:

1. CO2 emission factors are 22.4 pounds of CO2e per gallon of fuel consumed.
2. CH4 emission factors are 0.065 pounds of CO2e per gallon of fuel consumed.
3. N2O emission factors are 0.068 pounds of CO2e per gallon of fuel consumed.

As shown in these emission factors, the CO_2 profile is 99 percent of the total GHG emissions generated in combustion equipment.

Additionally, GHG emissions are associated with fugitive emissions of SF_6 from gas-insulated switchgear equipment, such as the high voltage circuit breakers at the on-site substation. The SF_6 global warming equivalence is 22,800 times that of CO_2. The Project will have four 245-kV voltage circuit breakers, each with 125 pounds of SF_6 for a total of 500 pounds, and a maximum leak rate of 0.5 percent per year. CO_2e resulting from SF_6 gas leakage can be represented by the following equation:

CO_2e Emissions = SF_6 gas contained in equipment (lbs) x 0.5% leak rate per year x 0.0004536 MT/lb x 22,800

3.4 Impact Analysis

3.4.1 Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

3.4.1.1 Construction

Less Than Significant Impact. Construction of the Project will generate GHG emissions, which can contribute to global climate change. This analysis is provided in response to the subject of global climate change and, specifically, in response to the California Legislature's passage and the Governor's signing of AB 32, which is intended to control and reduce the emission of global warming gases in California; and SB 97, which directs the Office of Planning and Research and the California Resources Agency to develop CEQA Guidelines on how local agencies should analyze and, if necessary, mitigate for GHG emissions.

Construction emissions will be associated with vehicle engine exhaust from construction equipment and vehicles, vendor trips, construction worker commuting trips, and the stationary generators to be used during construction. CalEEMod also calculates indirect GHG emissions from electricity generation. Construction-related GHG emissions are considered temporary and short term and, as described above, are amortized over a 30-year period and added to the calculated operation phase emissions for comparison to the significance threshold (SCAQMD 2008). As shown in Table 13, amortized short-term construction CO_2e emissions are estimated to be 75 MT CO_2e. As shown in Table 14, when added to the operational GHG emissions, the Project will result in a less than significant cumulative impact in terms of climate change.

Table 13. Estimated Annual Construction Greenhouse Gas Emissions

Total Project Emissions	CO_2	CH_4	N_2O
	Emissions (Metric tons)		
Construction GHG Emissions	2,202	0.05	0.19
Global Warming Equivalence Factor	1	25	298
Equivalent CO_2e Emissions[1/]	2,202	1.28	55.22
Total Construction GHG (CO_2e)	*2,259*		
Total Construction GHG (CO_2e) Amortized Annual Emissions over 30 Years	***75***		

1/ Equivalent CO_2e Emissions = Construction GHG Emissions x Global Warming Equivalent Factor
CO_2 – carbon dioxide; CO_2e – carbon dioxide equivalent; CH_4 – methane; GHG – greenhouse gas; N_2O – nitrogen oxides

3.4.1.2 Operations

Less Than Significant Impact. Operation of the Project will generate GHG emissions through motor vehicle trips to and from the Project site, occasional use of heavy-duty trucks, waste generation, and electricity use. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 2.4.2.2.

The estimated operational GHG emissions from the Project are shown in Table 14.

Table 14. Estimated Annual Operational Greenhouse Gas Emissions

Annual	CO_2	CH_4	N_2O	SF_6
	Emissions (Metric tons)			
Operational GHG Emissions	3.42	0.0003	0.0002	0.0011
Global Warming Equivalence Factor	1	25	298	22,800
Equivalent CO_2e Emissions[1]	3.42	0.01	0.06	25.86
Total Operational GHG Emissions	29			
Total Operational GHG Emissions + Amortized Construction GHG Emissions	104			

1/ Equivalent CO_2e Emissions = Construction GHG Emissions x Global Warming Equivalent Factor

CO_2 – carbon dioxide; CO_2e – carbon dioxide equivalent; CH_4 – methane; GHG – greenhouse gas; N_2O – nitrogen oxides

As shown in Table 14, estimated annual Project-operational GHG emissions will be approximately 29 MT CO_2e per year as a result of Project operation. Estimated maximum annual operational emissions and amortized construction emissions will be approximately 104 MT CO_2e per year. As shown, the total annual emissions will not exceed the proposed interim GHG significance threshold of 900 MT CO_2e per year. Because the Project's GHG emissions will not result in a cumulatively considerable contribution, the Project will result in a less than significant cumulative impact in terms of climate change.

The Project will also have indirect GHG emissions during operation due to energy losses during transmission and battery charging cycles, and due to auxiliary loads including BESS module thermal management systems (TMS), supervisory control and data acquisition system, and other energy-consuming equipment. Based on the total BESS storage capacity of 1,200 megawatt-hours (MWh), approximately 1,343 MWh of grid electric energy will be drawn for each full charging cycle, of which approximately 143 MWh will be lost due to round-trip losses. Each of the Project's 384 battery modules will also be equipped with a TMS that provides cooling (or heating) of the battery modules as required to maintain the allowable operating temperature range. The total auxiliary load, including TMS and other energy consumption, is estimated to be 7.68 MW.

Conservatively assuming up to 365 full charging cycles per year, transmission and BESS charging losses may result in a total energy loss of up to 52,053 MWh of grid electric energy per year. Assuming that the BESS operates for an average of 8 hours per day (one charge and discharge cycle), BESS auxiliary systems are estimated to consume approximately 24,840 MWh of grid electric energy per year.

Table 15 presents the estimated indirect GHG emissions during operation of the Project, based on default GHG emission factors provided by CalEEMod for the Pacific Gas & Electric Company, which serves Solano County. One of the key objectives of the Project is to allow for an increased percentage of renewable energy use, reducing GHG emissions by storing renewable energy for use during times when demand exceeds renewable energy generation. Therefore, the indirect emission estimates presented in this analysis are conservative since they are based on current PG&E GHG emission factors. Although the conservatively estimated indirect GHG emissions would be greater than the proposed interim GHG significance threshold of 900 MT CO_2e per year, that threshold is intended to apply only to direct, rather than indirect, GHG emissions from a project.

Table 15. Estimated Indirect Operational Greenhouse Gas Emissions

CalEEMod Electric Utility GHG Emission Factors	CO_2	CH_4	N_2O
	Emissions (lb/MWh)		
Pacific Gas and Electric Company	203.983	0.033	0.004
Annual Indirect GHG Emissions	**CO_2**	**CH_4**	**N_2O**
	Emissions (Metric tons)		
Indirect GHG Emissions from Round-Trip Efficiency Losses	4,816	0.78	0.09
Indirect GHG Emissions from Auxiliary Loads	2,298	0.37	0.05
Total Indirect GHG Emissions from BESS Operation	7,115	1.15	0.14
Global Warming Equivalence Factor	1	25	298
Equivalent CO_2e Emissions[1]	7,115	28.77	41.57
Total Indirect Operational GHG Emissions (CO_2e)	7,185		

3.4.2 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. While GHGs will be generated from construction and occasional operation and maintenance activities, the Project will result in a potential net reduction in GHG emissions, by providing battery storage capacity that will enable the replacement of electricity generated by fossil fuels. The Project will support the State policies necessary to meet the California renewable energy standards. As stated earlier, CARB'S Scoping Plan addresses AB 1279, SB 905, SB 1065, SB 1075, and other legislation and executive orders addressing GHG reductions in various manufacturing sectors and managing natural lands.

The Scoping Plan lays out a roadmap for achieving carbon neutrality in California by 2045 or sooner. The 2022 Plan addresses recent legislation and extends and expands upon earlier CARB plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. The carbon neutrality goal is new in the 2022 Plan and proposes both emissions reductions as well as capture and storage. According to the Scoping Plan, the estimated resources needed to meet future energy demand is approximately 37 gigawatts of battery storage by 2045. The Scoping Plan also acknowledges that battery storage projects over the period 2022-2035 will need to increase from the current proposed projects. The proposed Project will substantially increase local energy storage capacity and address the limitations of the electrical grid by the increasing demand for renewable energy. Layering energy storage systems into the energy grid improves grid reliability and makes it more resilient to disturbances and peaks in energy demand. The Project and other energy storage systems are used to supply power during brief disturbances, reduce outages and associated impacts to the community, and substitute for certain large footprint transmission and disruption upgrades.

Therefore, the Project will be consistent with the State policies and impacts will be less than significant.

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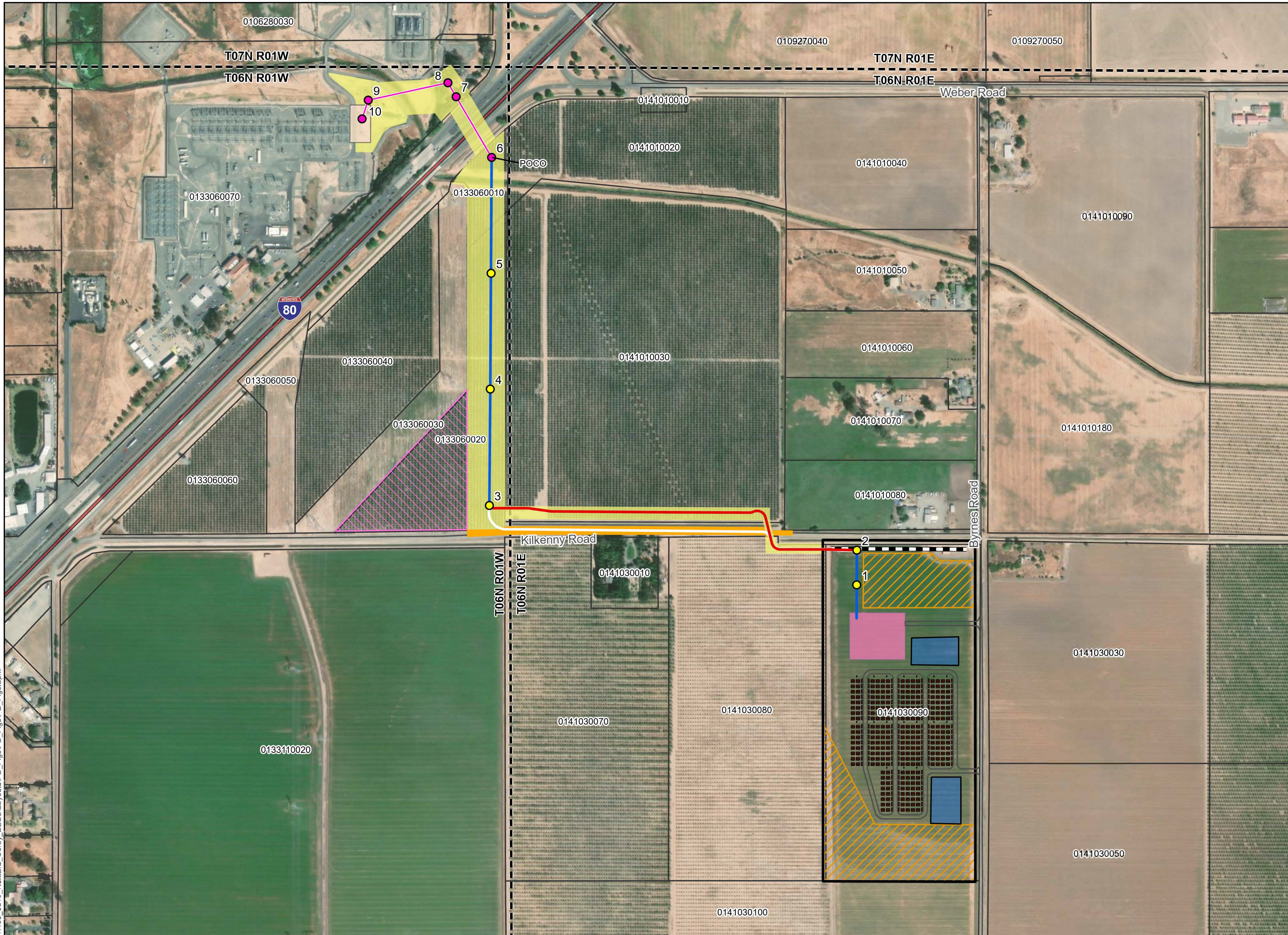
FIGURES



NextEra Energy
Corby Battery Energy Storage System Project

Figure 1
Project Layout

Solano County, CA

Parcels
Township Range

Proposed Features

Proposed Pole
Gen-tie (Overhead)
Gen-tie (Underground; Option 1)
Gen-tie (Underground; Option 2)
Sound Barrier
Access Road
Construction Laydown Area
Gen-tie Corridor (Option 1)
Gen-tie Corridor (Option 2)
Gen-tie Laydown Area
BESS Array
Project Site
Stormwater Pond
Project Substation
New Corby Bay

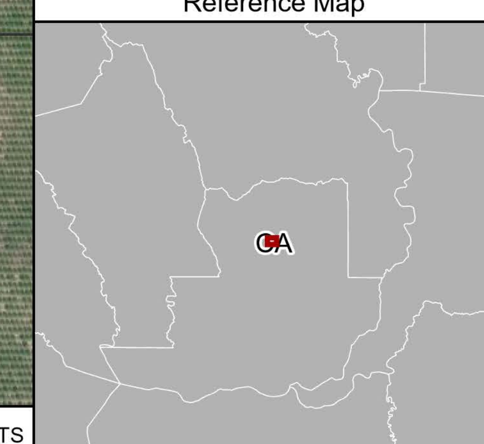
PG&E Features

Pole Locations (PG&E)
Gen-tie (Overhead; PG&E)

TETRA TECH

NOT FOR CONSTRUCTION

Reference Map



1:6,500 NAD 1983 StatePlane California II FIPS 0402 Feet

0 0.25 0.5 Miles

Source: ESRI, USDA NAIP, US CENSUS, BTS

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ATTACHMENT A: CALEEMOD

Corby BESS AFC Annual Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Corby BESS AFC Annual
Construction Start Date	3/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.3922740342, -121.907417485
County	Solano-Sacramento
City	Unincorporated
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	837
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	40.3	User Defined Unit	40.3	89,530	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.99	7.78	63.8	126	0.20	2.10	99.2	101	1.97	11.0	12.8	—	27,543	27,543	0.59	3.01	42.9	28,494
Mit.	8.99	7.78	63.8	126	0.20	2.10	30.0	31.6	1.97	4.09	5.94	—	27,543	27,543	0.59	3.01	42.9	28,494
% Reduced	—	—	—	—	—	—	70%	69%	—	63%	54%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.51	8.12	70.2	132	0.19	2.13	61.1	63.2	1.99	7.01	9.00	—	25,249	25,249	0.66	1.79	0.87	25,799
Mit.	9.51	8.12	70.2	132	0.19	2.13	19.8	22.0	1.99	2.89	4.88	—	25,249	25,249	0.66	1.79	0.87	25,799
% Reduced	—	—	—	—	—	—	68%	65%	—	59%	46%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.19	3.56	32.5	59.4	0.09	1.01	31.5	32.5	0.94	3.59	4.54	—	12,703	12,703	0.30	1.07	7.61	13,035
Mit.	4.19	3.56	32.5	59.4	0.09	1.01	10.1	11.1	0.94	1.46	2.40	—	12,703	12,703	0.30	1.07	7.61	13,035
% Reduced	—	—	—	—	—	—	68%	66%	—	59%	47%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.77	0.65	5.92	10.8	0.02	0.18	5.74	5.92	0.17	0.66	0.83	—	2,103	2,103	0.05	0.18	1.26	2,158
Mit.	0.77	0.65	5.92	10.8	0.02	0.18	1.84	2.02	0.17	0.27	0.44	—	2,103	2,103	0.05	0.18	1.26	2,158
% Reduced	—	—	—	—	—	—	68%	66%	—	59%	47%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.99	7.78	63.8	126	0.20	2.10	99.2	101	1.97	11.0	12.8	—	27,543	27,543	0.59	3.01	42.9	28,494
2027	1.12	1.04	4.36	31.7	0.01	0.11	45.7	45.8	0.11	4.78	4.89	—	2,429	2,429	0.04	0.19	6.73	2,495
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.51	8.12	70.2	132	0.19	2.13	61.1	63.2	1.99	7.01	9.00	—	25,249	25,249	0.66	1.79	0.87	25,799
2027	1.08	0.99	7.66	32.4	0.02	0.18	45.7	45.8	0.18	4.78	4.89	—	3,065	3,065	0.06	0.30	0.17	3,157
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.19	3.56	32.5	59.4	0.09	1.01	31.5	32.5	0.94	3.59	4.54	—	12,703	12,703	0.30	1.07	7.61	13,035
2027	0.25	0.23	1.25	7.30	< 0.005	0.03	8.46	8.50	0.03	0.89	0.92	—	600	600	0.01	0.05	0.67	617
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.77	0.65	5.92	10.8	0.02	0.18	5.74	5.92	0.17	0.66	0.83	—	2,103	2,103	0.05	0.18	1.26	2,158
2027	0.05	0.04	0.23	1.33	< 0.005	0.01	1.54	1.55	0.01	0.16	0.17	—	99.4	99.4	< 0.005	0.01	0.11	102

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.99	7.78	63.8	126	0.20	2.10	30.0	31.6	1.97	4.09	5.94	—	27,543	27,543	0.59	3.01	42.9	28,494
2027	1.12	1.04	4.36	31.7	0.01	0.11	12.7	12.8	0.11	1.49	1.60	—	2,429	2,429	0.04	0.19	6.73	2,495
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.51	8.12	70.2	132	0.19	2.13	19.8	22.0	1.99	2.89	4.88	—	25,249	25,249	0.66	1.79	0.87	25,799
2027	1.08	0.99	7.66	32.4	0.02	0.18	12.7	12.8	0.18	1.49	1.60	—	3,065	3,065	0.06	0.30	0.17	3,157
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.19	3.56	32.5	59.4	0.09	1.01	10.1	11.1	0.94	1.46	2.40	—	12,703	12,703	0.30	1.07	7.61	13,035
2027	0.25	0.23	1.25	7.30	< 0.005	0.03	2.39	2.42	0.03	0.29	0.32	—	600	600	0.01	0.05	0.67	617
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.77	0.65	5.92	10.8	0.02	0.18	1.84	2.02	0.17	0.27	0.44	—	2,103	2,103	0.05	0.18	1.26	2,158
2027	0.05	0.04	0.23	1.33	< 0.005	0.01	0.44	0.44	0.01	0.05	0.06	—	99.4	99.4	< 0.005	0.01	0.11	102

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.80	2.74	0.05	4.02	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	0.00	34.8	34.8	< 0.005	< 0.005	0.05	35.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.10	2.10	0.02	0.15	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	17.7	17.7	< 0.005	< 0.005	< 0.005	18.3

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.43	2.40	0.03	2.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.00	20.7	20.7	< 0.005	< 0.005	0.02	21.1
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	0.44	0.01	0.37	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	3.42	3.42	< 0.005	< 0.005	< 0.005	3.49

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	0.04	0.02	0.12	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.05	19.4
Area	2.75	2.70	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.80	2.74	0.05	4.02	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	0.00	34.8	34.8	< 0.005	< 0.005	0.05	35.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	0.04	0.02	0.15	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	< 0.005	18.3
Area	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.10	2.10	0.02	0.15	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	17.7	17.7	< 0.005	< 0.005	< 0.005	18.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.03	0.03	0.01	0.09	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	13.2
Area	2.40	2.37	0.02	1.92	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.90	7.90	< 0.005	< 0.005	—	7.92
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.43	2.40	0.03	2.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.00	20.7	20.7	< 0.005	< 0.005	0.02	21.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.12	2.12	< 0.005	< 0.005	< 0.005	2.18
Area	0.44	0.43	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.44	0.44	0.01	0.37	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	3.42	3.42	< 0.005	< 0.005	< 0.005	3.49

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	0.04	0.02	0.12	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.05	19.4
Area	2.75	2.70	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.80	2.74	0.05	4.02	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	0.00	34.8	34.8	< 0.005	< 0.005	0.05	35.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.04	0.04	0.02	0.15	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	< 0.005	18.3
Area	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.10	2.10	0.02	0.15	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	17.7	17.7	< 0.005	< 0.005	< 0.005	18.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.01	0.09	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	13.2
Area	2.40	2.37	0.02	1.92	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.90	7.90	< 0.005	< 0.005	—	7.92
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.43	2.40	0.03	2.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.00	20.7	20.7	< 0.005	< 0.005	0.02	21.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.12	2.12	< 0.005	< 0.005	< 0.005	2.18
Area	0.44	0.43	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.44	0.44	0.01	0.37	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	3.42	3.42	< 0.005	< 0.005	< 0.005	3.49

3. Construction Emissions Details

3.1. Gen-tie Site Prep (Orchard Removal) (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.49	2.09	19.2	17.3	0.03	0.86	—	0.86	0.79	—	0.79	—	3,220	3,220	0.13	0.03	—	3,231
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.68	3.68	< 0.005	0.37	0.37	—	12.1	12.1	< 0.005	< 0.005	0.02	12.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.58	0.52	< 0.005	0.03	—	0.03	0.02	—	0.02	—	97.0	97.0	< 0.005	< 0.005	—	97.4
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.1	16.1	< 0.005	< 0.005	—	16.1
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.41	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.3	93.3	< 0.005	< 0.005	0.33	94.6
Vendor	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	0.00
Hauling	0.06	0.03	2.24	0.37	0.01	0.04	0.60	0.65	0.04	0.16	0.21	—	2,152	2,152	0.02	0.33	4.39	2,256

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.59	2.59	< 0.005	< 0.005	< 0.005	2.63
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.07	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.9	64.9	< 0.005	0.01	0.06	67.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.43	0.43	< 0.005	< 0.005	< 0.005	0.44
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.2

3.2. Gen-tie Site Prep (Orchard Removal) (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.49	2.09	19.2	17.3	0.03	0.86	—	0.86	0.79	—	0.79	—	3,220	3,220	0.13	0.03	—	3,231
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.93	0.93	< 0.005	0.09	0.09	—	12.1	12.1	< 0.005	< 0.005	0.02	12.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.08	0.06	0.58	0.52	< 0.005	0.03	—	0.03	0.02	—	0.02	—	97.0	97.0	< 0.005	< 0.005	—	97.4
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.1	16.1	< 0.005	< 0.005	—	16.1
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.41	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.3	93.3	< 0.005	< 0.005	0.33	94.6
Vendor	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	0.00
Hauling	0.06	0.03	2.24	0.37	0.01	0.04	0.60	0.65	0.04	0.16	0.21	—	2,152	2,152	0.02	0.33	4.39	2,256
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.59	2.59	< 0.005	< 0.005	< 0.005	2.63
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.07	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.9	64.9	< 0.005	0.01	0.06	67.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.43	0.43	< 0.005	< 0.005	< 0.005	0.44
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.2

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	9.28	8.76	0.02	0.40	—	0.40	0.37	—	0.37	—	1,646	1,646	0.07	0.01	—	1,652
Onsite truck	0.01	0.01	0.16	0.11	< 0.005	< 0.005	14.7	14.7	< 0.005	1.47	1.47	—	48.4	48.4	< 0.005	0.01	0.07	50.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	9.28	8.76	0.02	0.40	—	0.40	0.37	—	0.37	—	1,646	1,646	0.07	0.01	—	1,652
Onsite truck	0.01	0.01	0.17	0.11	< 0.005	< 0.005	14.7	14.7	< 0.005	1.47	1.47	—	48.9	48.9	< 0.005	0.01	< 0.005	51.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.12	1.06	< 0.005	0.05	—	0.05	0.04	—	0.04	—	198	198	0.01	< 0.005	—	199
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	1.61	1.61	< 0.005	0.16	0.16	—	5.86	5.86	< 0.005	< 0.005	< 0.005	6.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.9	32.9	< 0.005	< 0.005	—	33.0

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.03	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	149	149	< 0.005	0.01	0.53	151
Vendor	0.01	0.01	0.23	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	189	189	< 0.005	0.02	0.46	196
Hauling	0.05	0.03	1.57	0.38	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,348	1,348	0.01	0.21	2.70	1,413
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.55	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	< 0.005	0.01	0.01	137
Vendor	0.01	0.01	0.25	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	189	189	< 0.005	0.02	0.01	196
Hauling	0.05	0.02	1.70	0.39	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,349	1,349	0.01	0.21	0.07	1,412
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.7	22.7	< 0.005	< 0.005	0.02	23.7
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.02	—	163	163	< 0.005	0.03	0.14	170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.79
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	< 0.005	3.92
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.9	26.9	< 0.005	< 0.005	0.02	28.2

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	9.28	8.76	0.02	0.40	—	0.40	0.37	—	0.37	—	1,646	1,646	0.07	0.01	—	1,652
Onsite truck	0.01	0.01	0.16	0.11	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	48.4	48.4	< 0.005	0.01	0.07	50.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	9.28	8.76	0.02	0.40	—	0.40	0.37	—	0.37	—	1,646	1,646	0.07	0.01	—	1,652
Onsite truck	0.01	0.01	0.17	0.11	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	48.9	48.9	< 0.005	0.01	< 0.005	51.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.12	1.06	< 0.005	0.05	—	0.05	0.04	—	0.04	—	198	198	0.01	< 0.005	—	199
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.40	0.40	< 0.005	0.04	0.04	—	5.86	5.86	< 0.005	< 0.005	< 0.005	6.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.9	32.9	< 0.005	< 0.005	—	33.0
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.04	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	149	149	< 0.005	0.01	0.53	151
Vendor	0.01	0.01	0.23	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	189	189	< 0.005	0.02	0.46	196
Hauling	0.05	0.03	1.57	0.38	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,348	1,348	0.01	0.21	2.70	1,413
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.55	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	< 0.005	0.01	0.01	137
Vendor	0.01	0.01	0.25	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	189	189	< 0.005	0.02	0.01	196
Hauling	0.05	0.02	1.70	0.39	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,349	1,349	0.01	0.21	0.07	1,412
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.7	22.7	< 0.005	< 0.005	0.02	23.7
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.02	—	163	163	< 0.005	0.03	0.14	170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.79
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	< 0.005	3.92
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.9	26.9	< 0.005	< 0.005	0.02	28.2

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	1.20	8.76	12.9	0.03	0.38	—	0.38	0.35	—	0.35	—	2,884	2,884	0.12	0.02	—	2,894

Dust From Material Movement	—	—	—	—	—	—	0.57	0.57	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.05	0.04	0.79	0.53	< 0.005	< 0.005	73.6	73.6	< 0.005	7.35	7.35	—	242	242	0.01	0.04	0.34	254
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.56	2.30	< 0.005	0.07	—	0.07	0.06	—	0.06	—	514	514	0.02	< 0.005	—	515
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.15	0.10	< 0.005	< 0.005	11.9	11.9	< 0.005	1.18	1.18	—	43.3	43.3	< 0.005	0.01	0.03	45.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.28	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.0	85.0	< 0.005	< 0.005	—	85.3
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.16	2.16	< 0.005	0.22	0.22	—	7.17	7.17	< 0.005	< 0.005	< 0.005	7.51
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.30	0.18	3.31	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	746	746	0.01	0.03	2.64	757

Vendor	0.03	0.02	0.62	0.24	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	413	413	0.01	0.06	0.79	433
Hauling	0.39	0.17	15.0	2.46	0.10	0.29	4.03	4.32	0.29	1.10	1.39	—	14,401	14,401	0.11	2.23	29.3	15,098
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	0.01	0.20	124
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.6	73.6	< 0.005	0.01	0.06	77.1
Hauling	0.07	0.03	2.83	0.44	0.02	0.05	0.71	0.76	0.05	0.19	0.24	—	2,565	2,565	0.02	0.40	2.25	2,686
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.3	20.3	< 0.005	< 0.005	0.03	20.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.8
Hauling	0.01	0.01	0.52	0.08	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	425	425	< 0.005	0.07	0.37	445

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	1.20	8.76	12.9	0.03	0.38	—	0.38	0.35	—	0.35	—	2,884	2,884	0.12	0.02	—	2,894
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.05	0.04	0.79	0.53	< 0.005	< 0.005	18.6	18.6	< 0.005	1.85	1.86	—	242	242	0.01	0.04	0.34	254

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.56	2.30	< 0.005	0.07	—	0.07	0.06	—	0.06	—	514	514	0.02	< 0.005	—	515
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.15	0.10	< 0.005	< 0.005	2.99	2.99	< 0.005	0.30	0.30	—	43.3	43.3	< 0.005	0.01	0.03	45.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.28	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.0	85.0	< 0.005	< 0.005	—	85.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.55	0.55	< 0.005	0.05	0.05	—	7.17	7.17	< 0.005	< 0.005	< 0.005	7.51
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.30	0.18	3.31	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	746	746	0.01	0.03	2.64	757
Vendor	0.03	0.02	0.62	0.24	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	413	413	0.01	0.06	0.79	433
Hauling	0.39	0.17	15.0	2.46	0.10	0.29	4.03	4.32	0.29	1.10	1.39	—	14,401	14,401	0.11	2.23	29.3	15,098
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	0.01	0.20	124
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.6	73.6	< 0.005	0.01	0.06	77.1
Hauling	0.07	0.03	2.83	0.44	0.02	0.05	0.71	0.76	0.05	0.19	0.24	—	2,565	2,565	0.02	0.40	2.25	2,686
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.3	20.3	< 0.005	< 0.005	0.03	20.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.8
Hauling	0.01	0.01	0.52	0.08	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	425	425	< 0.005	0.07	0.37	445

3.7. Battery/Container Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.14	17.8	44.0	0.04	0.63	—	0.63	0.59	—	0.59	—	3,868	3,868	0.16	0.03	—	3,881
Onsite truck	0.01	0.01	0.20	0.13	< 0.005	< 0.005	18.4	18.4	< 0.005	1.84	1.84	—	60.5	60.5	< 0.005	0.01	0.08	63.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.14	17.8	44.0	0.04	0.63	—	0.63	0.59	—	0.59	—	3,868	3,868	0.16	0.03	—	3,881
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	18.4	18.4	< 0.005	1.84	1.84	—	61.1	61.1	< 0.005	0.01	< 0.005	64.0

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.89	7.41	18.3	0.02	0.26	—	0.26	0.24	—	0.24	—	1,611	1,611	0.07	0.01	—	1,616
Onsite truck	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	6.93	6.93	< 0.005	0.69	0.69	—	25.3	25.3	< 0.005	< 0.005	0.02	26.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.35	3.34	< 0.005	0.05	—	0.05	0.04	—	0.04	—	267	267	0.01	< 0.005	—	268
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	1.27	1.27	< 0.005	0.13	0.13	—	4.19	4.19	< 0.005	< 0.005	< 0.005	4.39
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.45	0.27	4.97	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,119	1,119	0.02	0.04	3.95	1,136
Vendor	0.05	0.04	0.86	0.44	0.01	0.01	0.18	0.19	0.01	0.05	0.06	—	707	707	0.01	0.09	1.72	737
Hauling	0.08	0.04	2.35	0.57	0.01	0.04	0.56	0.60	0.04	0.15	0.19	—	2,022	2,022	0.02	0.31	4.05	2,120
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	0.39	4.12	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,012	1,012	0.03	0.04	0.10	1,025
Vendor	0.04	0.03	0.93	0.45	0.01	0.01	0.18	0.19	0.01	0.05	0.06	—	708	708	0.01	0.09	0.04	736
Hauling	0.07	0.04	2.55	0.58	0.01	0.04	0.56	0.60	0.04	0.15	0.19	—	2,023	2,023	0.02	0.31	0.10	2,118
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.14	1.67	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	430	430	0.01	0.02	0.71	436
Vendor	0.02	0.01	0.38	0.18	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	295	295	< 0.005	0.04	0.31	307
Hauling	0.03	0.02	1.04	0.24	0.01	0.02	0.23	0.24	0.02	0.06	0.08	—	842	842	0.01	0.13	0.73	882
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	71.1	71.1	< 0.005	< 0.005	0.12	72.2
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.8	48.8	< 0.005	0.01	0.05	50.8
Hauling	0.01	< 0.005	0.19	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	0.12	146

3.8. Battery/Container Installation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.14	17.8	44.0	0.04	0.63	—	0.63	0.59	—	0.59	—	3,868	3,868	0.16	0.03	—	3,881
Onsite truck	0.01	0.01	0.20	0.13	< 0.005	< 0.005	4.64	4.64	< 0.005	0.46	0.46	—	60.5	60.5	< 0.005	0.01	0.08	63.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.14	17.8	44.0	0.04	0.63	—	0.63	0.59	—	0.59	—	3,868	3,868	0.16	0.03	—	3,881
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	4.64	4.64	< 0.005	0.46	0.46	—	61.1	61.1	< 0.005	0.01	< 0.005	64.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.89	7.41	18.3	0.02	0.26	—	0.26	0.24	—	0.24	—	1,611	1,611	0.07	0.01	—	1,616
Onsite truck	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	1.75	1.75	< 0.005	0.17	0.18	—	25.3	25.3	< 0.005	< 0.005	0.02	26.5

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.35	3.34	< 0.005	0.05	—	0.05	0.04	—	0.04	—	267	267	0.01	< 0.005	—	268
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	4.19	4.19	< 0.005	< 0.005	< 0.005	4.39
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.45	0.27	4.97	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,119	1,119	0.02	0.04	3.95	1,136
Vendor	0.05	0.04	0.86	0.44	0.01	0.01	0.18	0.19	0.01	0.05	0.06	—	707	707	0.01	0.09	1.72	737
Hauling	0.08	0.04	2.35	0.57	0.01	0.04	0.56	0.60	0.04	0.15	0.19	—	2,022	2,022	0.02	0.31	4.05	2,120
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	0.39	4.12	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,012	1,012	0.03	0.04	0.10	1,025
Vendor	0.04	0.03	0.93	0.45	0.01	0.01	0.18	0.19	0.01	0.05	0.06	—	708	708	0.01	0.09	0.04	736
Hauling	0.07	0.04	2.55	0.58	0.01	0.04	0.56	0.60	0.04	0.15	0.19	—	2,023	2,023	0.02	0.31	0.10	2,118
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.14	1.67	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	430	430	0.01	0.02	0.71	436
Vendor	0.02	0.01	0.38	0.18	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	295	295	< 0.005	0.04	0.31	307
Hauling	0.03	0.02	1.04	0.24	0.01	0.02	0.23	0.24	0.02	0.06	0.08	—	842	842	0.01	0.13	0.73	882
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	71.1	71.1	< 0.005	< 0.005	0.12	72.2
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.8	48.8	< 0.005	0.01	0.05	50.8
Hauling	0.01	< 0.005	0.19	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	0.12	146

3.9. Substation Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	2.21	19.8	27.3	0.04	0.72	—	0.72	0.67	—	0.67	—	3,776	3,776	0.15	0.03	—	3,789
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	2.21	19.8	27.3	0.04	0.72	—	0.72	0.67	—	0.67	—	3,776	3,776	0.15	0.03	—	3,789
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.80	7.16	9.88	0.01	0.26	—	0.26	0.24	—	0.24	—	1,366	1,366	0.06	0.01	—	1,370
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.15	1.31	1.80	< 0.005	0.05	—	0.05	0.04	—	0.04	—	226	226	0.01	< 0.005	—	227
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.30	0.18	3.31	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	746	746	0.01	0.03	2.64	757
Vendor	0.06	0.05	1.15	0.58	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	943	943	0.01	0.12	2.30	982
Hauling	0.05	0.03	1.57	0.38	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,348	1,348	0.01	0.21	2.70	1,413
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.26	2.74	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	674	674	0.02	0.03	0.07	684
Vendor	0.06	0.04	1.24	0.60	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	944	944	0.01	0.12	0.06	981
Hauling	0.05	0.02	1.70	0.39	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,349	1,349	0.01	0.21	0.07	1,412
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.97	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	249	249	0.01	0.01	0.41	252
Vendor	0.02	0.02	0.44	0.21	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	341	341	< 0.005	0.05	0.36	355
Hauling	0.02	0.01	0.60	0.14	< 0.005	0.01	0.13	0.14	0.01	0.04	0.05	—	488	488	< 0.005	0.08	0.42	511
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.2	41.2	< 0.005	< 0.005	0.07	41.8
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.5	56.5	< 0.005	0.01	0.06	58.8
Hauling	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	80.7	80.7	< 0.005	0.01	0.07	84.5

3.10. Substation Installation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.61	2.21	19.8	27.3	0.04	0.72	—	0.72	0.67	—	0.67	—	3,776	3,776	0.15	0.03	—	3,789
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	2.21	19.8	27.3	0.04	0.72	—	0.72	0.67	—	0.67	—	3,776	3,776	0.15	0.03	—	3,789
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.80	7.16	9.88	0.01	0.26	—	0.26	0.24	—	0.24	—	1,366	1,366	0.06	0.01	—	1,370
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.15	1.31	1.80	< 0.005	0.05	—	0.05	0.04	—	0.04	—	226	226	0.01	< 0.005	—	227
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.30	0.18	3.31	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	746	746	0.01	0.03	2.64	757
Vendor	0.06	0.05	1.15	0.58	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	943	943	0.01	0.12	2.30	982
Hauling	0.05	0.03	1.57	0.38	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,348	1,348	0.01	0.21	2.70	1,413

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.26	2.74	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	674	674	0.02	0.03	0.07	684
Vendor	0.06	0.04	1.24	0.60	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	944	944	0.01	0.12	0.06	981
Hauling	0.05	0.02	1.70	0.39	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,349	1,349	0.01	0.21	0.07	1,412
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.97	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	249	249	0.01	0.01	0.41	252
Vendor	0.02	0.02	0.44	0.21	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	341	341	< 0.005	0.05	0.36	355
Hauling	0.02	0.01	0.60	0.14	< 0.005	0.01	0.13	0.14	0.01	0.04	0.05	—	488	488	< 0.005	0.08	0.42	511
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.2	41.2	< 0.005	< 0.005	0.07	41.8
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.5	56.5	< 0.005	0.01	0.06	58.8
Hauling	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	80.7	80.7	< 0.005	0.01	0.07	84.5

3.11. Gen-tie Foundations, Tower Erection, and Underground Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	12.7	14.7	0.04	0.43	—	0.43	0.39	—	0.39	—	3,500	3,500	0.14	0.03	—	3,512
Onsite truck	0.01	0.01	0.20	0.13	< 0.005	< 0.005	18.4	18.4	< 0.005	1.84	1.84	—	60.5	60.5	< 0.005	0.01	0.08	63.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.97	1.65	12.7	14.7	0.04	0.43	—	0.43	0.39	—	0.39	—	3,500	3,500	0.14	0.03	—	3,512
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	18.4	18.4	< 0.005	1.84	1.84	—	61.1	61.1	< 0.005	0.01	< 0.005	64.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.60	4.58	5.33	0.01	0.16	—	0.16	0.14	—	0.14	—	1,266	1,266	0.05	0.01	—	1,270
Onsite truck	< 0.005	< 0.005	0.07	0.05	< 0.005	< 0.005	6.02	6.02	< 0.005	0.60	0.60	—	22.0	22.0	< 0.005	< 0.005	0.01	23.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.84	0.97	< 0.005	0.03	—	0.03	0.03	—	0.03	—	210	210	0.01	< 0.005	—	210
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	1.10	1.10	< 0.005	0.11	0.11	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.81
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.30	0.18	3.31	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	746	746	0.01	0.03	2.64	757
Vendor	0.02	0.02	0.46	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	377	377	< 0.005	0.05	0.92	393
Hauling	0.12	0.06	3.61	0.88	0.02	0.06	0.85	0.91	0.06	0.23	0.29	—	3,100	3,100	0.03	0.48	6.21	3,250
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.26	2.74	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	674	674	0.02	0.03	0.07	684
Vendor	0.02	0.02	0.50	0.24	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	378	378	< 0.005	0.05	0.02	393
Hauling	0.11	0.06	3.91	0.90	0.02	0.06	0.85	0.91	0.06	0.23	0.29	—	3,102	3,102	0.03	0.48	0.16	3,247
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.08	0.97	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	249	249	0.01	0.01	0.41	252
Vendor	0.01	0.01	0.18	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.14	142
Hauling	0.04	0.02	1.38	0.32	0.01	0.02	0.30	0.33	0.02	0.08	0.11	—	1,121	1,121	0.01	0.17	0.97	1,175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.2	41.2	< 0.005	< 0.005	0.07	41.8
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.6	22.6	< 0.005	< 0.005	0.02	23.5
Hauling	0.01	< 0.005	0.25	0.06	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	186	186	< 0.005	0.03	0.16	194

3.12. Gen-tie Foundations, Tower Erection, and Underground Installation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	12.7	14.7	0.04	0.43	—	0.43	0.39	—	0.39	—	3,500	3,500	0.14	0.03	—	3,512
Onsite truck	0.01	0.01	0.20	0.13	< 0.005	< 0.005	4.64	4.64	< 0.005	0.46	0.46	—	60.5	60.5	< 0.005	0.01	0.08	63.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	12.7	14.7	0.04	0.43	—	0.43	0.39	—	0.39	—	3,500	3,500	0.14	0.03	—	3,512
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	4.64	4.64	< 0.005	0.46	0.46	—	61.1	61.1	< 0.005	0.01	< 0.005	64.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.71	0.60	4.58	5.33	0.01	0.16	—	0.16	0.14	—	0.14	—	1,266	1,266	0.05	0.01	—	1,270
Onsite truck	< 0.005	< 0.005	0.07	0.05	< 0.005	< 0.005	1.52	1.52	< 0.005	0.15	0.15	—	22.0	22.0	< 0.005	< 0.005	0.01	23.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.84	0.97	< 0.005	0.03	—	0.03	0.03	—	0.03	—	210	210	0.01	< 0.005	—	210
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.81
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.30	0.18	3.31	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	746	746	0.01	0.03	2.64	757
Vendor	0.02	0.02	0.46	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	377	377	< 0.005	0.05	0.92	393
Hauling	0.12	0.06	3.61	0.88	0.02	0.06	0.85	0.91	0.06	0.23	0.29	—	3,100	3,100	0.03	0.48	6.21	3,250
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.26	2.74	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	674	674	0.02	0.03	0.07	684
Vendor	0.02	0.02	0.50	0.24	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	378	378	< 0.005	0.05	0.02	393
Hauling	0.11	0.06	3.91	0.90	0.02	0.06	0.85	0.91	0.06	0.23	0.29	—	3,102	3,102	0.03	0.48	0.16	3,247
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.97	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	249	249	0.01	0.01	0.41	252
Vendor	0.01	0.01	0.18	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.14	142
Hauling	0.04	0.02	1.38	0.32	0.01	0.02	0.30	0.33	0.02	0.08	0.11	—	1,121	1,121	0.01	0.17	0.97	1,175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.2	41.2	< 0.005	< 0.005	0.07	41.8
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.6	22.6	< 0.005	< 0.005	0.02	23.5

Hauling	0.01	< 0.005	0.25	0.06	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	186	186	< 0.005	0.03	0.16	194

3.13. Gen-tie Stringing and Pulling (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	2.63	4.02	0.01	0.06	—	0.06	0.06	—	0.06	—	657	657	0.03	0.01	—	659
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	18.4	18.4	< 0.005	1.84	1.84	—	61.1	61.1	< 0.005	0.01	< 0.005	64.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.31	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.4	78.4	< 0.005	< 0.005	—	78.7
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	1.99	1.99	< 0.005	0.20	0.20	—	7.25	7.25	< 0.005	< 0.005	< 0.005	7.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.0	13.0	< 0.005	< 0.005	—	13.0
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.36	0.36	< 0.005	0.04	0.04	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.26
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.26	2.74	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	674	674	0.02	0.03	0.07	684
Vendor	0.02	0.02	0.50	0.24	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	378	378	< 0.005	0.05	0.02	393
Hauling	0.05	0.02	1.70	0.39	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,349	1,349	0.01	0.21	0.07	1,412
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.32	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.1	82.1	< 0.005	< 0.005	0.14	83.3
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.0	45.0	< 0.005	0.01	0.05	46.9
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.02	—	161	161	< 0.005	0.02	0.14	169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	0.02	13.8
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.46	7.46	< 0.005	< 0.005	0.01	7.76
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.6	26.6	< 0.005	< 0.005	0.02	27.9

3.14. Gen-tie Stringing and Pulling (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.25	0.21	2.63	4.02	0.01	0.06	—	0.06	0.06	—	0.06	—	657	657	0.03	0.01	—	659
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	4.64	4.64	< 0.005	0.46	0.46	—	61.1	61.1	< 0.005	0.01	< 0.005	64.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.31	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.4	78.4	< 0.005	< 0.005	—	78.7
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.50	0.50	< 0.005	0.05	0.05	—	7.25	7.25	< 0.005	< 0.005	< 0.005	7.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.0	13.0	< 0.005	< 0.005	—	13.0
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.26
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.26	2.74	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	674	674	0.02	0.03	0.07	684
Vendor	0.02	0.02	0.50	0.24	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	378	378	< 0.005	0.05	0.02	393
Hauling	0.05	0.02	1.70	0.39	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,349	1,349	0.01	0.21	0.07	1,412
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.32	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.1	82.1	< 0.005	< 0.005	0.14	83.3
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.0	45.0	< 0.005	0.01	0.05	46.9

Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.02	—	161	161	< 0.005	0.02	0.14	169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	0.02	13.8
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.46	7.46	< 0.005	< 0.005	0.01	7.76
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.6	26.6	< 0.005	< 0.005	0.02	27.9

3.15. Gen-tie Stringing and Pulling (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	2.57	4.03	0.01	0.05	—	0.05	0.05	—	0.05	—	657	657	0.03	0.01	—	659
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	18.4	18.4	< 0.005	1.84	1.84	—	59.7	59.7	< 0.005	0.01	< 0.005	62.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.16	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.9	39.9	< 0.005	< 0.005	—	40.0
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	1.01	1.01	< 0.005	0.10	0.10	—	3.60	3.60	< 0.005	< 0.005	< 0.005	3.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.60	6.60	< 0.005	< 0.005	—	6.62
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.18	0.18	< 0.005	0.02	0.02	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.63
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.24	2.56	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	662	662	0.02	0.03	0.06	671
Vendor	0.02	0.01	0.48	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	369	369	< 0.005	0.05	0.02	384
Hauling	0.05	0.02	1.66	0.38	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,317	1,317	0.01	0.21	0.06	1,380
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.9	40.9	< 0.005	< 0.005	0.06	41.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.4	22.4	< 0.005	< 0.005	0.02	23.3
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.9	79.9	< 0.005	0.01	0.07	83.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.78	6.78	< 0.005	< 0.005	0.01	6.87
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.71	3.71	< 0.005	< 0.005	< 0.005	3.86
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.01	13.9

3.16. Gen-tie Stringing and Pulling (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	2.57	4.03	0.01	0.05	—	0.05	0.05	—	0.05	—	657	657	0.03	0.01	—	659
Onsite truck	0.01	0.01	0.21	0.14	< 0.005	< 0.005	4.64	4.64	< 0.005	0.46	0.46	—	59.7	59.7	< 0.005	0.01	< 0.005	62.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.16	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.9	39.9	< 0.005	< 0.005	—	40.0
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.25	0.25	< 0.005	0.03	0.03	—	3.60	3.60	< 0.005	< 0.005	< 0.005	3.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.60	6.60	< 0.005	< 0.005	—	6.62
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.63
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.24	2.56	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	662	662	0.02	0.03	0.06	671
Vendor	0.02	0.01	0.48	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	369	369	< 0.005	0.05	0.02	384

Hauling	0.05	0.02	1.66	0.38	0.01	0.03	0.37	0.40	0.03	0.10	0.13	—	1,317	1,317	0.01	0.21	0.06	1,380
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.9	40.9	< 0.005	< 0.005	0.06	41.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.4	22.4	< 0.005	< 0.005	0.02	23.3
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.9	79.9	< 0.005	0.01	0.07	83.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.78	6.78	< 0.005	< 0.005	0.01	6.87
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.71	3.71	< 0.005	< 0.005	< 0.005	3.86
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.01	13.9

3.17. Commissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.41	0.27	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	134	134	< 0.005	0.02	0.19	141
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.44	0.27	< 0.005	< 0.005	44.2	44.2	< 0.005	4.41	4.41	—	135	135	< 0.005	0.02	< 0.005	142
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.05	< 0.005	< 0.005	7.11	7.11	< 0.005	0.71	0.71	—	24.0	24.0	< 0.005	< 0.005	0.01	25.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	1.30	1.30	< 0.005	0.13	0.13	—	3.97	3.97	< 0.005	< 0.005	< 0.005	4.17

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.50	0.34	5.81	0.00	0.00	1.31	1.31	0.00	0.31	0.31	—	1,372	1,372	0.02	0.05	4.47	1,392
Vendor	0.06	0.04	1.11	0.55	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	922	922	0.01	0.12	2.08	961
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.46	0.44	4.79	0.00	0.00	1.31	1.31	0.00	0.31	0.31	—	1,240	1,240	0.03	0.05	0.12	1,257
Vendor	0.05	0.04	1.19	0.57	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	924	924	0.01	0.12	0.05	961
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.84	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	< 0.005	0.01	0.34	228
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	164	164	< 0.005	0.02	0.16	171
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.3	37.3	< 0.005	< 0.005	0.06	37.8
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.2	27.2	< 0.005	< 0.005	0.03	28.3
Hauling	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	0.00

3.18. Commissioning (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.03	0.02	0.41	0.27	< 0.005	< 0.005	11.1	11.1	< 0.005	1.11	1.11	—	134	134	< 0.005	0.02	0.19	141
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.44	0.27	< 0.005	< 0.005	11.1	11.1	< 0.005	1.11	1.11	—	135	135	< 0.005	0.02	< 0.005	142
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.05	< 0.005	< 0.005	1.79	1.79	< 0.005	0.18	0.18	—	24.0	24.0	< 0.005	< 0.005	0.01	25.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.33	0.33	< 0.005	0.03	0.03	—	3.97	3.97	< 0.005	< 0.005	< 0.005	4.17
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.50	0.34	5.81	0.00	0.00	1.31	1.31	0.00	0.31	0.31	—	1,372	1,372	0.02	0.05	4.47	1,392
Vendor	0.06	0.04	1.11	0.55	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	922	922	0.01	0.12	2.08	961
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.46	0.44	4.79	0.00	0.00	1.31	1.31	0.00	0.31	0.31	—	1,240	1,240	0.03	0.05	0.12	1,257
Vendor	0.05	0.04	1.19	0.57	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	924	924	0.01	0.12	0.05	961
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.84	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	< 0.005	0.01	0.34	228
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	164	164	< 0.005	0.02	0.16	171
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.3	37.3	< 0.005	< 0.005	0.06	37.8
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.2	27.2	< 0.005	< 0.005	0.03	28.3
Hauling	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	0.00

3.19. Generator Only Phase - Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.29	1.50	15.0	—	0.06	—	0.06	0.06	—	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.27	2.74	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.20. Generator Only Phase - Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.29	1.50	15.0	—	0.06	—	0.06	0.06	—	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.27	2.74	—	0.01	—	0.01	0.01	—	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.21. Generator Only Phase - Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.59	5.88	—	0.02	—	0.02	0.02	—	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	1.07	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.22. Generator Only Phase - Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.48	0.48	2.50	25.0	—	0.10	—	0.10	0.10	—	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.59	5.88	—	0.02	—	0.02	0.02	—	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	1.07	—	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.69	0.64	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Total	2.75	2.70	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	0.06	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31
Total	0.44	0.43	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.69	0.64	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Total	2.75	2.70	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	0.06	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31
Total	0.44	0.43	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

Gen-tie Site Prep (Orchard Removal)	Site Preparation	4/1/2026	4/15/2026	5.00	11.0	—
Site Preparation	Site Preparation	3/1/2026	4/30/2026	5.00	44.0	—
Grading	Grading	4/1/2026	6/30/2026	5.00	65.0	—
Battery/Container Installation	Building Construction	5/1/2026	11/30/2026	5.00	152	—
Substation Installation	Building Construction	7/1/2026	12/31/2026	5.00	132	—
Gen-tie Foundations, Tower Erection, and Underground Installation	Building Construction	7/1/2026	12/31/2026	5.00	132	—
Gen-tie Stringing and Pulling	Building Construction	11/1/2026	1/31/2027	5.00	65.0	—
Commissioning	Building Construction	2/1/2027	4/30/2027	5.00	65.0	—
Generator Only Phase - Construction	Building Construction	3/1/2026	4/30/2027	5.00	305	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Gen-tie Site Prep (Orchard Removal)	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Gen-tie Site Prep (Orchard Removal)	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Gen-tie Site Prep (Orchard Removal)	Other Construction Equipment	Diesel	Average	1.00	8.00	82.0	0.42
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	4.00	71.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Plate Compactors	Diesel	Average	1.00	6.00	8.00	0.43

Grading	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Grading	Rubber Tired Loaders	Diesel	Average	1.00	6.00	150	0.36
Grading	Skid Steer Loaders	Diesel	Average	1.00	6.00	71.0	0.37
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Battery/Container Installation	Cranes	Diesel	Average	2.00	8.00	367	0.29
Battery/Container Installation	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Battery/Container Installation	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Battery/Container Installation	Plate Compactors	Diesel	Average	2.00	4.00	8.00	0.43
Battery/Container Installation	Generator Sets	Diesel	Tier 4 Final	2.00	8.00	369	0.74
Battery/Container Installation	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Battery/Container Installation	Skid Steer Loaders	Diesel	Average	2.00	6.00	71.0	0.37
Battery/Container Installation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Battery/Container Installation	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Substation Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Substation Installation	Aerial Lifts	Diesel	Average	4.00	4.00	46.0	0.31
Substation Installation	Bore/Drill Rigs	Diesel	Average	1.00	2.00	83.0	0.50
Substation Installation	Cranes	Diesel	Average	1.00	4.00	367	0.29
Substation Installation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Substation Installation	Generator Sets	Diesel	Tier 4 Final	1.00	4.00	369	0.74
Substation Installation	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Substation Installation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Substation Installation	Tractors/Loaders/Back	Diesel	Average	1.00	6.00	84.0	0.37
Substation Installation	Trenchers	Diesel	Average	2.00	8.00	40.0	0.50
Substation Installation	Skid Steer Loaders	Diesel	Average	1.00	6.00	71.0	0.37
Substation Installation	Rough Terrain Forklifts	Diesel	Average	1.00	6.00	96.0	0.40
Gen-tie Foundations, Tower Erection, and Underground Installation	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Gen-tie Foundations, Tower Erection, and Underground Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Gen-tie Foundations, Tower Erection, and Underground Installation	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Gen-tie Foundations, Tower Erection, and Underground Installation	Pumps	Diesel	Average	2.00	4.00	11.0	0.74
Gen-tie Foundations, Tower Erection, and Underground Installation	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Gen-tie Foundations, Tower Erection, and Underground Installation	Bore/Drill Rigs	Diesel	Average	1.00	4.00	83.0	0.50
Gen-tie Foundations, Tower Erection, and Underground Installation	Excavators	Diesel	Average	1.00	6.00	36.0	0.38
Gen-tie Foundations, Tower Erection, and Underground Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Gen-tie Stringing and Pulling	Aerial Lifts	Diesel	Average	2.00	6.00	46.0	0.31

Gen-tie Stringing and Pulling	Tractors/Loaders/Back	Diesel	Average	2.00	6.00	84.0	0.37
Generator Only Phase - Construction	Generator Sets	Diesel	Tier 4 Final	2.00	8.00	369	0.74

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Gen-tie Site Prep (Orchard Removal)	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Gen-tie Site Prep (Orchard Removal)	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Gen-tie Site Prep (Orchard Removal)	Other Construction Equipment	Diesel	Average	1.00	8.00	82.0	0.42
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	4.00	71.0	0.37
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	1.00	4.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Plate Compactors	Diesel	Average	1.00	6.00	8.00	0.43
Grading	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Grading	Rubber Tired Loaders	Diesel	Average	1.00	6.00	150	0.36
Grading	Skid Steer Loaders	Diesel	Average	1.00	6.00	71.0	0.37
Grading	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Battery/Container Installation	Cranes	Diesel	Average	2.00	8.00	367	0.29
Battery/Container Installation	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Battery/Container Installation	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Battery/Container Installation	Plate Compactors	Diesel	Average	2.00	4.00	8.00	0.43
Battery/Container Installation	Generator Sets	Diesel	Tier 4 Final	2.00	8.00	369	0.74
Battery/Container Installation	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Battery/Container Installation	Skid Steer Loaders	Diesel	Average	2.00	6.00	71.0	0.37
Battery/Container Installation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Battery/Container Installation	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Substation Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Substation Installation	Aerial Lifts	Diesel	Average	4.00	4.00	46.0	0.31
Substation Installation	Bore/Drill Rigs	Diesel	Average	1.00	2.00	83.0	0.50
Substation Installation	Cranes	Diesel	Average	1.00	4.00	367	0.29
Substation Installation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Substation Installation	Generator Sets	Diesel	Tier 4 Final	1.00	4.00	369	0.74
Substation Installation	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Substation Installation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Substation Installation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Substation Installation	Trenchers	Diesel	Average	2.00	8.00	40.0	0.50
Substation Installation	Skid Steer Loaders	Diesel	Average	1.00	6.00	71.0	0.37
Substation Installation	Rough Terrain Forklifts	Diesel	Average	1.00	6.00	96.0	0.40
Gen-tie Foundations, Tower Erection, and Underground Installation	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Gen-tie Foundations, Tower Erection, and Underground Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29

Gen-tie Foundations, Tower Erection, and Underground Installation	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Gen-tie Foundations, Tower Erection, and Underground Installation	Pumps	Diesel	Average	2.00	4.00	11.0	0.74
Gen-tie Foundations, Tower Erection, and Underground Installation	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Gen-tie Foundations, Tower Erection, and Underground Installation	Bore/Drill Rigs	Diesel	Average	1.00	4.00	83.0	0.50
Gen-tie Foundations, Tower Erection, and Underground Installation	Excavators	Diesel	Average	1.00	6.00	36.0	0.38
Gen-tie Foundations, Tower Erection, and Underground Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Gen-tie Stringing and Pulling	Aerial Lifts	Diesel	Average	2.00	6.00	46.0	0.31
Gen-tie Stringing and Pulling	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Generator Only Phase - Construction	Generator Sets	Diesel	Tier 4 Final	2.00	8.00	369	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—

Site Preparation	Worker	16.0	12.4	LDA,LDT1,LDT2
Site Preparation	Vendor	8.00	7.29	HHDT,MHDT
Site Preparation	Hauling	20.0	20.0	HHDT
Site Preparation	Onsite truck	8.00	1.25	HHDT
Grading	—	—	—	—
Grading	Worker	80.0	12.4	LDA,LDT1,LDT2
Grading	Vendor	16.0	7.29	HHDT
Grading	Hauling	87.0	50.0	HHDT
Grading	Onsite truck	40.0	1.25	HHDT
Battery/Container Installation	—	—	—	—
Battery/Container Installation	Worker	120	12.4	LDA,LDT1,LDT2
Battery/Container Installation	Vendor	30.0	7.29	HHDT,MHDT
Battery/Container Installation	Hauling	30.0	20.0	HHDT
Battery/Container Installation	Onsite truck	10.0	1.25	HHDT
Substation Installation	—	—	—	—
Substation Installation	Worker	80.0	12.4	LDA,LDT1,LDT2
Substation Installation	Vendor	40.0	7.29	HHDT,MHDT
Substation Installation	Hauling	20.0	20.0	HHDT
Substation Installation	Onsite truck	0.00	1.25	HHDT
Gen-tie Foundations, Tower Erection, and Underground Installation	—	—	—	—
Gen-tie Foundations, Tower Erection, and Underground Installation	Worker	80.0	12.4	LDA,LDT1,LDT2
Gen-tie Foundations, Tower Erection, and Underground Installation	Vendor	16.0	7.29	HHDT,MHDT
Gen-tie Foundations, Tower Erection, and Underground Installation	Hauling	46.0	20.0	HHDT
Gen-tie Foundations, Tower Erection, and Underground Installation	Onsite truck	10.0	1.25	HHDT
Gen-tie Site Prep (Orchard Removal)	—	—	—	—

Gen-tie Site Prep (Orchard Removal)	Worker	10.0	12.4	LDA,LDT1,LDT2
Gen-tie Site Prep (Orchard Removal)	Vendor	0.00	7.29	HHDT,MHDT
Gen-tie Site Prep (Orchard Removal)	Hauling	13.0	50.0	HHDT
Gen-tie Site Prep (Orchard Removal)	Onsite truck	2.00	1.25	HHDT
Gen-tie Stringing and Pulling	—	—	—	—
Gen-tie Stringing and Pulling	Worker	80.0	12.4	LDA,LDT1,LDT2
Gen-tie Stringing and Pulling	Vendor	16.0	7.29	HHDT,MHDT
Gen-tie Stringing and Pulling	Hauling	20.0	20.0	HHDT
Gen-tie Stringing and Pulling	Onsite truck	10.0	1.25	HHDT
Commissioning	—	—	—	—
Commissioning	Worker	150	12.4	LDA,LDT1,LDT2
Commissioning	Vendor	40.0	7.29	HHDT,MHDT
Commissioning	Hauling	0.00	20.0	HHDT
Commissioning	Onsite truck	20.0	1.50	HHDT
Generator Only Phase - Construction	—	—	—	—
Generator Only Phase - Construction	Worker	0.00	12.4	LDA,LDT1,LDT2
Generator Only Phase - Construction	Vendor	0.00	7.29	HHDT,MHDT
Generator Only Phase - Construction	Hauling	0.00	20.0	HHDT
Generator Only Phase - Construction	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	16.0	12.4	LDA,LDT1,LDT2
Site Preparation	Vendor	8.00	7.29	HHDT,MHDT
Site Preparation	Hauling	20.0	20.0	HHDT
Site Preparation	Onsite truck	8.00	1.25	HHDT
Grading	—	—	—	—

Grading	Worker	80.0	12.4	LDA,LDT1,LDT2
Grading	Vendor	16.0	7.29	HHDT
Grading	Hauling	87.0	50.0	HHDT
Grading	Onsite truck	40.0	1.25	HHDT
Battery/Container Installation	—	—	—	—
Battery/Container Installation	Worker	120	12.4	LDA,LDT1,LDT2
Battery/Container Installation	Vendor	30.0	7.29	HHDT,MHDT
Battery/Container Installation	Hauling	30.0	20.0	HHDT
Battery/Container Installation	Onsite truck	10.0	1.25	HHDT
Substation Installation	—	—	—	—
Substation Installation	Worker	80.0	12.4	LDA,LDT1,LDT2
Substation Installation	Vendor	40.0	7.29	HHDT,MHDT
Substation Installation	Hauling	20.0	20.0	HHDT
Substation Installation	Onsite truck	0.00	1.25	HHDT
Gen-tie Foundations, Tower Erection, and Underground Installation	—	—	—	—
Gen-tie Foundations, Tower Erection, and Underground Installation	Worker	80.0	12.4	LDA,LDT1,LDT2
Gen-tie Foundations, Tower Erection, and Underground Installation	Vendor	16.0	7.29	HHDT,MHDT
Gen-tie Foundations, Tower Erection, and Underground Installation	Hauling	46.0	20.0	HHDT
Gen-tie Foundations, Tower Erection, and Underground Installation	Onsite truck	10.0	1.25	HHDT
Gen-tie Site Prep (Orchard Removal)	—	—	—	—
Gen-tie Site Prep (Orchard Removal)	Worker	10.0	12.4	LDA,LDT1,LDT2
Gen-tie Site Prep (Orchard Removal)	Vendor	0.00	7.29	HHDT,MHDT
Gen-tie Site Prep (Orchard Removal)	Hauling	13.0	50.0	HHDT
Gen-tie Site Prep (Orchard Removal)	Onsite truck	2.00	1.25	HHDT
Gen-tie Stringing and Pulling	—	—	—	—

Gen-tie Stringing and Pulling	Worker	80.0	12.4	LDA,LDT1,LDT2
Gen-tie Stringing and Pulling	Vendor	16.0	7.29	HHDT,MHDT
Gen-tie Stringing and Pulling	Hauling	20.0	20.0	HHDT
Gen-tie Stringing and Pulling	Onsite truck	10.0	1.25	HHDT
Commissioning	—	—	—	—
Commissioning	Worker	150	12.4	LDA,LDT1,LDT2
Commissioning	Vendor	40.0	7.29	HHDT,MHDT
Commissioning	Hauling	0.00	20.0	HHDT
Commissioning	Onsite truck	20.0	1.50	HHDT
Generator Only Phase - Construction	—	—	—	—
Generator Only Phase - Construction	Worker	0.00	12.4	LDA,LDT1,LDT2
Generator Only Phase - Construction	Vendor	0.00	7.29	HHDT,MHDT
Generator Only Phase - Construction	Hauling	0.00	20.0	HHDT
Generator Only Phase - Construction	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Grading	35,243	10,693	32.5	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	12.0	0.00	0.00	3,129	20.0	0.00	0.00	5,214

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	134,295	44,765	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.5	annual days of extreme heat
Extreme Precipitation	6.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	0	N/A
Extreme Precipitation	2	2	2	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	4	2	3
Flooding	1	4	0	N/A
Drought	1	2	2	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	2	4

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	2	2	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	4	2	3
Flooding	1	4	1	4
Drought	1	2	2	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	2	4

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.6
AQ-PM	12.7
AQ-DPM	31.5
Drinking Water	37.5
Lead Risk Housing	9.17

Pesticides	80.8
Toxic Releases	42.7
Traffic	50.5
Effect Indicators	—
CleanUp Sites	86.8
Groundwater	87.8
Haz Waste Facilities/Generators	93.6
Impaired Water Bodies	43.8
Solid Waste	77.6
Sensitive Population	—
Asthma	86.8
Cardio-vascular	67.5
Low Birth Weights	20.9
Socioeconomic Factor Indicators	—
Education	46.2
Housing	17.9
Linguistic	25.6
Poverty	10.9
Unemployment	48.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.26408315
Employed	49.30065443
Median HI	79.84088284
Education	—

Bachelor's or higher	45.52803798
High school enrollment	100
Preschool enrollment	37.79032465
Transportation	—
Auto Access	93.63531374
Active commuting	3.772616451
Social	—
2-parent households	88.50250225
Voting	54.13832927
Neighborhood	—
Alcohol availability	81.95816759
Park access	4.619530348
Retail density	10.04747851
Supermarket access	9.790837931
Tree canopy	17.28474272
Housing	—
Homeownership	66.77787758
Housing habitability	86.03875273
Low-inc homeowner severe housing cost burden	84.11394842
Low-inc renter severe housing cost burden	87.5914282
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	83.11305017
Arthritis	60.6
Asthma ER Admissions	18.3
High Blood Pressure	76.3
Cancer (excluding skin)	45.0
Asthma	55.1

Coronary Heart Disease	81.5
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	82.1
Life Expectancy at Birth	50.8
Cognitively Disabled	24.2
Physically Disabled	37.2
Heart Attack ER Admissions	32.3
Mental Health Not Good	64.8
Chronic Kidney Disease	79.8
Obesity	59.2
Pedestrian Injuries	19.6
Physical Health Not Good	79.7
Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	56.8
No Leisure Time for Physical Activity	74.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	48.8
Elderly	37.4
English Speaking	87.9
Foreign-born	26.8
Outdoor Workers	23.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.2
Traffic Density	51.7

Traffic Access	23.0
Other Indices	—
Hardship	32.8
Other Decision Support	—
2016 Voting	69.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	56.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project-specific data
Construction: Construction Phases	Project-specific construction data
Construction: Off-Road Equipment	Project-specific construction data

Construction: Dust From Material Movement	Project-specific construction data
Construction: Architectural Coatings	Project-specific construction data
Construction: Trips and VMT	Project-specific data
Construction: On-Road Fugitive Dust	Project-specific assumptions
Operations: Road Dust	Project-specific assumption

Corby BESS AFC Daily (Operations) Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Corby BESS AFC Daily (Operations)
Construction Start Date	3/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.3922740342, -121.907417485
County	Solano-Sacramento
City	Unincorporated
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	837
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	40.3	User Defined Unit	40.3	89,530	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.93	2.88	0.09	4.24	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	0.00	42.6	42.6	0.01	< 0.005	0.05	44.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.22	2.22	0.06	0.49	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	25.8	25.8	0.01	< 0.005	< 0.005	27.4
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.43	2.40	0.03	2.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.00	20.7	20.7	< 0.005	< 0.005	0.02	21.1
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	0.44	0.01	0.37	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	3.42	3.42	< 0.005	< 0.005	< 0.005	3.49

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.18	0.18	0.05	0.35	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.6	26.6	0.01	< 0.005	0.05	28.1

Area	2.75	2.70	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.93	2.88	0.09	4.24	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	0.00	42.6	42.6	0.01	< 0.005	0.05	44.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.16	0.16	0.06	0.49	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.8	25.8	0.01	< 0.005	< 0.005	27.4
Area	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.22	2.22	0.06	0.49	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	25.8	25.8	0.01	< 0.005	< 0.005	27.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.01	0.09	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	13.2
Area	2.40	2.37	0.02	1.92	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.90	7.90	< 0.005	< 0.005	—	7.92
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.43	2.40	0.03	2.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	0.00	20.7	20.7	< 0.005	< 0.005	0.02	21.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.12	2.12	< 0.005	< 0.005	< 0.005	2.18
Area	0.44	0.43	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.44	0.44	0.01	0.37	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	3.42	3.42	< 0.005	< 0.005	< 0.005	3.49

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
Total	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.69	0.64	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Total	2.75	2.70	0.03	3.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	0.06	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31
Total	0.44	0.43	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.31	1.31	< 0.005	< 0.005	—	1.31

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Total all Land Uses	52.0	0.00	0.00	3,129	20.0	0.00	0.00	5,214

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	134,295	44,765	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

8. User Changes to Default Data

Screen	Justification
Land Use	Project-specific data
Construction: Construction Phases	Project-specific construction data
Construction: Off-Road Equipment	Project-specific construction data
Construction: Dust From Material Movement	Project-specific construction data
Construction: Architectural Coatings	Project-specific construction data
Construction: Trips and VMT	Project-specific data
Construction: On-Road Fugitive Dust	Project-specific assumptions
Operations: Road Dust	Project-specific assumption

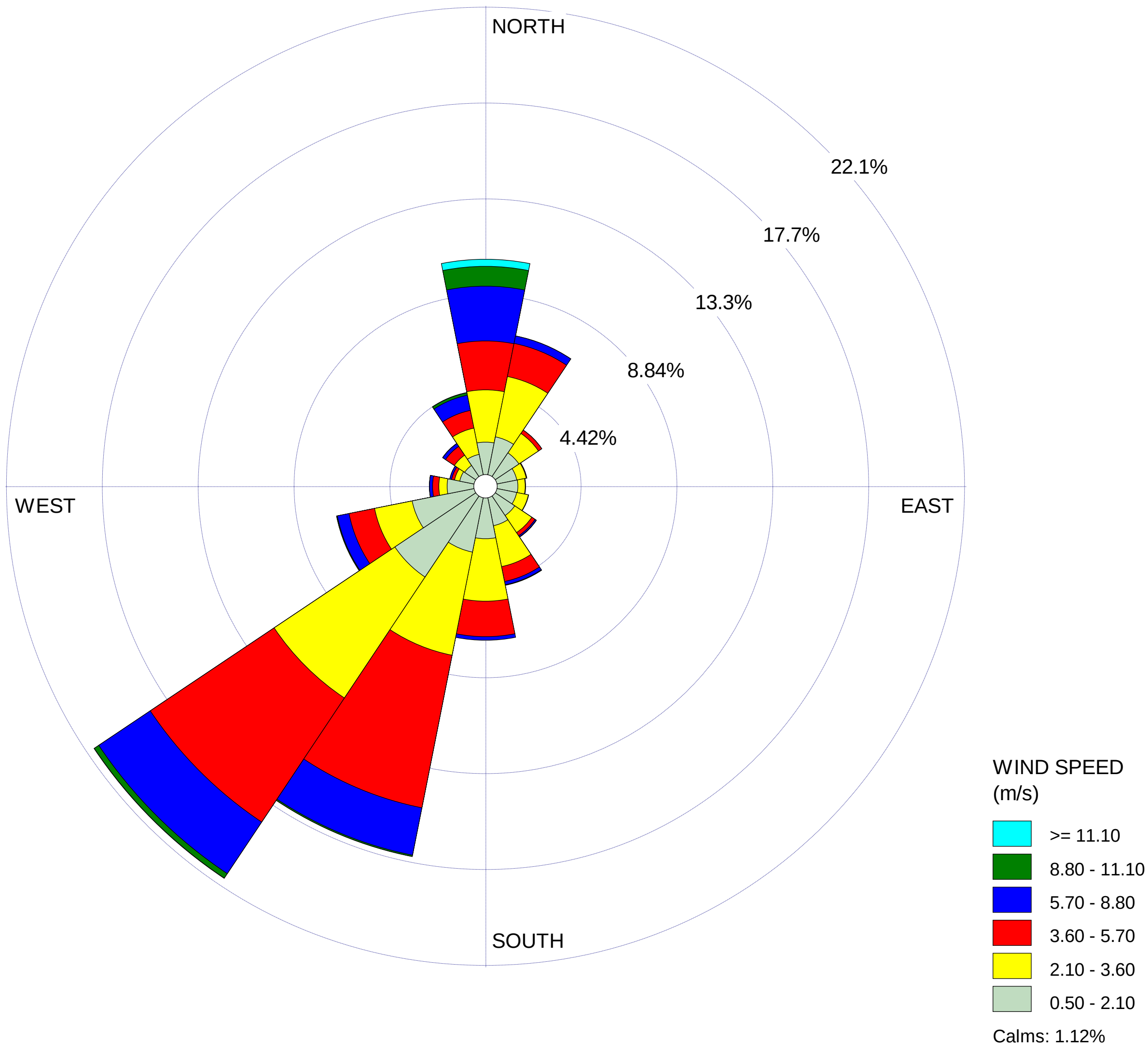
ATTACHMENT B: DISPERSION MODELING

WIND ROSE PLOT:

Nut Tree Airport - KVCB 724828

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD:	COMPANY NAME:	
Processed years: 2017-2021	**Start Date: 1/1/2017 - 00:00** **End Date: 12/31/2021 - 23:59**		
		MODELER:	
	CALM WINDS: **1.12%**	TOTAL COUNT: **43535 hrs.**	
	AVG. WIND SPEED: **3.25 m/s**	DATE: **6/20/2022**	PROJECT NO.:

WRPLOT View - Lakes Environmental Software

Results Summary

Corby BESS - CO Construction

CO - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	2503.65762	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	12/24/2019, 19
8-HR	1ST	522.29132	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	2/5/2021, 24
1-HR	2ND	2466.85127	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	11/2/2021, 8
8-HR	2ND	417.46227	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	12/20/2019, 24

CO - Concentration - Source Group: BESS

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	988.91265	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	2/28/2020, 8
8-HR	1ST	185.51681	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	12/24/2019, 24
1-HR	2ND	976.43944	ug/m^3	595365.66	4249626.20	23.05	0.00	23.05	10/31/2017, 8
8-HR	2ND	170.55506	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	12/11/2019, 16

CO - Concentration - Source Group: GENTIE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	559.90757	ug/m^3	594666.20	4250239.88	24.84	0.00	24.84	2/28/2020, 8
8-HR	1ST	87.56064	ug/m^3	594622.70	4251028.54	25.07	0.00	25.07	1/12/2017, 24
1-HR	2ND	518.41963	ug/m^3	594666.20	4250239.88	24.84	0.00	24.84	10/31/2017, 8
8-HR	2ND	81.69856	ug/m^3	594648.93	4250983.89	26.15	0.00	26.15	1/12/2017, 24

Results Summary

Corby BESS - CO Construction

CO - Concentration - Source Group: SUBSTN

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	2335.83695	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	12/24/2019, 19
8-HR	1ST	493.37783	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	2/5/2021, 24
1-HR	2ND	2296.90335	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	11/2/2021, 8
8-HR	2ND	384.47074	ug/m^3	594455.85	4250906.57	25.55	0.00	25.55	1/18/2019, 16

Results Summary

Corby BESS - CO Operations

CO - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	32.96901	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	2/28/2020, 8
8-HR	1ST	6.18488	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	12/24/2019, 24
1-HR	2ND	32.55317	ug/m^3	595365.66	4249626.20	23.05	0.00	23.05	10/31/2017, 8
8-HR	2ND	5.68607	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	12/11/2019, 16

CO - Concentration - Source Group: BESS

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	32.96901	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	2/28/2020, 8
8-HR	1ST	6.18488	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	12/24/2019, 24
1-HR	2ND	32.55317	ug/m^3	595365.66	4249626.20	23.05	0.00	23.05	10/31/2017, 8
8-HR	2ND	5.68607	ug/m^3	595404.21	4249626.58	22.98	0.00	22.98	12/11/2019, 16

CO - Concentration - Source Group: GENTIE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	
8-HR	1ST	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	
1-HR	2ND	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	
8-HR	2ND	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	

Results Summary

Corby BESS - CO Operations

CO - Concentration - Source Group: SUBSTN

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	
8-HR	1ST	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	
1-HR	2ND	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	
8-HR	2ND	0.00000	ug/m^3	595415.77	4250279.25	23.54	0.00	23.54	

Results Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.29946	ug/m^3	594464.30	4251031.29	25.37	0.00	25.37	

DPM - Concentration - Source Group: BESS

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.08465	ug/m^3	595455.61	4250231.45	23.56	0.00	23.56	

DPM - Concentration - Source Group: GENTIE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.05149	ug/m^3	594644.02	4250909.39	24.71	0.00	24.71	

DPM - Concentration - Source Group: SUBSTN

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.25801	ug/m^3	594464.30	4251031.29	25.37	0.00	25.37	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.04454	ug/m^3	MEIR-1	595415.77	4250279.25	23.54	0.00	23.54	
ANNUAL		0.00314	ug/m^3	MEIR-9	596300.42	4250254.46	21.93	0.00	21.93	
ANNUAL		0.00936	ug/m^3	MEIR-2	594931.91	4250179.68	25.23	0.00	25.23	
ANNUAL		0.00774	ug/m^3	MEIW-2	595611.93	4249482.52	22.82	0.00	22.82	
ANNUAL		0.00307	ug/m^3	MEIR	594638.16	4249238.15	23.45	0.00	23.45	
ANNUAL		0.00180	ug/m^3	MEIR-8	596049.90	4249314.63	22.48	0.00	22.48	
ANNUAL		0.01239	ug/m^3	MEIR-4	595511.46	4250501.92	23.35	0.00	23.35	
ANNUAL		0.00719	ug/m^3	MEIR-5	595498.54	4250667.12	23.48	0.00	23.48	
ANNUAL		0.01326	ug/m^3	MEIR-3	595411.52	4250453.65	23.67	0.00	23.67	
ANNUAL		0.00444	ug/m^3	MEIR	595566.91	4250969.21	23.84	0.00	23.84	
ANNUAL		0.00817	ug/m^3	MEIR-6	594766.45	4251527.66	25.98	0.00	25.98	
ANNUAL		0.00340	ug/m^3	MEIR-7	595687.62	4249132.47	22.73	0.00	22.73	
ANNUAL		0.00440	ug/m^3	MEIW	595505.14	4249007.04	22.58	0.00	22.58	
ANNUAL		0.03002	ug/m^3	MEIW-1	595615.79	4250198.89	23.11	0.00	23.11	
ANNUAL		0.00292	ug/m^3	MEIW-4	593892.01	4250441.84	26.38	0.00	26.38	
ANNUAL		0.00421	ug/m^3	MEIW-5	595985.30	4250979.75	22.82	0.00	22.82	
ANNUAL		0.00107	ug/m^3	SR-1	593411.06	4251932.94	28.54	0.00	28.54	
ANNUAL		0.00098	ug/m^3	SR-2	593289.01	4251915.51	28.87	0.00	28.87	
ANNUAL		0.00079	ug/m^3	SR-3	593034.82	4250164.60	28.84	0.00	28.84	
ANNUAL		0.00067	ug/m^3	SR-4	592775.99	4249427.13	28.06	0.00	28.06	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00059	ug/m^3	SR-5	592634.24	4249800.03	28.71	0.00	28.71	
ANNUAL		0.02243	ug/m^3	MEIW-3	594302.81	4250769.11	25.00	0.00	25.00	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: BESS

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.04304	ug/m^3	MEIR-1	595415.77	4250279.25	23.54	0.00	23.54	
ANNUAL		0.00267	ug/m^3	MEIR-9	596300.42	4250254.46	21.93	0.00	21.93	
ANNUAL		0.00397	ug/m^3	MEIR-2	594931.91	4250179.68	25.23	0.00	25.23	
ANNUAL		0.00717	ug/m^3	MEIW-2	595611.93	4249482.52	22.82	0.00	22.82	
ANNUAL		0.00155	ug/m^3	MEIR	594638.16	4249238.15	23.45	0.00	23.45	
ANNUAL		0.00144	ug/m^3	MEIR-8	596049.90	4249314.63	22.48	0.00	22.48	
ANNUAL		0.01072	ug/m^3	MEIR-4	595511.46	4250501.92	23.35	0.00	23.35	
ANNUAL		0.00546	ug/m^3	MEIR-5	595498.54	4250667.12	23.48	0.00	23.48	
ANNUAL		0.01120	ug/m^3	MEIR-3	595411.52	4250453.65	23.67	0.00	23.67	
ANNUAL		0.00270	ug/m^3	MEIR	595566.91	4250969.21	23.84	0.00	23.84	
ANNUAL		0.00073	ug/m^3	MEIR-6	594766.45	4251527.66	25.98	0.00	25.98	
ANNUAL		0.00298	ug/m^3	MEIR-7	595687.62	4249132.47	22.73	0.00	22.73	
ANNUAL		0.00391	ug/m^3	MEIW	595505.14	4249007.04	22.58	0.00	22.58	
ANNUAL		0.02923	ug/m^3	MEIW-1	595615.79	4250198.89	23.11	0.00	23.11	
ANNUAL		0.00053	ug/m^3	MEIW-4	593892.01	4250441.84	26.38	0.00	26.38	
ANNUAL		0.00328	ug/m^3	MEIW-5	595985.30	4250979.75	22.82	0.00	22.82	
ANNUAL		0.00030	ug/m^3	SR-1	593411.06	4251932.94	28.54	0.00	28.54	
ANNUAL		0.00029	ug/m^3	SR-2	593289.01	4251915.51	28.87	0.00	28.87	
ANNUAL		0.00030	ug/m^3	SR-3	593034.82	4250164.60	28.84	0.00	28.84	
ANNUAL		0.00024	ug/m^3	SR-4	592775.99	4249427.13	28.06	0.00	28.06	
ANNUAL		0.00026	ug/m^3	SR-5	592634.24	4249800.03	28.71	0.00	28.71	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: BESS

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00088	ug/m^3	MEIW-3	594302.81	4250769.11	25.00	0.00	25.00	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: GENTIE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00111	ug/m^3	MEIR-1	595415.77	4250279.25	23.54	0.00	23.54	
ANNUAL		0.00022	ug/m^3	MEIR-9	596300.42	4250254.46	21.93	0.00	21.93	
ANNUAL		0.00452	ug/m^3	MEIR-2	594931.91	4250179.68	25.23	0.00	25.23	
ANNUAL		0.00030	ug/m^3	MEIW-2	595611.93	4249482.52	22.82	0.00	22.82	
ANNUAL		0.00078	ug/m^3	MEIR	594638.16	4249238.15	23.45	0.00	23.45	
ANNUAL		0.00018	ug/m^3	MEIR-8	596049.90	4249314.63	22.48	0.00	22.48	
ANNUAL		0.00111	ug/m^3	MEIR-4	595511.46	4250501.92	23.35	0.00	23.35	
ANNUAL		0.00120	ug/m^3	MEIR-5	595498.54	4250667.12	23.48	0.00	23.48	
ANNUAL		0.00153	ug/m^3	MEIR-3	595411.52	4250453.65	23.67	0.00	23.67	
ANNUAL		0.00112	ug/m^3	MEIR	595566.91	4250969.21	23.84	0.00	23.84	
ANNUAL		0.00206	ug/m^3	MEIR-6	594766.45	4251527.66	25.98	0.00	25.98	
ANNUAL		0.00022	ug/m^3	MEIR-7	595687.62	4249132.47	22.73	0.00	22.73	
ANNUAL		0.00026	ug/m^3	MEIW	595505.14	4249007.04	22.58	0.00	22.58	
ANNUAL		0.00050	ug/m^3	MEIW-1	595615.79	4250198.89	23.11	0.00	23.11	
ANNUAL		0.00073	ug/m^3	MEIW-4	593892.01	4250441.84	26.38	0.00	26.38	
ANNUAL		0.00056	ug/m^3	MEIW-5	595985.30	4250979.75	22.82	0.00	22.82	
ANNUAL		0.00027	ug/m^3	SR-1	593411.06	4251932.94	28.54	0.00	28.54	
ANNUAL		0.00024	ug/m^3	SR-2	593289.01	4251915.51	28.87	0.00	28.87	
ANNUAL		0.00021	ug/m^3	SR-3	593034.82	4250164.60	28.84	0.00	28.84	
ANNUAL		0.00016	ug/m^3	SR-4	592775.99	4249427.13	28.06	0.00	28.06	
ANNUAL		0.00013	ug/m^3	SR-5	592634.24	4249800.03	28.71	0.00	28.71	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: GENTIE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00334	ug/m^3	MEIW-3	594302.81	4250769.11	25.00	0.00	25.00	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: SUBSTN

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00039	ug/m^3	MEIR-1	595415.77	4250279.25	23.54	0.00	23.54	
ANNUAL		0.00025	ug/m^3	MEIR-9	596300.42	4250254.46	21.93	0.00	21.93	
ANNUAL		0.00086	ug/m^3	MEIR-2	594931.91	4250179.68	25.23	0.00	25.23	
ANNUAL		0.00027	ug/m^3	MEIW-2	595611.93	4249482.52	22.82	0.00	22.82	
ANNUAL		0.00074	ug/m^3	MEIR	594638.16	4249238.15	23.45	0.00	23.45	
ANNUAL		0.00018	ug/m^3	MEIR-8	596049.90	4249314.63	22.48	0.00	22.48	
ANNUAL		0.00056	ug/m^3	MEIR-4	595511.46	4250501.92	23.35	0.00	23.35	
ANNUAL		0.00053	ug/m^3	MEIR-5	595498.54	4250667.12	23.48	0.00	23.48	
ANNUAL		0.00053	ug/m^3	MEIR-3	595411.52	4250453.65	23.67	0.00	23.67	
ANNUAL		0.00062	ug/m^3	MEIR	595566.91	4250969.21	23.84	0.00	23.84	
ANNUAL		0.00538	ug/m^3	MEIR-6	594766.45	4251527.66	25.98	0.00	25.98	
ANNUAL		0.00020	ug/m^3	MEIR-7	595687.62	4249132.47	22.73	0.00	22.73	
ANNUAL		0.00022	ug/m^3	MEIW	595505.14	4249007.04	22.58	0.00	22.58	
ANNUAL		0.00030	ug/m^3	MEIW-1	595615.79	4250198.89	23.11	0.00	23.11	
ANNUAL		0.00165	ug/m^3	MEIW-4	593892.01	4250441.84	26.38	0.00	26.38	
ANNUAL		0.00037	ug/m^3	MEIW-5	595985.30	4250979.75	22.82	0.00	22.82	
ANNUAL		0.00050	ug/m^3	SR-1	593411.06	4251932.94	28.54	0.00	28.54	
ANNUAL		0.00045	ug/m^3	SR-2	593289.01	4251915.51	28.87	0.00	28.87	
ANNUAL		0.00028	ug/m^3	SR-3	593034.82	4250164.60	28.84	0.00	28.84	
ANNUAL		0.00028	ug/m^3	SR-4	592775.99	4249427.13	28.06	0.00	28.06	
ANNUAL		0.00019	ug/m^3	SR-5	592634.24	4249800.03	28.71	0.00	28.71	

Sensitive Receptor Summary

Corby BESS - HRA Modeling

DPM - Concentration - Source Group: SUBSTN

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.01821	ug/m^3	MEIW-3	594302.81	4250769.11	25.00	0.00	25.00	

ATTACHMENT C: HEALTH RISK ASSESSMENT

```
HARP2 - HRACalc (dated 22118) 9/16/2024 7:09:47 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
*********************************
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

*********************************
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

*********************************
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments.  The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

*********************************
INHALATION

Daily breathing rate: LongTerm24HR

**Worker Adjustment Factors**
Worker adjustment factors enabled: NO

**Fraction at time at home**
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

*********************************
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

*********************************
TIER 2 SETTINGS
```

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\s.sridharan\Desktop\CorbyBESSMEIRCancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\s.sridharan\Desktop\CorbyBESSMEIRNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\s.sridharan\Desktop\CorbyBESSMEIRNCAcuteRisk.csv
HRA ran successfully
```

```
HARP2 - HRACalc (dated 22118) 9/16/2024 6:31:51 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
**********************************
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: HighEnd

**********************************
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

**********************************
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments.  The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

**********************************
INHALATION

Daily breathing rate: Moderate8HR

**Worker Adjustment Factors**
Worker adjustment factors enabled: NO

**Fraction at time at home**
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********************************
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

**********************************
TIER 2 SETTINGS
```

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSMEIWCancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSMEIWNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSMEIWNCAcuteRisk.csv
HRA ran successfully
```

```
HARP2 - HRACalc (dated 22118) 9/16/2024 6:33:17 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
*********************************
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

*********************************
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 5
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

*********************************
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments.  The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

*********************************
INHALATION

Daily breathing rate: Moderate8HR

**Worker Adjustment Factors**
Worker adjustment factors enabled: NO

**Fraction at time at home**
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

*********************************
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

*********************************
TIER 2 SETTINGS
```

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSrSR5CancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSrSR5NCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSrSR5NCAcuteRisk.csv
HRA ran successfully
```

```
HARP2 - HRACalc (dated 22118) 9/16/2024 6:34:01 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
**********************************
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: HighEnd

**********************************
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

**********************************
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments.  The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

**********************************
INHALATION

Daily breathing rate: Moderate8HR

**Worker Adjustment Factors**
Worker adjustment factors enabled: NO

**Fraction at time at home**
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********************************
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

**********************************
TIER 2 SETTINGS
```

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSSRCancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSSRNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\s.sridharan\OneDrive - Tetra Tech, Inc\Working\Corby\HRA1\CorbyBESSSRNCAcuteRisk.csv
HRA ran successfully
```

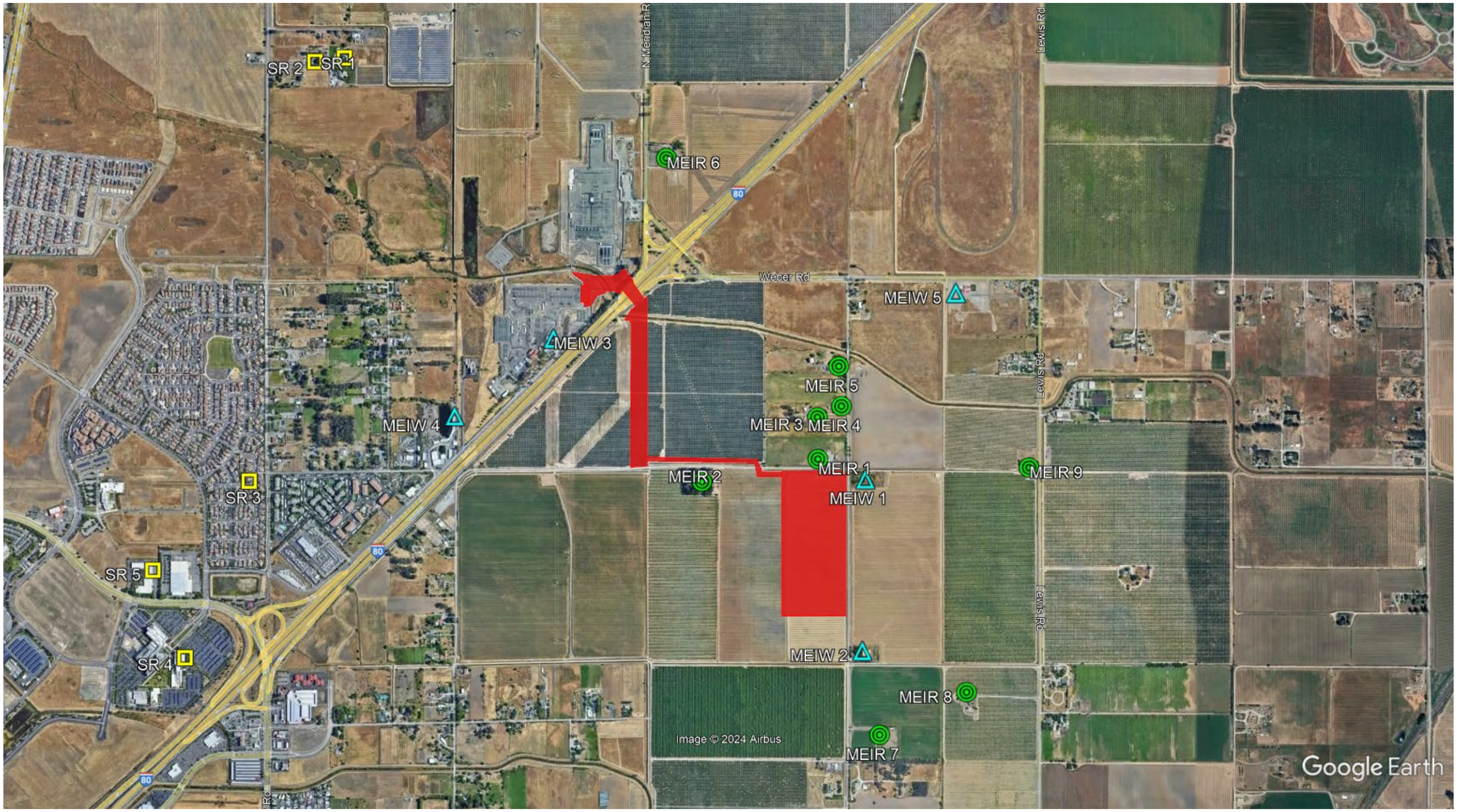


Figure C-1: Maximally Exposed Individual Receptors