Appendix A

Air Quality and Greenhouse Gas Assessment

Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Mountain View I & II Wind Repower Project

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
µg/m^3	micrograms per cubic meter
2016 RTP/SCS	2016–2040 Regional Transportation Plan / Sustainable Communities Strategy
AB	Assembly Bill
AQMP	Air Quality Management Plan
BAU	business as usual
BLM	Bureau of Land Management
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California's Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CNRA	California Natural Resources Agency
County	County of Riverside
CO	carbon monoxide
CO_2	carbon dioxide
CVAG	Coachella Valley Association of Governments of Governments
DPM	diesel particulate matter
EO	Executive Order
EPA	U.S. Environmental Protection Agency
First Update	*First Update to the Climate Change Scoping Plan: Building on the Framework*
GHG	greenhouse gas
GWP	global warming potential
HAP	hazardous air pollutant
HFC	hydrofluorocarbon
kV	kilovolt
kW	kilowatt
LCFS	Low Carbon Fuel Standard
LST	localized significance thresholds
mg/m^3	milligrams per cubic meter
MMT	million metric ton
MPO	metropolitan planning organization
MT CO_2e	metric tons of carbon dioxide equivalent
MW	megawatt
MWh	megawatt-hour
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NF_3	nitrogen trifluoride
NHTSA	National Highway Traffic Safety Administration
NO	Nitric oxide

Acronym/Abbreviation	Definition
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
O_3	ozone
PFC	perfluorocarbon
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
ppb	parts per billion
ppm	parts per million
Project	Mountain View I & II Wind Repower Project
ROW	right-of-way
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
SCAB	South Coast Air Basin
SCADA	Supervisory Control and Data Acquisition
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
Scoping Plan	*Climate Change Scoping Plan: A Framework for Change*
SCS	Sustainable Communities Strategy
Second Update	2017 Climate Change
SF_6	sulfur hexafluoride
SLCP	short-lived climate pollutant
SO_2	sulfur dioxide
SO_x	sulfur oxides
SRA	source-receptor area
SSAB	Salton Sea Air Basin
TAC	toxic air contaminants
TPPS	Transportation Project Prioritization Study
VMT	vehicle miles traveled
VOC	volatile organic compound
W-E	Wind Energy Resource Zone
WTG	wind turbine generator
ZEV	Zero-emissions vehicle
ZNE	zero net energy

Executive Summary

The purpose of this technical report is to assess the potential air quality and greenhouse gas (GHG) emissions impacts associated with implementation of the proposed Mountain View I & II Wind Repower Project (Project) located in Riverside County (County). This assessment utilizes the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.).

Project Overview

The Project comprises the following components and activities:

- Decommission and remove the approximately 93 existing, antiquated turbines from the Project site.
- Install 16 new wind turbines and related infrastructure with a per-turbine generating capacity of between 3.6 megawatts (MW) and 4.3 MW on land within the County's Wind Energy Resource (W-E) Zone.
- Decommission and remove the new wind turbines at the end of their useful life cycle.

The Project site is located within the Salton Sea Air Basin and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Construction criteria air pollutant and GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, consistent with SCAQMD guidance.

Air Quality

The air quality impact analysis evaluated the potential for adverse impacts to air quality due to construction and operational emissions resulting from the Project. Impacts were evaluated for their significance based on the SCAQMD mass daily criteria air pollutant thresholds (SCAQMD 1993, as revised in March 2015 [SCAQMD 2015]). Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. Pollutants that are evaluated include volatile organic compounds (VOCs) (also referred to as reactive organic gases), oxides of nitrogen (NO_x), CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$. VOCs and NO_x are important because they are precursors to O_3.

Air Quality Plan Consistency

The Project would not result in an increase in the frequency and severity of existing air quality violations and would not conflict with the SCAQMD Consistency Criterion No. 1. Also, implementation of the Project would not exceed the demographic growth forecasts in the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS); therefore, the Project would also be consistent with the SCAQMD 2016 Air Quality Management Plan, which based future emission estimates on the SCAG 2016 RTP/SCS. Thus, the Project would not conflict with the SCAQMD Consistency Criterion No. 2. Based on these considerations, impacts related to the Project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

Construction Criteria Air Pollutant Emissions

Construction of the Project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, and soil disturbance) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Maximum daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years (2021–2022).

Operational Criteria Air Pollutant Emissions

Operational activities would be limited to maintenance and repair. Maintenance activities would be minimal and would be similar to those that occur under existing conditions.

Exposure of Sensitive Receptors

Construction activities would not generate emissions in excess of the SCAQMD site-specific localized significance thresholds; therefore, site-specific construction impacts would be less than significant. In addition, diesel equipment would also be subject to the California Air Resources Board (CARB) air toxic control measures for in-use off-road diesel fleets, which would minimize diesel particulate matter emissions. Similarly, the vehicle related emissions would be temporary and would not cause a long-term source of CO. Therefore, the Project would have a less-than-significant impact on sensitive receptors.

Odors

Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, which would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Impacts associated with odors during construction would be less than significant. The Project would not generate any new odors during operation; therefore, impacts during operation would be less than significant.

Greenhouse Gas Emissions

Global climate change is primarily considered a cumulative impact but must also be evaluated on a proposed project-level under CEQA. A proposed project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHG emissions. GHGs are gases that absorb infrared radiation in the atmosphere. Principal GHGs regulated under state and federal law and regulations include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). GHG emissions are measured in metric tons of CO_2 equivalent (MT CO_2e), which account for weighted global warming potential factors for CH_4 and N_2O.

Project-Generated Construction and Operational Greenhouse Gas Emissions

The threshold applied to assess the potential for the Project to generate GHG emissions either directly or indirectly that may have a significant impact on the environment was the recommended County threshold of 3,000 MT CO_2e per year. Pursuant to SCAQMD guidance, construction emissions were amortized over a 30-year project lifetime, so that construction GHG emissions could be compared to the operational threshold (SCAQMD 2008).

Project construction would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. The estimated total GHG emissions during Project construction would be approximately 848 MT CO_2e over the construction period. Estimated Project-generated construction emissions amortized over 30 years would be approximately 28 MT CO_2e per year. The estimated total GHG emissions during decommissioning of the Project would be approximately 131 MT CO_2e over the decommissioning period. Estimated Project-generated decommissioning emissions amortized over 30 years would be approximately 4 MT CO_2e per year. Combined amortized construction and decommissioning emissions would be 33 MT CO_2e per year.

As Project-generated GHG emissions do not exceed the 3,000 MT CO_2e per year threshold, the Project-generated GHG emissions would result in a less-than-significant impact.

GHG Benefit

The current site produces approximately 197,773 megawatt hours (MWh) of electricity per year. The proposed Project is expected to produce an estimated 229 GWh of electricity per year. Therefore, the Project could produce

an additional 25,794 MWh per year compared to the existing turbines. The latest published GHG emission factor for Southern California Edison (SCE) is 534 pounds of CO_2e/MWh (SCE 2019). Assuming that SCE would meet the Executive Order (EO) B-55-18 carbon neutrality target in 2045, a linear regression of the SCE GHG emission factor was calculated from 2019 to 2044. This would mean that the Project would avoid less GHG emissions over time. Assuming this, the Project would avoid a net 59,817 MT CO_2e from 2023 through 2044. In contrast, including amortized construction and decommissioning emissions, the Project would emit 978 MT CO_2e over a 30-year lifetime. It should be noted that the Project is expected to be operational through 2052 and thus it would not avoid GHG emissions from 2045 through 2052.

Consistency with Applicable Greenhouse Gas Reduction Plans

The Project was assessed for consistency with the County's Climate Action Plan, the SCAG 2016/RTP/SCS and Connect SoCal plan, CARB's updated Scoping Plan, and EO S-3-05. The Project was shown to be consistent with all the GHG plans previously mentioned. To the extent these regulations are applicable to the Project and its uses, the Project would comply with all applicable regulations adopted in furtherance of the Scoping Plan to the extent required by law. As such, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be less than significant.

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1 Introduction

1.1 Report Purpose and Scope

The purpose of this technical report is to assess the potential air quality and greenhouse gas (GHG) emissions impacts associated with implementation of the proposed Mountain View I & II Wind Repower Project (Project) located in Riverside County (County). This assessment uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and is based on the emissions-based significance thresholds recommended by the South Coast Air Quality Management District (SCAQMD) and other applicable thresholds of significance.

This introductory section provides a description of the Project and the Project location. Section 2, Air Quality, describes the air quality-related environmental setting, regulatory setting, existing air quality conditions, thresholds of significance, and analysis methodology and presents an air quality impact analysis per CEQA Guidelines Appendix G. Section 3, Greenhouse Gas Emissions, follows the same format as Section 2 and similarly describes the GHG emissions-related environmental setting, regulatory setting, existing climate changes conditions, thresholds of significance, and analysis methodology, and presents a GHG emissions impact analysis per CEQA Guidelines Appendix G. Section 4, References Cited, includes a list of the references cited. Section 5, List of Preparers, includes a list of those who prepared this technical report.

The analysis in this technical report incorporates Project data as provided by the Project Applicant and the California Emission Estimator Model (CalEEMod) default values where appropriate.

1.2 Regional and Local Setting

The proposed Project boundary encompasses approximately 1,255.9 acres of existing energy facilities within unincorporated County of Riverside (County). Specifically, the Project site is located within the County of Riverside, north of the City of Palm Springs, in the northwestern portion of the Coachella Valley. State Route 111 and the City of Palm Springs are located south of the project site, and Interstate 10 is located north of the project site (Figure 1).

The proposed Project is mostly located within the boundaries of the existing Mountain View I & II wind energy facilities and covers 1,202.86 acres of private land and 52.34 acres of Bureau of Land Management (BLM) lands. The project site encompasses 42 parcels and a portion of two additional parcels. The Project site is located within Section 13 of Township 3 South, Range 3 East; and Sections 17 and 18 of Township 3 South, Range 4 East of the Desert Hot Springs and Whitewater U.S. Geological Survey Quadrangles. The approximate geographic center of the Project site is located at 33°54′28.04″N (latitude) and 116°35′32.03″W (longitude).

Surrounding land uses can be broadly described as developed with a mix of wind energy facilities, industrial and commercial properties, and rural residences. The Union Pacific Railroad (UPRR) corridor runs east-to-west south of the project site, and Coachella Valley Water District (CVWD) percolation ponds are located south of the railroad right-of-way (ROW). Interstate 10 runs northwest-to-southeast north of the Project site, and State Route 62 and vacant desert land are located north of Interstate 10. Existing wind energy projects are located on all sides of the project site, and some commercial and industrial land uses are developed east of the project site, adjacent to Indian Canyon Drive. The area of land between the noncontiguous portions of the Project site consists of wind energy development, rural residential, and undeveloped land. An open space area are located west of the Project site.

1.3 Project Description

The proposed Project would include removal of 93 existing on-site Mitsubishi 600-kilowatt (kW) wind turbine generators (WTGs) and 3 meteorological (met) towers and the subsequent installation of 16 Vestas WTGs; 7 existing Mitsubishi 600 kW WTGs would remain as part of the proposed Project. The proposed Project would be capable of producing approximately 229.90 gigawatt-hours of power per year for operational years one through ten. Beyond operational year ten, assuming decommissioning of the seven Mitsubishi 600 kW WTGs, the proposed Project would produce approximately 215.90 gigawatt-hours of power annually for the remainder of its operational life. The proposed Project would repower the wind farm with modern, higher capacity WTGs.

Permits, authorizations, and approvals for the portion of the Project on fee-owned lands will include, but may not be limited to, the following: Riverside County wind energy conversion system (WECS) permit, Building and Grading permits; Federal Aviation Administration Determinations of No Hazard; California State Water Resources Control Board Construction General Permit, Riverside County Airport Land Use Commission Review; Coachella Valley Multiple Species Habitat Conservation Plan Joint Project Review; and a building permit with the City of Palm Springs for the proposed replacement of the underground electrical collection system and replacement and storage of a spare transformer at the Mount Wind Substation. Additionally, the Project Applicant has requested a Variance and Change of Zone from the County of Riverside.

The seven existing WTGs would be upgraded with and/or refurbished gearboxes, generators, and other components, to improve electrical generation efficiency. Six of the existing WTGs that would remain as part of the proposed project (WTG74-09 through WTG74-14) are located on BLM parcel no. 668-310-038 (ROW Grant CACA-42139), and one WTG (WTG74-15) is located on privately owned parcel no. 669-020-008. Via a pending application, the applicant is requesting that BLM extend ROW Grant CACA-42139 to December 31, 2042. BLM, as the lead agency pursuant to the National Environmental Policy Act, is anticipated to apply a Categorical Exclusion for the proposed improvements to existing WTGs within BLM land.

No changes are proposed with respect to 11 existing Mitsubishi WTGs authorized by ROW Grant CACA-40557. These 11 WTGs are located on land that is not contiguous with the proposed project site and no changes are proposed to them as part of the proposed Project.

Figure 1 Location Map

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2 Air Quality

2.1 Environmental Setting

The Project site is located within the Salton Sea Air Basin (SSAB). The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward to the Palo Verde Valley. The Coachella Valley Planning Area is a federal nonattainment area that is part of a sub-region of Riverside County in the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east.

2.1.1 Meteorological and Topographical Conditions

The SSAB includes the central portion of Riverside County (Coachella Valley) and all of Imperial County. The Riverside County portion of the SSAB is under the SCAQMD jurisdiction. The SSAB is generally very flat and bordered to the west by the Peninsular Mountain range and to the east by the Chocolate, Orocopia, and Cargo Muchacho Mountains. The Riverside county portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (SCAQMD 2017).

The SSAB is a continental, desert region with a climate characterized by low annual rainfall, low humidity, hot days, and cool nights. Temperatures exceed 100°F during the summer with daily highs near 110°F during July and August. The mean temperature in the summer is 89°F, while the mean temperature in the winter is 57°F (SCAQMD 2017). Rainfall in the area varies considerably, although precipitation normally occurs November through April. A semi-permanent high-pressure zone blocks mid-latitude storms and causes sunny skies most of the time in the SSAB. The high-pressure zone tends to be weaker in the winter, and it is during this time that the SSAB usually receives its average 2.8 inches of annual precipitation. The Peninsular Mountains to the west block coastal influence, such as cool and damp marine air that traverses inland from the Pacific Ocean. The geographic barriers and atmospheric conditions often limit the amount of precipitation for the area.

The Coachella Valley is impacted by pollutant transport from the South Coast Air Basin (SCAB). Ozone in the atmosphere of the Riverside County portion of SSAB is both directly transported from the SCAB and formed principally from ozone precursors (hydrocarbons and NO_x[1]) emitted upwind. In addition, pollutant transport occurs to the Antelope Valley, Mojave Desert, Ventura County, and San Diego County. The mountains to the east act as physical barriers to the dispersion of airborne contaminants. The Coachella Valley is exposed to frequent gusty winds; stronger winds tend to occur in the open mid-portion of the valley, while lighter winds tend to occur closer to the foothills. The pollutant transport pathway from the SCAB to the SSAB is through the San Gorgonio Pass (sometimes referred to as the Banning Pass) to the Coachella Valley.

The area climate is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 108°F in July to a low of 42°F in December. Annual precipitation averages about 5.5 inches, falling mostly from August through March (WRCC 2017).

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain "primary" pollutants (mainly reactive hydrocarbons and NO_x) react to form "secondary" pollutants (primarily oxidants). Since this process is time dependent, secondary

[1] NO_x is a general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO_2) and other oxides of nitrogen.

pollutants can be formed many miles downwind of the emission sources. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O_3) and a substantial portion of fine particulate matter ($PM_{2.5}$, particles less than 2.5 microns in diameter). In the SSAB, high concentrations of O_3 are normally recorded during the late spring, summer, and early autumn months, when more intense sunlight drives enhanced photochemical reactions. Due to the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion—a layer of warm, dry air overlaying cool, moist marine air—is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet above mean sea level, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet above mean sea level, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours.

Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of O_3 observed during summer months in the SSAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The SSAB has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

As with other locations within the SSAB, the area where the Project is located is susceptible to air inversions, which trap a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources. Elevated concentrations of particulate matter less than 10 microns in diameter (PM_{10}) and $PM_{2.5}$ can occur in the SSAB throughout the year but occur most frequently in fall and winter. Although there are some changes in emissions by day-of-week and season, the observed variations in pollutant concentrations are primarily the result of seasonal differences in weather conditions.

2.1.2 Pollutants and Effects

2.1.2.1 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles

are also regulated as criteria air pollutants. These pollutants, as well as toxic air contaminants (TACs), are discussed in the following paragraphs.[2]

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).[3] The O_3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013).

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in, thereby causing shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies on the effects of O_3 on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019b).

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an

[2] The descriptions of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's "Criteria Air Pollutants" (EPA 2018a), as well as the California Air Resources Board's "Glossary" (CARB 2019a) and "Fact Sheet: Air Pollution Sources, Effects and Control" (CARB 2009).

[3] The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019c).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2019d).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during

exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 parts per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. Older people and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2019e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) consists of particulate matter that is 10 microns or less in diameter, which is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) consists of particulate matter that is 2.5 microns or less in diameter, which is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory

mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2017).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate ambient air quality standards for VOCs as a group.

2.1.2.2 Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based

on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases—gas and particle—both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70 the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2019f). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2019f). CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) (17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines, including trucks, buses, and cars, and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2019f). Those most vulnerable to non-cancer health effects are children, whose lungs are still developing, and older people, who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Valley Fever. Coccidioidomycosis, more commonly known as "Valley Fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The

ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

Riverside County is not considered a highly endemic region for Valley Fever as the latest report from the California Department of Public Health listed Riverside County as having 5.6 cases per 100,000 people (California Department of Public Health 2018). According to the County of Riverside Epidemiology Department, there were no reported incidents of Valley Fever within the Projects zip code from 2016 through 2019 (Curlee pers. comm. 2020).

2.1.3 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The SCAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The nearest sensitive-receptor land use (resident) to the Project is located approximately 690 feet from the closest area of disturbance during construction.

2.2 Regulatory Setting

2.2.1 Federal Regulations

2.2.1.1 Criteria Air Pollutants

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

2.2.1.2 Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required the EPA to identify National Emission Standards for HAPs to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other

mammals. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

2.2.1.3 Safer Affordable Fuel-Efficient Vehicle Rule

In August 2019, the EPA and National Highway Traffic Safety Administration (NHTSA) jointly published a notice of proposed rulemaking for Part One of the Safer Affordable Fuel-Efficient Vehicle Rule (SAFE Rule). The SAFE Rule proposed new and amended CO_2, Corporate Average Fuel Economy, and GHG emissions standards for passenger cars and light trucks. Further, Part One of this rule proposed to withdraw the State of California's waiver, afforded under the Clean Air Act to set GHG and zero-emission vehicle (ZEV) standards separate from the federal government. Part One of the SAFE Rule became effective in November 2019. CARB has provided adjustment factors for pollutants, including NO_2, PM_{10}, $PM_{2.5}$, and CO, from light-duty vehicle exhaust to account for Part One of the SAFE Rule.

In March 2020, EPA and NHTSA announced Part Two of the SAFE Rule, which would set amended fuel economy and CO_2 standards for passenger cars and light trucks for model years 2021–2026. Part Two would become effective 60 days after publication in the Federal Register. The proposed Project's operational emissions associated with passenger cars and light-duty trucks would be relatively minimal, and the anticipated changes associated with the implementation of this rule would not result in significant changes to the estimated operational emissions for the proposed Project.

Furthermore, although off-model adjustments are available from CARB, the vehicle miles traveled (VMT) split between vehicle fuels is not publicly available, and thus adjustments to the CalEEMod EMFAC data are not possible at this time (Sardar, pers. comm. 2019). Based on the CARB adjustment factors, implementation of the SAFE Rule would slightly increase the anticipated emissions factors for passenger vehicles and light-duty trucks starting in 2021. The Project's assumed operational year is 2022, at which time adjustments to account for SAFE Rule would be minimal (i.e., less than 1% increase).

2.2.2 State Regulations

2.2.2.1 Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1 hour and 24 hours), NO_2, 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. The NAAQS and CAAQS are presented in Table 1.

Table 1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary[c,d]*	*Secondary[c,e]*
O_3	1 hour	0.09 ppm (180 μg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 μg/m³)
	24 hours	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 μg/m³	150 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 μg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m³	15.0 μg/m³
Lead[j,k]	30-Day Average	1.5 μg/m³	—	—
	Calendar Quarter	—	1.5 μg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 μg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 μg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 μg/m³)	—	—
Sulfates	24 hours	25 μg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016b.

Notes: μg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; ppm = parts per million by volume; O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

[a] California standards for O_3, CO, SO_2 (1 hour and 24 hours), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 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/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of 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.

[h] 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 national 1-hour 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 hours and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until 1 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.

2.2.2.2 Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic 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. In 1987, the legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification to the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road

Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the 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. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

California Health and Safety Code Section 41700

This section 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. This section also applies to sources of objectionable odors.

2.2.3 Local Regulations

The following local/regional regulations pertaining to air quality would apply to the Project.

2.2.3.1 South Coast Air Quality Management District

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the Riverside County portion of the SSAB, where the Project is located. The SCAQMD operates monitoring stations in the SSAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in the SSAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The most recent AQMP is the 2016 AQMP (SCAQMD 2017), adopted by the SCAQMD governing board on March 3, 2017. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air. The 2016 AQMP represents a new approach, focusing on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017). Because mobile sources are the principal contributor to the SSAB's air quality challenges, the SCAQMD has been and will continue to be closely engaged with CARB and the EPA, who have primary responsibility for these sources. The 2016 AQMP recognizes the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality but also local businesses and the regional economy. These "win-win" scenarios are key to implementation of this 2016 AQMP with broad support from a wide range of stakeholders.

The previous AQMP was the 2012 AQMP, which was adopted in February 2013 (SCAQMD 2013). The 2012 AQMP proposed policies and measures to achieve federal and state standards for improved air quality in the SSAB and those portions of the SSAB (formerly named the Southeast Desert Air Basin) that are under SCAQMD jurisdiction. The 2012 AQMP was designed to meet applicable federal and state requirements for O_3 and particulate matter. The 2012 AQMP documented that attainment of the federal 24-hour $PM_{2.5}$ standard was impracticable by 2015, and SSAB should be classified as a 'serious' nonattainment area along with the appropriate federal requirements. The 2012 AQMP included the planning requirements to meet the 1-hour O_3 standard. The 2012 AQMP demonstrated attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 in the SSAB through adoption of all feasible measures. Finally, the 2012 AQMP updated the EPA-approved 8-hour O_3 control plan with new measures

designed to reduce reliance on the Clean Air Act Section 182(e)(5) long-term measures for NO_x and VOC reductions. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, were based on existing and projected land use and development. The EPA, with a final ruling on April 14, 2016, approved the Clean Air Act planning requirements for the 24-hour $PM_{2.5}$ standard portion, and on September 3, 2014, approved the 1-hour O_3 Clean Air Act planning requirements.

Applicable Rules

Emissions that would result from mobile, area, and stationary sources during construction and operation of the Project are subject to SCAQMD rules and regulations. The SCAQMD rules applicable to the Project may include the following:

- **Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402 – Nuisance:** This rule prohibits the discharge of air pollutants from a facility that causes injury, detriment, nuisance, or annoyance to the public or damage to business or property.
- **Rule 403 – Fugitive Dust:** This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.
- **Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources:** This rule enacts fugitive dust control requirements that are in addition to those within Rule 403 and apply only to sources within the Coachella Valley.
- **Rule 431.2 – Sulfur Content of Liquid Fuels:** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile sources.
- **Regulation XIV – Rule 1403, Asbestos Emissions from Demolition/Renovation Activities.** This rule states that an owner or operator of any demolition or renovation activity is required to have an asbestos study performed prior to demolition and to provide notification to SCAQMD prior to commencing demolition activities.

2.2.3.2 Coachella Valley Association of Governments

The Project is within the jurisdiction of the Coachella Valley Association of Governments (CVAG), which participates in regional planning with the Southern California Association of Governments (SCAG). CVAG is the regional transportation planning agency coordinating government services in the Coachella Valley. As the recognized transportation planning agency with the Riverside County Transportation Commission, it is CVAG's responsibility to prepare and adopt a Regional Transportation Plan (RTP) for the Coachella Valley. This is accomplished through the creation of the Transportation Project Prioritization Study (TPPS), which identifies and prioritizes transportation projects in the region. The CVAG developed its first TPPS in 1989, with subsequent report updates in 1993, 1999, 2005, and 2010. The most recent version was adopted on June 26, 2017 (CVAG 2017). The TPPS includes growth projections for cities within the Coachella Valley. The projects and growth projections within the TPPS are fed into a larger regional planning effort by the SCAG. SCAG recently released its 2016 RTP, which includes the majority of projects seen within the TPPS. The SCAQMD 2016 AQMP applies the updated SCAG growth forecasts assumed in the 2016 RTP/SCS. Responding to the context of the RTP guidelines and California state legislation, CVAG's Active

Transportation Plan, also within the TPPS, was designed to be completed simultaneously with the TPPS and Regional Arterial Cost Estimate documents. Together, this family of documents serves as CVAG's RTP, listing all regionally significant transportation projects, including roadway projects, active transportation projects and other improvement projects that have been identified to benefit regional circulation within the Coachella Valley.

2.2.3.3 County of Riverside

Policies pertaining to improving air quality are addressed in the Air Quality Element of the County of Riverside General Plan. Policies associated with air quality associated are presented as follows (County of Riverside 2015):

AQ 1.1: Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.

AQ 1.2: Support Southern California Association of Government's (SCAG's) Regional Growth Management Plan by developing intergovernmental agreements with appropriate governmental entities such as the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG), sanitation districts, water districts, and those sub-regional entities identified in the Regional Growth Management Plan.

AQ 1.3: Participate in the development and update of those regional air quality management plans required under federal and state law, and meet all standards established for clean air in these plans.

AQ 1.4: Coordinate with the SCAQMD and MDAQMD [Mojave Desert Air Quality Management District] to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.

AQ 1.5: Establish and implement air quality, land use and circulation measures that improve not only the County's environment but the entire region.

AQ 1.6: Establish a level playing field by working with local jurisdictions to simultaneously adopt policies similar to those in this Air Quality Element.

AQ 1.7: Support legislation which promotes cleaner industry, clean fuel vehicles and more efficient burning engines and fuels.

AQ 1.8: Support the introduction of federal, state or regional enabling legislation to permit the County to promote inventive air quality programs, which otherwise could not be implemented.

AQ 1.9: Encourage, publicly recognize and reward innovative approaches that improve air quality.

AQ 1.10: Work with regional and local agencies to evaluate the feasibility of implementing a system of charges (e.g., pollution charges, user fees, congestion pricing and toll roads) that requires individuals who undertake polluting activities to bear the economic cost of their actions where possible.

AQ 1.11: Involve environmental groups, the business community, special interests, and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants.

AQ 2.1: The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.

AQ 2.2: Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.

AQ 2.3: Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.

AQ 2.4: Consider creating a program to plant urban trees on an Area Plan basis that removes pollutants from the air, provides shade and decreases the negative impacts of heat on the air.

AQ 3.1: Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.

AQ 3.2: Seek new cooperative relationships between employers and employees to reduce vehicle miles traveled.

AQ 3.4: Encourage employee rideshares and transit incentives for employers with more than 25 employees at a single location.

AQ 4.1: Require the use of all feasible building materials/methods which reduce emissions.

AQ 4.5: Require stationary pollution sources to minimize the release of toxic pollutants through: Design features; Operating procedures; Preventive maintenance; Operator training; and Emergency response planning.

AQ 4.6: Require stationary air pollution sources to comply with applicable air district rules and control measures.

AQ 4.7: To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.

AQ 4.8: Expand, as appropriate, measures contained in the County's Fugitive Dust Reduction Program for the Coachella Valley to the entire County.

AQ 4.9: Require compliance with SCAQMD Rules 403 and 403.1 and support appropriate future measures to reduce fugitive dust emanating from construction sites.

AQ 4.10: Coordinate with the SCAQMD and MDAQMD to create a communications plan to alert those conducting grading operations in the County of first, second, and third stage smog alerts, and when wind speeds exceed 25 miles per hour. During these instances all grading operations should be suspended.

AQ 5.1: Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

AQ 5.2: Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.

AQ 5.3: Update, when necessary, the County's Policy Manual for Energy Conservation to reflect revisions to the County Energy Conservation Program.

AQ 5.4: Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

AQ 7.4: Offer incentives to businesses to control emissions and implement the AQMP.

AQ 8.2: Emphasize job creation and reductions in vehicle miles traveled in job-poor areas to improve air quality over other less efficient methods.

AQ 8.4: Support new mixed-use land use patterns and community centers which encourage community self-sufficiency and containment and discourage automobile dependency.

AQ 8.6: Encourage employment centers in close proximity to residential uses.

AQ 8.7: Implement zoning code provisions which encourage community centers, telecommuting and home-based businesses.

AQ 8.8: Promote land use patterns which reduce the number and length of motor vehicle trips.

AQ 8.9: Promote land use patterns that promote alternative modes of travel.

AQ 9.1: Cooperate with local, regional, state and federal jurisdictions to reduce vehicle miles traveled and motor vehicle emissions through job creation.

AQ 9.2: Attain performance goals and/or VMT reductions which are consistent with SCAG's Growth Management Plan.

AQ 10.1: Encourage trip reduction plans to promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking.

AQ 10.2: Use incentives, regulations and Transportation Demand Management in cooperation with surrounding jurisdictions when possible to eliminate vehicle trips which would otherwise be made.

AQ 10.3: Assist merchants in encouraging their customers to shift from single occupancy vehicles to transit, carpools, bicycles, or foot.

AQ 11.1: Establish requirements for special event centers to provide off-site parking and park-n-ride facilities at remote locations. Remote parking should be as close to practicable to the event site and the operator should supply shuttle services.

AQ 11.2: Promote the use of peripheral parking by increasing on-site parking rates and offering reduced rates to peripheral parking with tickets sold for non-ridesharing patrons.

AQ 11.3: Encourage special event center operators to advertise and offer discounted transit passes with event tickets.

AQ 11.4: Encourage special event center operators to advertise and offer discount parking incentives to carpooling patrons, with two or more persons per vehicle, for on-site parking facilities.

AQ 12.2: Synchronize signals throughout the County with those of its cities, adjoining counties and the California Department of Transportation.

AQ 12.4: Eliminate traffic hazards and delays through highway maintenance, rapid emergency response, debris removal, and elimination of at-grade railroad crossings, when possible.

AQ 12.5: Encourage business owners to schedule deliveries at off-peak traffic periods.

AQ 13.1: Manage the County of Riverside transportation fleet fueling standards to achieve an appropriate alternate fuel fleet mix.

AQ 13.2: Cooperate with local, regional, state, and federal jurisdictions to better manage transportation facilities and fleets.

AQ 13.3: Encourage the construction of high-occupancy-vehicle (HOV) lanes whenever possible to relieve congestion, safety hazards and air pollution as described in the AQMP.

AQ 14.1: Emphasize the use of high occupancy vehicle lanes, light rail and bus routes, and pedestrian and bicycle facilities when using transportation facility development to improve mobility and air quality.

AQ 14.2: When developing new capital facility improvement plans, also consider measures such as Transportation Demand Management, Transportation Systems Management, or job/housing balance strategies.

AQ 14.3: Monitor traffic and congestion to determine when and where the County needs new transportation facilities to achieve increased mobility efficiency.

AQ 15.1: Identify and monitor sources, enforce existing regulations, and promote stronger controls to reduce particulate matter.

AQ 16.1: Cooperate with local, regional, state and federal jurisdictions to better control particulate matter.

AQ 16.2: Encourage stricter state and federal legislation on bias belted tires, smoking vehicles, and vehicles that spill debris on streets and highways, to better control particulate matter.

AQ 16.3: Collaborate with the SCAQMD and MDAQMD to require and/or encourage the adoption of regulations or incentives to limit the amount of time trucks may idle.

AQ 16.4: Collaborate with the EPA, SCAQMD, MDAQMD, and warehouse owners and operators to create regulations and programs to reduce the amount of diesel fumes released due to warehousing operations.

AQ 17.1: Reduce particulate matter from agriculture, construction, demolition, debris hauling, street cleaning, utility maintenance, railroad rights-of-way, and off-road vehicles to the extent possible.

AQ 17.2: Enforce regulations against illegal fires.

AQ 17.3: Identify and create a control plan for areas within the County prone to wind erosion of soil.

AQ 17.4: Adopt incentives, regulations and/or procedures to manage paved and unpaved roads and parking lots so they produce the minimum practicable level of particulates.

AQ 17.5: Adopt incentives and/or procedures to limit dust from agricultural lands and operations, where applicable.

AQ 17.6: Reduce emissions from building materials and methods that generate excessive pollutants, through incentives and/or regulations.

AQ 17.7: Separate trucks from other vehicles in industrial areas of the County with the creation of truck-only access lanes to promote the free flow of traffic.

AQ 17.8: Adopt regulations and programs necessary to meet state and federal guidelines for diesel emissions.

AQ 17.9: Encourage the installation and use of electric service units at truck stops and distribution centers for heating and cooling truck cabs, and particularly for powering refrigeration trucks in lieu of idling of engines for power.

AQ 17.10: Promote and encourage the use of natural gas and electric vehicles in distribution centers.

AQ 17.11: Create and implement street-sweeping plans, as appropriate, in areas of the County disproportionately affected by particulate matter pollution.

Many air quality strategies result in co-benefits with reducing GHG emissions. See Section 3.2.3.3, County of Riverside, for a discussion of the County's GHG emission reduction policies.

2.3 Regional and Local Air Quality Conditions

2.3.1 Coachella Valley Portion of the Salton Sea Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than the NAAQS. Table 2 depicts the current attainment status of the Project site with respect to the NAAQS and CAAQS. The attainment classifications for the criteria pollutants are outlined in Table 2.

Table 2. Coachella Valley Portion of the Salton Sea Air Basin Attainment Classification

Pollutant	Designation/Classification	
	Federal Standards[1]	*State Standards*
Ozone (O_3) – 1 hour	No federal standard	**Nonattainment**
O_3 – 8 hours	**Severe nonattainment**	**Nonattainment**
Nitrogen dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon monoxide (CO)	Unclassifiable/attainment	Attainment
Sulfur dioxide (SO_2)	Unclassifiable/attainment	Attainment
Coarse particulate matter (PM_{10})	**Serious nonattainment**	**Nonattainment**
Fine particulate matter ($PM_{2.5}$)	Unclassifiable/attainment	Attainment
Lead	Unclassifiable/attainment	Attainment
Hydrogen sulfide	No federal standard	Unclassified
Sulfates	No federal standard	Attainment
Visibility-reducing particles	No federal standard	Unclassified

Source: SCAQMD 2017.
Notes: Bold text = not in attainment; Attainment = meets the standards; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

1 The level of attainment is based on the air quality data, emissions and emissions-related data, meteorology, geography/topography, and jurisdictional boundaries of the planning area.

In summary, the SSAB is designated as a nonattainment area for federal and state O_3 standards and federal and state PM_{10} standards. The SSAB is designated as an attainment area for federal and state CO, $PM_{2.5}$, NO_2, and SO_2 standards.

Despite the current nonattainment status, air quality within the SSAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly due to lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the SCAQMD. This trend toward cleaner air has occurred in spite of continued population growth. Despite this growth, air quality has improved significantly over the years, primarily due to the impacts of the region's air quality control program. PM_{10} levels have declined almost 50% since 1990, and $PM_{2.5}$ levels have also declined 50% since measurements began in 1999 (SCAQMD 2013). Similar improvements are observed with O_3, although the rate of O_3 decline has slowed in recent years.

2.3.2 Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The SCAQMD monitors local ambient air quality at the Project site. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2016 to 2018 are presented in Table 3. The Palm Springs monitoring station, located at 590 Racquet Club Avenue, Palm Springs, California, is the nearest air quality monitoring station to the Project site, located approximately 7.3 miles southeast of the Project site. The data collected at this station are considered representative of the air quality experienced in the Project vicinity.

Air quality data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ from the Rubidoux monitoring station are provided in Table 3. Because SO_2 measurements are not monitored at the Palm Springs monitoring station, the measurements were taken from the Rubidoux monitoring station (1588 Mission Boulevard, Rubidoux, California, approximately 48 miles west of the Project site). The number of days exceeding the ambient air quality standards is also shown in Table 3.

Table 3. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2016	*2017*	*2018*	*2016*	*2017*	*2018*
Ozone (O_3)										
Palm Springs	ppm	Maximum 1-hour concentration	State	0.09	0.103	0.113	0.111	6	18	11
	ppm	Maximum 8-hour concentration	State	0.070	0.092	0.097	0.099	48	63	58
			Federal	0.070	0.092	0.097	0.099	46	57	56
Nitrogen Dioxide (NO_2)										
Palm Springs	ppm	Maximum 1-hour concentration	State	0.18	0.042	0.042	0.042	0	0	0
			Federal	0.100	0.043	0.043	0.043	0	0	0
	ppm	Annual concentration	State	0.030	0.006	0.006	0.006	0	0	0
			Federal	0.053	0.006	0.007	0.007	0	0	0

Table 3. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2016	*2017*	*2018*	*2016*	*2017*	*2018*
Carbon Monoxide (CO)										
Palm Springs	ppm	Maximum 1-hour concentration	State	20	3.1	1.0	1.1	0	0	0
			Federal	35	3.1	1.0	1.1	0	0	0
	ppm	Maximum 8-hour concentration	State	9.0	1.5	0.5	0.8	0	0	0
			Federal	9	1.5	0.5	0.8	0	0	0
Sulfur Dioxide (SO_2)										
Rubidoux	ppm	Maximum 1-hour concentration	Federal	0.075	0.006	0.003	0.002	0	0	0
	ppm	Maximum 24-hour concentration	Federal	0.14	0.001	0.001	0.001	0	0	0
	ppm	Annual concentration	Federal	0.030	0.000	0.000	0.001	0	0	0
Coarse Particulate Matter (PM_{10})[a]										
Palm Springs	µg/m³	Maximum 24-hour concentration	State	50	113.1	60.5	37.4	(*) 3	(*) 1	(0.0) 0
			Federal	150	447.2	105.6	422.3	(1.1) 1	(0.0) 0	(2.0) 2
	µg/m³	Annual concentration	State	20	23.1	22.1	22.9	-	-	-
Fine Particulate Matter ($PM_{2.5}$)[a]										
Palm Springs	µg/m³	Maximum 24-hour concentration	Federal	35	14.7	14.5	30.2	(0.0) 0	(0.0) 0	(0.0) 0
	µg/m³	Annual concentration	State	12	-	6.0	6.0	-	-	-
			Federal	12.0						

Sources: CARB 2020; EPA 2020.

Notes: — = not available; µg/m3 = micrograms per cubic meter; ppm = parts per million

Data taken from CARB iADAM (http://www.arb.ca.gov/adam, CARB 2016c) and EPA AirData (http://www.epa.gov/airdata/, EPA 2016a) represent the highest concentrations experienced over a given year.

Exceedances of federal and state standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

2.4 Significance Criteria and Methodology

2.4.1 Thresholds of Significance

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Based on CEQA Guidelines Appendix G, the Project would have a significant impact on air quality if the Project would:

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

CEQA Guidelines Appendix G indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the Project would have a significant impact on air quality. The SCAQMD has established Air Quality Significance Thresholds, as revised in April 2019 (SCAQMD 2019), which set forth quantitative emissions thresholds below which a proposed project would not have a significant impact on ambient air quality. Proposed Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 4, SCAQMD Air Quality Significance Thresholds, are exceeded.

A proposed project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O_3 (see Table 1), which is a nonattainment pollutant, if the Project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 4. These emissions-based thresholds for O_3 precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly (see the discussion of O_3 and its sources in Section 2), and the effects of an individual proposed project's emissions of O_3 precursors on levels in ambient air cannot be determined through air quality models or other quantitative methods.

Table 4. South Coast Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	*Construction (pounds per day)*	*Operation (pounds per day)*
VOCs	75	55
NO_x	100	55
CO	550	550
SO_x	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3
TACs and Odor Thresholds		
TACs[b]	Maximum incremental cancer risk ≥ 10 in 1 million Chronic and acute hazard index ≥ 1.0 (proposed project increment)	

Table 4. South Coast Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	*Construction (pounds per day)*	*Operation (pounds per day)*
Odor	Proposed project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants[c]		
NO_2 1-hour average NO_2 annual arithmetic mean	SCAQMD is in attainment; proposed project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; proposed project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
PM_{10} 24-hour average PM_{10} annual average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation) 1.0 μg/m³	
$PM_{2.5}$ 24-hour average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation)	

Source: SCAQMD 2019.
Notes: SCAQMD = South Coast Air Quality Management District; VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; TAC = toxic air contaminant; NO_2 = nitrogen dioxide; ppm = parts per million; μg/m³ = micrograms per cubic meter.
GHG emissions thresholds for industrial proposed projects, as added in the March 2015 revision (SCAQMD 2015) to the SCAQMD Air Quality Significance Thresholds, were not include included in Table 4 as they will be addressed within the GHG emissions analysis and not the air quality study.

[a] The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
[b] TACs include carcinogens and non-carcinogens.
[c] Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
[d] Ambient air quality thresholds are based on SCAQMD Rule 403.

In addition to the emission-based thresholds listed in Table 4, SCAQMD also recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project as a result of construction activities. Such an evaluation is referred to a localized significance threshold (LST) analysis. For proposed project sites of 5 acres or less, the Final Localized Significance Threshold Methodology (SCAQMD 2009) includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for NO_2 and CO, PM_{10} and $PM_{2.5}$) without performing dispersion modeling. For project site of 5 acres or more, the lookup tables can still be used if the Project disturbs less than 5 acres per day. The Project site is estimated to disturb approximately 123 acres or less over a 9-month period, or less than 1 acre per day; therefore, it is appropriate to use the lookup tables for the LST evaluation.

The LST significance thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a proposed project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute

substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

- Source-receptor area (SRA) in which the proposed project is located
- Size of the proposed project site
- Distance between the proposed project site and the nearest sensitive receptor (e.g., residences, schools, and hospitals)

The Project site is located in SRA 30 (Coachella Valley). The SCAQMD provides guidance for applying CalEEMod to the LSTs. LST pollutant screening level concentration data is currently published for 1-, 2-, and 5-acre sites for varying distances. Using the SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, the Project would disturb a maximum of 1-acre per day during the grading and road upgrades phase (1 grader and 1 rubber-tired dozer).

The nearest sensitive-receptor land use (the existing residents) is located approximately 690 feet from the closest area of disturbance. As such, the LST receptor distance was assumed to be 656 feet (200 meters). The LST values from the SCAQMD lookup tables for SRA 30 (Coachella Valley) for a 1-acre Project site and a receptor distance of 200 meters are shown in Table 5.

Table 5. Localized Significance Thresholds for Source-Receptor Area 30 (Coachella Valley)

Pollutant	Threshold (pounds per day)
NO_2	376
CO	6,021
PM_{10}	80
$PM_{2.5}$	24

Source: SCAQMD 2009.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
LST thresholds were determined based on the values for 1-acre site at a distance of 200 meters from the nearest sensitive receptor.

2.4.2 Approach and Methodology

2.4.2.1 Construction

Emissions from the construction phase of the Project were estimated using CalEEMod Version 2016.3.2 (CAPCOA 2017). Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the Project Applicant and CalEEMod default values when Project specifics were not known.

For purposes of estimating Project emissions, and based on information provided by the Project Applicant, it is assumed that construction of the Project would commence in August 2021[4] and would last approximately 10 months, ending in June 2022. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- WTG Removal: 5 months (August 2021 – December 2021)
- Grading and Road Upgrades: 2 months (August 2021 – October 2021)

[4] The analysis assumes a construction start date of August 2021, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

- WTG Foundation Installation: 3 months (October 2021 – December 2021)
- WTG/Met Tower Erection: 3 months (December 2021 – February 2022)
- Overhead Electrical Collector System Improvements: 1 month (February 2022)
- Tower Wiring, Mechanical Completion: 2 months (February 2022 – April 2022)
- Commissioning: 2 months (April 2022 – May 2022)
- Restoration: 2 months (April 2022 – May 2022)

Construction-worker estimates and vendor truck trips by construction phase were provided by the Project Applicant. The number of haul truck trips was estimated based on an average truck size of 16 cubic yards. CalEEMod default trip length values were used for the distances for worker and vendor trips. The Project's haul trip distance was provided by the Project Applicant. The Project assumed an average concrete delivery truck of 10 cubic yards and approximately 700 cubic yards of concrete needed per new turbine installation. The demolition of the existing turbines and foundations was assumed to require approximately 12 semi-trailers per turbine. The foundations removed will be ground on site and used as road base on site.

The construction equipment mix and vehicle trips used for estimating the Project-generated construction emissions are shown in Table 6.

Table 6. Construction Workers, Vendor Trips, and Equipment Use per Day

	One-Way Vehicle Trips			Equipment		
Construction Phase	*Average Daily Worker Trips*	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
WTG Removal	30	4	2,268	Cranes	1	10
				Generator sets	1	10
				Rough terrain forklifts	1	10
				Rubber-tired loader	1	10
				Tractors/loaders/backhoes	1	10
				Rock crusher	1	10
Grading and Road Upgrades	12	2	0	Graders	2	10
				Rollers	1	10
				Rubber-tired dozers	1	10
WTG Foundation Installation	64	6	1,820	Excavators	2	10
				Pumps	1	10
				Rubber-tired dozers	1	10
WTG/Met Tower Erection	68	8	0	Aerial lifts	1	5
				Cranes	2	10
				Generator sets	1	5
				Rough terrain forklifts	3	10
Overhead Electrical Collector System Improvements	12	12	24	Crane	1	10
				Tractors/loaders/backhoes	1	5

Table 6. Construction Workers, Vendor Trips, and Equipment Use per Day

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Tower Wiring, Mechanical Completion	32	2	0	Generator sets	2	10
Commissioning	12	2	0	Generator sets	2	10
Restoration	6	2	0	Skid steer loaders	1	10

Notes: See Appendix A for details**.** WTG = wind turbine generator.

In accordance with SCAQMD Rules 403 and 403.1, the Project would employ the following fugitive dust control measures:

- Watering twice daily
- Limiting unpaved road travel speed to 15 miles per hour

In addition to the fugitive dust regulatory control measures identified above, the Project Applicant will employ the following project design feature (**PDF-AQ-1**) to further reduce fugitive dust emissions during construction:

PDF-A-Q-1 Apply a soil stabilizer to unpaved roads at least once every 6 months.

2.4.2.2 Decommissioning

As discussed in Section 1.3, Project Description, the Project would be decommissioned after the end of its expected 30-year lifetime. All aboveground and underground structures will be removed to be reused or recycled.

For purposes of estimating Project decommissioning emissions, and based on information provided by the applicant, it is assumed that decommissioning of the Project would commence in January 2053[5] and would last approximately 5 months. However, because CalEEMod relies on CARB EMFAC 2014, it is only able to estimate mobile source emissions through 2050. Therefore, the emissions for decommissioning were estimated in year 2050. This is conservative as the emissions are likely to be less in 2053 as vehicles and construction equipment become more efficient. The analysis contained herein is based on the following subset area schedule assumptions (duration of phases is approximate. Detailed construction equipment modeling assumptions are provided in Appendix A, CalEEMod Outputs.

- WTG Removal: 4 months (January 2053 – April 2053)
- Restoration: 1 month (April 2053)

Emissions from the decommissioning phase of the Project were estimated using CalEEMod. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the Project Applicant, CalEEMod defaults, and best engineering judgement.

[5] The analysis assumes a construction start date of January 2053, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

General decommissioning equipment modeling assumptions are provided in Table 7, Decommissioning Workers, Vendor Trips, and Equipment Use per Day. Default values for equipment mix, horsepower, and load factor provided in CalEEMod were used for all construction equipment. For the analysis, it was generally assumed that heavy-duty equipment would be operating at the site 5 days per week. For the purposes of estimating emissions, it was assumed that worker trips and truck trips would be made to the site independently; however, it is likely that workers would drive trucks to and from the site for deliveries rather than driving in a separate vehicle. Therefore, the estimates provided in Table 7 are conservative. Detailed construction equipment modeling assumptions are provided in Appendix A.

Table 7. Decommissioning Workers, Vendor Trips, and Equipment Use per Day

	One-Way Vehicle Trips			Equipment		
Construction Phase	*Average Daily Worker Trips*	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
WTG Removal	30	4	2,232	Cranes	2	10
				Generator sets	1	10
				Rough terrain forklifts	1	10
				Rubber-tired loader	1	10
				Tractors/loaders/ backhoes	1	10
Restoration	6	2	0	Skid steer loaders	1	10

Notes: See Appendix A for details. WTG = wind turbine generator.

The Project Applicant provided the estimated number of workers and vendor trucks. Changes to any standard default values or assumptions are reported in the CalEEMod output (see Appendix A).

2.4.2.3 Operation

The Project will not require an on-site operations and maintenance facility. The existing remote operations and maintenance building and yard will store critical spare wind turbine parts and provide a building for maintenance services. The facility includes permanent administrative, maintenance, and storage building structures. Routine Project maintenance will include the periodic clearing of sand from within the switchyard fences and Project access roads due to high quantities of sand blowing into the area and accumulating in areas where wind velocities are slowed by fences, turbine towers, and utility poles.

To operate the existing wind energy facilities, the Project Applicant employs approximately 10 people in the area. Once repowered, the same operations team would continue to work on the Project and on the Project site. No net increase in the number of people employed and working on the Project site would occur. Activities associated with long-term operations and maintenance were not quantified as they would not increase over what currently exists.

2.5 Impact Analysis

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

As previously discussed, the Project site is located within the SSAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD has established criteria for determining consistency with the AQMP, currently the 2016 AQMP, in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows:

- **Consistency Criterion No. 1:** The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Consistency Criterion No. 1

Section 2.5.2 evaluates the Project's potential impacts per CEQA Guidelines Appendix G Threshold 2 (the Project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation impact analysis). As discussed in Section 2.5.2, the Project would not result in an exceedance of SCAQMD thresholds during construction for any criteria air pollutant. Therefore, the Project would not result in an increase in the frequency or severity of existing air quality violations and would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook.

Consistency Criterion No. 2

While striving to achieve the NAAQS for O_3 and $PM_{2.5}$ and the CAAQS for O_3, PM_{10}, and $PM_{2.5}$ through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in the SSAB. Proposed projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population and employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook).

The Project WECS are located entirely within the W-E (Wind Energy Resource) Zone. A portion of the Project access roads and collection cross the Metropolitan Water District's aqueduct, which is located in the R-R (Rural Residential) zone. Riverside County Code of Ordinances Title 17, Chapter 17.164 specifies the uses permitted in the W-E Zone as follows: "D. Commercial wind energy conversion system (WECS) and WECS arrays with no limit as to rated power output are permitted provided a commercial WECS permit has been granted pursuant to the provisions of Chapter 17.224." The Riverside County Zoning Ordinance Section 18.41 codifies requirements for Commercial WECS. As described in Ordinance 18.41a (2), Commercial WECS or WECS arrays having a total power output of more than 100 kW are permitted in the W-E Zone and in the W-1 Zone, provided a commercial WECS permit is granted pursuant to Ordinance Section 18.41. Therefore, the Project is consistent with the zoning of the Project site.

The Project would be considered consistent with the existing land use and zoning, which were used to develop the assumptions in the 2016 AQMP. Additionally, the Project would not directly or indirectly promote population growth or increase trips in the region. Therefore, the Project would not exceed the assumptions of the 2016 AQMP. Accordingly, the Project would meet Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook.

Summary

As described previously, the Project would not result in an increase in the frequency and severity of existing air quality violations and would not conflict with Consistency Criterion No. 1. Also, implementation of the Project would not exceed the demographic growth forecasts in the SCAG 2016 RTP/SCS; therefore, the Project would also be consistent with the SCAQMD 2016 AQMP, which based future emission estimates on the SCAG 2016 RTP/SCS and the CVAG 2017 TPPS. Thus, the Project would not conflict with Consistency Criterion No. 2. Based on these considerations, impacts related to the Project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

2.5.2 Would the proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, proposed project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a proposed project's individual emissions would have a cumulatively significant impact on air quality.

Construction Emissions

Construction of the Project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

As discussed in Section 2.4.2.1, criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2021 and 2022). Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the Project Applicant and is intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed Project information was not available.

Implementation of the Project would generate air pollutant emissions from entrained dust, off-road equipment, and vehicle emissions. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The Project would be required to comply with SCAQMD Rules 403 and 403.1 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions. The Project would also employ an off-road speed limit of 15 miles per hour. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$.

Table 8 presents the estimated maximum daily construction emissions generated during construction of the Project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix A.

Table 8. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2021	5.79	70.89	45.12	0.18	20.31	5.50
2022	2.55	26.59	23.10	0.05	9.26	1.92
Maximum Daily Emissions	**5.79**	**70.89**	**45.12**	**0.18**	**20.31**	**5.50**
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix A for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SCAQMD Rules 403 and 403.1 (Fugitive Dust), including watering of the Project site and unpaved roads three times per day, and restricting vehicle speed on unpaved roads to 15 miles per hour.

As shown in Table 8, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts related to construction would be less than significant. As discussed in Section 2.4.2.2, the Project would not create any new impacts during operation.

Decommissioning Emissions

Decommissioning of the Project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips).

As discussed in Section 2.4.2.1, criteria air pollutant emissions associated with temporary decommissioning activity were quantified using CalEEMod. Construction emissions were calculated for the estimated worst-case day over the decommissioning period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2053).

Table 9 presents the estimated maximum daily emissions generated during decommissioning of the Project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix A.

Table 9. Estimated Maximum Daily Decommissioning Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2053	1.51	5.98	15.94	0.05	9.68	1.51
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix A for complete results.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SCAQMD Rules 403 and 403.1 (Fugitive Dust), including watering of the Project site and unpaved roads three times per day, and restricting vehicle speed on unpaved roads to 15 miles per hour.

As shown in Table 9, daily decommissioning emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. Emissions generated during decommissioning would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts related to construction would be less than significant. As discussed in Section 2.4.2.2, the Project would not create any new impacts during operation.

If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

As discussed in Section 2.3.1, the SSAB has been designated as a federal and state nonattainment area for O_3 and PM_{10}. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SSAB including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction of the Project would generate VOC and NO_x emissions (which are precursors to O_3) and emissions of PM_{10}. As indicated in Tables 8 and 9, Project-generated construction and decommissioning emissions would not exceed the SCAQMD emission-based significance thresholds for VOC, NO_x, CO, SO_2, PM_{10}, or $PM_{2.5}$. Similarly, the Project would not generate an increase in emissions during operation.

In regards to potential cumulative localized impacts, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the Project would exceed SCAQMD thresholds. Criteria air pollutant emissions associated with construction activity of future proposed projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} emissions would be reduced because all future proposed Projects would be subject to SCAQMDs Rules 403 and 403.1 (Fugitive Dust), which set forth general and specific requirements for all construction sites in the SCAQMD.

Based on the previous considerations, the Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants. Impacts would be considered less than significant.

2.5.3 Would the proposed Project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Thresholds Analysis

As discussed in Section 2.1.3, sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The nearest sensitive-receptor land use (existing residents) is located approximately 690 feet from the closest area of disturbance. As such, the LST receptor distance was assumed to be 656 feet (200 meters).

An LST analysis has been prepared to determine potential impacts to nearby sensitive receptors during construction of the Project. As indicated in the discussion of the thresholds of significance (Section 2.4, Significance Criteria and Methodology), the SCAQMD also recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the Project site. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology

(2009). According to the Final Localized Significance Threshold Methodology, "off-site mobile emissions from the Project should not be included in the emissions compared to the LSTs" (SCAQMD 2009). Hauling of soils and construction materials associated with Project construction are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways. Emissions from the trucks would be relatively brief in nature and would cease once the trucks pass through the main streets.

Construction activities associated with the Project would result in temporary sources of on-site fugitive dust and construction equipment emissions. Off-site emissions from vendor trucks, haul trucks, and worker vehicle trips are not included in the LST analysis. The maximum allowable daily emissions that would satisfy the SCAQMD localized significance criteria for SRA 30 are presented in Table 10 and compared to the maximum daily on-site construction emissions generated during the Project.

Table 10. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Construction Emissions	49.53	38.10	7.46	4.26
SCAQMD LST	*376*	*6,021*	*80*	*24*
LST Exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2009.
Notes:
NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix A for detailed results.
Localized significance thresholds are shown for 1-acre project sites corresponding to a distance to a sensitive receptor of 200 meters.
These estimates reflect control of fugitive dust required by SCAQMD Rules 403 and 403.1, including watering of the Project site and unpaved roads three times per day, and restricting vehicle speed on unpaved roads to 15 miles per hour.

As shown in Table 10, construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific impacts during construction of the Project would be less than significant.

Health Impacts of Toxic Air Contaminants

In addition to impacts from criteria pollutants, Project impacts may include emissions of pollutants identified by the state and federal government as TACs or HAPs. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal HAPs, and is adopting appropriate control measures for sources of these TACs. The following measures are required by state law to reduce diesel particulate emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-Road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible.

The greatest potential for TAC emissions during construction would be DPM emissions from heavy equipment operations and heavy-duty trucks during construction of the Project and the associated health impacts to sensitive receptors. The closest sensitive receptors would be residents approximately 690 feet from the closest area of

disturbance. As shown in Table 8, maximum daily particulate matter (PM_{10} or $PM_{2.5}$) emissions generated by construction equipment operation and from hauling of soil during grading (exhaust particulate matter, or DPM), combined with fugitive dust generated by equipment operation, would be well below the SCAQMD significance thresholds. The Project would also not emit any new TAC emissions during operation. Therefore, the impact would be less than significant.

Health Impacts of Carbon Monoxide

Mobile source impacts occur on two scales of motion. Regionally, Project-related travel would add to regional trip generation and increase the VMT within the local airshed and the SSAB. Locally, Project-generated traffic would be added to the County's roadway system near the Project site during construction. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operates at pollution-inefficient speeds, and operates on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SSAB is steadily decreasing.

The Project would have trip generation associated with construction worker vehicles and vendor trucks. Title 40 of the California Code of Regulations, Section 93.123(c)(5), Procedures for Determining Localized CO, PM_{10}, and PM_2 Concentrations (hot-spot analysis), states that "CO, PM_{10}, and $PM_{2.5}$ hot-spot analyses are not required to consider construction-related activities, which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site" (40 CFR 93.123). While Project construction would involve on-road vehicle trips from trucks and workers during construction, construction activities would last approximately 8 months and would not require a Project-level construction hotspot analysis. Because the Project would not result in long-term operational vehicular trips, an operational CO hotspot evaluation is also not required. As such, potential Project-generated impacts associated with CO hotspots would be less than significant.

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the Project would result in emissions that would not exceed the SCAQMD thresholds for criteria air pollutants including VOC, CO, SO_x, PM_{10}, or $PM_{2.5}$. VOCs would be associated with motor vehicles and construction equipment; however, Project-generated VOC emissions would not result in the exceedances of the SCAQMD thresholds as shown in Table 4.

VOCs and NO_x are precursors to O_3, for which the SSAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SSAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 ambient air quality standards tend to occur between April and October when solar radiation is highest. The holistic effect of a single proposed project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_x emissions associated with Project construction could minimally contribute to regional O_3 concentrations and the associated health impacts. However, as emissions thresholds were not exceeded for either pollutant health effects would be considered less than significant.

Construction of the Project would also not exceed thresholds for PM_{10} and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or would obstruct the SSAB from coming into attainment for these pollutants. The Project would also not result in substantial DPM emissions during construction, and therefore, would not result in significant health effects related to DPM exposure. Additionally, the Project would be required to comply with SCAQMD Rules 403 and 403.1, which limit the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, health impacts would be considered less than significant.

Construction of the Project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Health impacts that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, Project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the alignment and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction of the Project would not require use of any stationary sources that would create substantial, localized NO_x impacts. Therefore, potential health impacts associated with NO_2 and NO_x would be considered less than significant.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots were discussed previously and are determined to be a less-than-significant impact. Thus, the Project's CO emissions would not contribute to significant health effects associated with this pollutant. In summary, construction of the Project would not result in exceedances of the SCAQMD significance thresholds for all criteria pollutants. Therefore, the potential health impacts associated with criteria air pollutants are considered less than significant.

Exposure to Valley Fever

As discussed in Section 2.1.2.2, Valley Fever is not highly endemic to Riverside County as the latest report from the California Department of Public Health listed Riverside County as having 5.6 cases per 100,000 people (California Department of Public Health 2018). According to the County of Riverside Epidemiology Department, there were no reported incidents of Valley Fever within the Projects zip code from 2016 through 2019 (Curlee pers. comm. 2020). The Project will also employ dust mitigation measures by watering three times per day and limiting speed on unpaved roads to 15 miles per hour. The Project will also be constructed in accordance with SCAQMD Rules 403 and 403.1, which limit the amount of fugitive dust generated during construction. As previously mentioned, the nearest sensitive-receptor land use (existing residents) is located approximately 660 feet from the closest area of disturbance. Therefore, the Project would have a less than significant impact with respect to Valley Fever exposure for sensitive receptors.

2.5.4 Would the proposed Project create objectionable odors affecting a substantial number of people?

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors potentially would be generated from vehicles and equipment exhaust emissions during construction of the Project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Project would not create any new sources of odor from these types of operations. Therefore, Project operations would result in an odor impact that is less than significant.

3 Greenhouse Gas Emissions

3.1 Environmental Setting

3.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and is the most significant driver of observed climate change (IPCC 2013; EPA 2017). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 3.3.2, Potential Effects of Climate Change.

3.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). (See also CEQA Guidelines Section 15364.5.[6]) Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much

[6] Climate forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code 38505 as impacts associated with other climate forcing substances are not evaluated herein.

greater heat-absorption potential than CO_2, include fluorinated gases such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[7]

Carbon Dioxide. CO_2 is a naturally occurring gas and a byproduct of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are from the combustion of fuels such as coal, oil, natural gas, and wood, and changes in land use.

Methane. CH_4 is produced through both natural and human activities. Methane is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (e.g., in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (e.g., in rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric O_3-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as byproducts of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the O_3-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

3.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects

[7] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (IPCC 1995), IPCC Fourth Assessment Report (2007), CARB's "Glossary of Terms Used in GHG Inventories" (CARB 2015), and EPA's "Glossary of Climate Change Terms" (EPA 2016b).

atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2016b). 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 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e).

The current version of CalEEMod (version 2016.3.2) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the Project.

3.2 Regulatory Setting

3.2.1 Federal Regulations

Massachusetts v. EPA

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards

In response to the *Massachusetts v. EPA* ruling, the Bush administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations

that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011. In 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intends to set standards for model years 2022 through 2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines (76 FR 57106–57513).

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

The Current Administration

On September 19, 2019, the NHTSA and the EPA issued a final action entitled the “One National Program Rule” to enable the federal government to provide nationwide uniform fuel economy and GHG emission standards for automobile and light-duty trucks. This action finalizes critical parts of the Safer, Affordable, Fuel-Efficient Vehicles Rule that was first proposed in August 2018. This action makes clear that federal law preempts state and local tailpipe GHG emissions standards as well as ZEV mandates. California and other states have challenged federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. The timing and consequences of these types of federal decisions and subsequent challenges are speculative at this time.

3.2.2 State Regulations

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

Executive Order S-3-05

EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

Assembly Bill 32 and CARB's Climate Change Scoping Plan

In furtherance of the goals established in EO S-3-05, the legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons [MMT] CO_2e). CARB's adoption of this limit is in accordance with California Health and Safety Code, Section 38550.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan) in accordance with California Health and Safety Code, Section 38561. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020 (CARB 2008). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS).
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 29% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations [referred to as "business-as-usual" (BAU)]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants; no further regulatory action would impact vehicle fuel efficiency; and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document (Final Supplement), CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG-reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 22% (down from 29%) from the BAU conditions. When the 2020 emissions-level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009 through 2016) and the Renewables Portfolio Standard (RPS) (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 29%) from the BAU conditions.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050" (CARB 2014). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are energy, transportation (e.g., vehicles/equipment, sustainable communities, housing, fuels, infrastructure), agriculture, water, waste management, and natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal (CARB 2014).

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies (CARB 2014).

As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent GWPs identified by the Intergovernmental Panel on Climate Change. Using the recalculated 1990 emissions level (431 MMT CO_2e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 29% or 16%) from the BAU conditions (CARB 2014).

On January 20, 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB 2017). This update proposed CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below), including continuing the cap-and-trade program through 2030. The Second Update incorporated approaches to cutting short-lived climate pollutants (SLCPs) under the SLCP Reduction Strategy (adopted by CARB in March 2017), and acknowledged the need for reducing emissions in agriculture and highlighted the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the natural and working lands, agriculture, energy, and transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2017). When discussing project-level GHG emissions-reduction actions and thresholds, the Second Update stated, "Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively

significant environmental impact of climate change under CEQA" (CARB 2017). The Second Update was approved by CARB's Governing Board on December 14, 2017.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 called for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e. The EO also called for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set new statewide GHG reduction targets, made changes to CARB's membership and increased legislative oversight of CARB's climate change-based activities, and expanded dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the senate and three members of the assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the legislature to CARB as nonvoting members; required CARB to make available and update (at least annually through its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and required CARB to identify specific information for GHG emissions-reduction measures when updating the Scoping Plan.

SB 605 and SB 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state; SB 1383 (2016) required CARB to approve and implement the SLCP Reduction Strategy. SB 1383 also established specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH_4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provided direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its SLCP Reduction Strategy in March 2017, which established a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases.

EO B-55-18

EO B-55-18 (September 2018) established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." This executive order directed CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal."

Building Energy

Title 24, Part 6 of the California Code of Regulations

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy

efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402[d]), and cost effectiveness (California Public Resources Code, Sections 25402[b][2] and [b][3]). These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment. The 2019 standards continue to improve upon the 2016 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 standards went into effect on January 1, 2020.

Title 24, Part 11 of the California Code of Regulations

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR 11) is commonly referred to as CALGreen, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, schools, and hospitals. The CALGreen 2019 standards went into effect on January 1, 2020 and continue to improve upon the 2016 CALGreen standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

Title 20 of the California Code of Regulations

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

Renewable Energy and Energy Procurement

SB 1078

SB 1078 (2002) established the RPS program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

SB 1368

SB 1368 (2006) required the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. This effort helps protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

SB X1 2

SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 MW or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350

SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualifying renewable energy sources. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. SB 350 also required the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

SB 100

SB 100 (2018) increased the standards set forth in SB 350, establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. Under SB 100, it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not occur through resource shuffling.

Mobile Sources

EO S-1-07

Issued on January 18, 2007, EO S-1-07 set a declining LCFS for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the LSFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of

energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations (MPOs) were then responsible for preparing an SCS within their RTP. The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, would achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), an SCS does not (i) regulate the use of land, (ii) supersede the land use authority of cities and counties, or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process. In 2010, CARB adopted the SB 375 targets for the regional MPOs. The targets for CVAG are a 10.5% reduction in emissions per capita by 2020 and a 15.4% reduction by 2035.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2012). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025, cars will emit 75% less smog-forming pollution than the average new car sold before 2012. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The ZEV program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

EO B-16-12

EO B-16-12 (2012) directs state entities under the governor's direction and control to support and facilitate development and distribution of ZEVs. This EO also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions-reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this EO, the governor convened an interagency working group on ZEVs that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

AB 1236

AB 1236 (2015) requires local land use jurisdictions to approve applications for the installation of EV charging stations, as defined, through the issuance of specified permits, unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provides for appeal of

that decision to the planning commission, as specified. AB 1236 requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, which creates an expedited and streamlined permitting process for EV charging stations, as specified. The City added Section 86.0151, Electric Vehicle Parking Regulations, to its municipal code in August 2015 in response to the AB 1236 requirements.

SB 350

In 2015, SB 350—the Clean Energy and Pollution Reduction Act—was enacted into law. As one of its elements, SB 350 established a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see California Public Utilities Code, Section 740.12).

EO B-48-18

EO B-48-18 (2018) launched an 8-year initiative to accelerate the sale of EVs through a mix of rebate programs and infrastructure improvements. The order also set a new EV target of 5 million EVs in California by 2030. EO B-48-18 included funding for multiple state agencies, including the CEC, to increase EV charging infrastructure and for CARB to provide rebates for the purchase of new EVs and purchase incentives for low-income customers.

Solid Waste

AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that it believes would assist the state in reaching the 75% goal by 2020 (CalRecycle 2012).

Water

EO B-29-15

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Other State Regulations and Goals

SB 97

SB 97 (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resources Agency (CNRA) adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009b).

With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009a), and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018).

Biological Diversity v. California Department of Fish and Wildlife

In its decision in *Center for Biological Diversity v. California Department of Fish and Wildlife* (*Newhall*) 62 Cal.4th 204 (2015), the California Supreme Court set forth several options that lead agencies may consider for evaluating the cumulative significance of a proposed project's GHG emissions:

1. A calculation of emissions reductions compared to a business-as-usual scenario based upon the emissions reductions in CARB's Scoping Plan, including examination of the data to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals.
2. A lead agency might assess consistency with AB 32's goals by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities.
3. Use of geographically specific GHG emission reduction plans to provide a basis for tiering and streamlining of project-level CEQA analysis.
4. A lead agency may rely on existing numerical thresholds of significance for GHG emissions, though use of such thresholds is not required.

The Newhall decision specifically found that use of a numerical threshold is not required.

3.2.3 Local Regulations

3.2.3.1 South Coast Air Quality Management District

Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a proposed project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues (SCAQMD 2008). As discussed in Section 3.4.1, the SCAQMD has recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development proposed projects; however, these thresholds were not adopted. See Section 2.2.3.1 for additional discussion on the SCAQMD.

3.2.3.2 Southern California Association of Governments

SB 375 requires MPOs to prepare an SCS in their RTP. As the CVAG is not an MPO, the SCAG is the MPO for the Coachella Valley and the Project area. The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012 (SCAG 2012), and the 2016–2040 RTP/SCS (2016 RTP/SCS) was adopted in April 2016 (SCAG 2016). Both the 2012 RTP/SCS and 2016 RTP/SCS establish a development pattern for the region that, when integrated with the transportation network and other policies and measures, would reduce GHG emissions from transportation (excluding goods movement). Specifically, the 2012 RTP/SCS links the goals of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging all residents affected by socioeconomic, geographic, and commercial limitations to be provided with fair access. The 2012 RTP/SCS and 2016 RTP/SCS do not require that local General Plans, Specific Plans, or zoning be consistent with it but provide incentives for consistency for governments and developers. The current SCAQMD AQMP (2016 AQMP) is based on the SCAG 2016 RTP/SCS demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2016–2040 RTP/SCS (SCAG 2016). The SCAG 2016 RTP/SCS takes into account demographic growth forecasts developed by CVAG.

3.2.3.3 County of Riverside

General Plan

Riverside County is committed to providing a more livable, equitable, and economically vibrant community through the incorporation of sustainability features and reduction of GHG emissions. In response to the growing regulatory requirements from both state and federal governments, a GHG reduction strategy is developed for Riverside County to establish specific goals and policies that incorporate environmental responsibility into its daily management. The GHG reduction strategies outlined in the Air Quality Element of the General Plan establish that Riverside County activities and approvals ensure individual actions do not emit significant amounts of GHGs and that the emissions from the individual actions do not contribute to cumulatively significant GHG emissions (County of Riverside 2015). The Air Quality Element lists 62 individual action items aimed to reduce GHG emissions within the County, including development and incorporation of a climate action plan (CAP).

Climate Action Plan

The General Plan includes Riverside County's CAP adopted on December 8, 2015, which contains further guidance on Riverside County's GHG Inventory reduction goals, thresholds, policies, guidelines, and implementation programs. The most recent update was adopted in November 2019 (County of Riverside 2019). In particular, the CAP elaborates on the General Plan goals and policies relative to GHG emissions and provides a specific implementation tool to guide future decisions of the County of Riverside. Per the CAP Update, Riverside County's 2017 GHG emissions totaled 4,905,518 MT CO_2e for that year. Under the BAU forecast, emissions will be 5,158,305 MT CO_2e in 2020; 6,368,781 MT CO_2e in 2030; and 11,305,026 MT_2e in 2050. These emissions levels are 5.1% higher in 2020 than 2017, 29.8% higher in 2030 than 2017, and more than double 2017 emissions by 2050. Under the adjusted BAU forecast (which represents state efforts in reducing GHG emissions within the County), emissions will be 4,861,256 MT CO_2e in 2020; 4,102,109 MT CO_2e in 2030; and 4,175,146 MT CO_2e in 2050. Compared to 2017, these emissions levels are 0.9% lower in 2020, 16.0% lower in 2030, and 14.8% lower in 2050. This CAP Update assesses the previous GHG reduction targets identified in the 2015 CAP and proposes new targets that are consistent with the state policies in order to meet the requirements of SB 32. The state recommends a 15% reduction below 2005–2008 baseline levels by 2020, a 49% reduction below 2008 levels by 2030, and an 80% reduction below 2008 levels by 2050. The CAP Update summarizes various state and local policies that will contribute to reduced GHG emissions in Riverside County by the year 2020 and beyond. Some of these policies include updated building codes for energy efficiency, the low carbon fuel standard, Pavley (California Assembly Bill) vehicle emissions standards, and the RPS for utility companies. By supporting the state in the implementation of these measures, Riverside County will experience substantial GHG emissions reductions. These GHG reductions from the state measures are accounted for in the reduced inventories. The County's CAP is a qualified GHG reduction plan under CEQA Guidelines Section 15183.5, and thus it can be used in a cumulative impacts analysis to determine significance. This is further discussed in Section 3.4.1.

3.3 Climate Change Conditions and Inventories

3.3.1 Sources of Greenhouse Gas Emissions

Per the EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2018* (EPA 2020), total United States GHG emissions were approximately 6,677 million MT CO_2e in 2018. The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 81% of total GHG emissions. The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.8% of CO_2 emissions in 2018. Relative to 1990, gross United States GHG emissions in 2018 are higher by 3.7%; down from

a high of 15.5% above 1990 levels in 2007. GHG emissions increased from 2017 to 2018 by 3.1% and overall, net emissions in 2018 were 10.2% below 2005 levels (EPA 2020).

According to California's 2000–2018 GHG emissions inventory (2020 edition), California emitted 425 MMT CO_2e in 2018, including emissions resulting from out-of-state electrical generation (CARB 2020). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2018 are presented in Table 11.

Table 11. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	169.50	40%
Industrial	89.18	21%
Electric power[b]	63.11	15%
Commercial and residential	41.37	10%
Agriculture	32.57	8%
High global-warming potential substances	20.46	5%
Recycling and waste	9.09	2%
Total	425.28	100%

Source: CARB 2020.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
Emissions reflect the 2018 California GHG inventory.
[a] Percentage of total has been rounded, and total may not sum due to rounding.
[b] Includes emissions associated with imported electricity, which account for 24.57 MMT CO_2e annually.

The County developed a GHG emission inventory as part of its CAP (County of Riverside 2019). The GHG inventory includes all major sources of emissions attributable directly or indirectly to Riverside County's government operations or activities within the community the County of Riverside serves. Government GHG inventories include emissions resulting from county government operations. Community-wide GHG inventories include a broader range of emissions associated with both the activities within the community Riverside County serves and the government operations. Table 12 shows the 2017 community-wide emissions as provided in the CAP.

Table 12. County of Riverside GHG Emissions by Source

Source	Annual GHG Emissions (MT CO_2e)	Percent of Total
On-road transportation	1,766,784	36%
Agriculture	1,670,954	34%
Energy (electricity and natural gas)	1,188,138	24%
Solid waste	204,365	4%
Water and wastewater	44,606	1%
Aviation	26,786	1%
Off-road sources	3,883	0%
Total	4,905,518	100%

Source: County of Riverside 2019.
Notes: MT CO_2e = metric tons of carbon dioxide equivalent per year.

3.3.2 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights. Shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year. Sea levels have risen, and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra Nevada snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model proposed projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late twenty-first century in central, and most notably, Southern California. By the late century, all proposed projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

A summary of current and future climate change impacts to resource areas in California, as discussed in Safeguarding California: Reducing Climate Risk (CNRA 2014) is provided as follows.

Agriculture. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought, to destructive storm events; significant shifts in water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased

risks from invasive species and weeds, agricultural pests and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production.

Biodiversity and Habitat. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift and novel combinations of species; pathogens, parasites and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss has occurs).

Energy. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events and sea level rise.

Forestry. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large-scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts and vegetation conversions.

Ocean and Coastal Ecosystems and Resources. Sea level rise, changing ocean conditions and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea level rise in addition to more frequent and severe coastal storms and erosion are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities as well as negatively impacting the coastal recreational assets such as beaches and tidal wetlands.

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the twenty-first century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity and duration of extreme heat and heat waves are likely to increase the risk of mortality due to heat related illness as well as exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies.

Transportation. While the transportation industry is a source of GHG emissions, it is also vulnerable to climate change risks. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand, which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety.

Water. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems, and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter. Increased risk of flooding has a variety of public health concerns, including water quality, public safety, property damage, displacement, and post-disaster mental health problems. Prolonged and intensified droughts can also negatively groundwater reserves and result in increased overdraft and subsidence. The higher

risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality.

In March 2016, the CNRA released Safeguarding California: Implementation Action Plans, a document that shows how California is acting to convert the recommendations contained in the 2014 Safeguarding California plan into action (CNRA 2016). Additionally, in May 2017, CNRA released the draft Safeguarding California Plan: 2017 Update, which is a survey of current programmatic responses for climate change and contains recommendations for further actions (CNRA 2017).

The CNRA released Safeguarding California Plan: 2018 Update in January 2018, which provides a roadmap for state agencies to protect communities, infrastructure, services, and the natural environment from climate change impacts. The 2018 Safeguarding California Plan includes 69 recommendations across 11 sectors and more than 1,000 ongoing actions and next steps developed by scientific and policy experts across 38 state agencies (CNRA 2018). As with previous state adaptation plans, the 2018 Update addresses the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming.

3.4 Significance Criteria and Methodology

3.4.1 Thresholds of Significance

The significance criteria used to evaluate the Project's GHG emissions impacts is based on the recommendations provided in CEQA Guidelines Appendix G. For the purposes of this GHG emissions analysis, the Project would have a significant environmental impact if it would (14 CCR 15000 et seq.):

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

Global climate change is a cumulative impact; a proposed project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a proposed project-level under CEQA.

County of Riverside

The County of Riverside CAP includes measures developed in order to reduce 525,511 MT CO_2e by 2030 and 2,982,947 MT CO_2e by 2050 as compared to the adjusted BAU forecast (County of Riverside 2019). Mitigation of GHG emissions impacts during the development review process of projects provides a cost-effective way of implementing the GHG reduction strategies for reducing community-wide emissions associated with new development (County of Riverside 2019). The development review process procedures for evaluating GHG impacts and determining significance for CEQA purposes will be streamlined by (1) applying an emissions level that is determined to be less than significant for small projects, and (2) utilizing the Screening Tables to mitigate project GHG emissions that exceed the threshold level. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. The CAP determined that the 90th percentile of projects ranged from 2,983 MT to 3,143 MT CO_2e per year. The 3,000 MT CO_2e per-year value is the low-end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need to use the Screening Tables. A threshold level above 3,000 MT CO_2e per year will

be used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions.

3.4.2 Approach and Methodology

Construction

CalEEMod Version 2016.3.2 was used to estimate potential Project-generated GHG emissions during construction. Construction of the Project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 2.4.2.1 are also applicable for the estimation of construction-related GHG emissions. As such, see Section 2.4.2.1 for a discussion of construction emissions calculation methodology and assumptions.

Decommissioning

CalEEMod Version 2016.3.2 was used to estimate potential Project-generated GHG emissions during decommissioning. Decommissioning of the Project would result in GHG emissions primarily associated with use of off-road equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for decommissioning criteria air pollutants discussed in Section 2.4.2.1 are also applicable for the estimation of decommissioning-related GHG emissions. As such, see Section 2.4.2.1 for a discussion of decommissioning emissions calculation methodology and assumptions.

Operational

As discussed in Section 2.4.2.2, the Project will not increase GHG emissions beyond what currently occurs at the site.

3.5 Impact Analysis

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

Construction Emissions

Construction of the Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 2.4.2.1. Construction of the Project is anticipated to commence in September 2021 and would last approximately 8 months, ending in April 2022. On-site sources of GHG emissions include off-road equipment and off-site sources, including trucks and worker vehicles. Table 13 presents construction emissions for the Project from on-site and off-site emission sources.

Table 13. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2021	723.95	0.09	0.00	726.20

Table 13. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2022	120.88	0.02	0.00	121.40
			Total	847.60
			30-Year Amortization of Construction Emissions	*28.25*

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

As shown in Table 13, the estimated total GHG emissions during construction of would be approximately 848 MT CO_2e over the construction period. Estimated Project-generated construction emissions amortized over 30 years would be approximately 28 MT CO_2e per year. As with Project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the Project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Decommissioning Emissions

Decommissioning of the Project would result in GHG emissions, which are primarily associated with use of off-road equipment, on-road vendor trucks, and worker vehicles.

CalEEMod was used to calculate the annual GHG emissions based on the decommissioning scenario described in Section 2.4.2.1. Decommissioning of the Project is anticipated to commence in January 2053 and would last approximately 5 months. On-site sources of GHG emissions include off-road equipment and off-site sources, including trucks and worker vehicles. Table 14 presents decommissioning emissions for the Project from on-site and off-site emission sources.

Table 14. Estimated Annual Decommissioning Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2053	130.49	0.00	0.00	130.59
			30-Year Amortization of Construction Emissions	*4.35*

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

As shown in Table 14, the estimated total GHG emissions during decommissioning of the Project would be approximately 131 MT CO_2e over the decommissioning period. Estimated Project-generated decommissioning emissions amortized over 30 years would be approximately 4 MT CO_2e per year.

The combined amortized construction and decommissioning GHG emissions would be 33 MT CO_2e per year. Therefore, the total annual emissions would not exceed the GHG significance threshold of 3,000 MT CO_2e per year. As such, the Project's GHG emissions would be considered less than significant.

GHG Emissions Benefits

In keeping with the renewable energy target under the Scoping Plan and as required by SB 100, the Project would provide a source of renewable energy to achieve the RPS of 100% by 2045. Renewable energy, in turn, potentially offsets GHG emissions generated by fossil-fuel power plants. The current site produces approximately 194,773 mega-watt hours (MWh) of electricity per year. The Project is expected to produce an estimated 229 GWh of

electricity per year. Therefore, the Project could produce an additional 25,794 MWh per year compared to the existing turbines. The latest published GHG emission factor for Southern California Edison (SCE) is 534 pounds of CO_2e/MWh (SCE 2019). Assuming that SCE would meet the EO B-55-18 carbon neutrality target in 2045, a linear regression of the SCE GHG emission factor was calculated from 2019 to 2044. This would mean that the Project would avoid less GHG emissions over time. Assuming this, the Project would avoid a net 59,817 MT CO_2e from 2023 through 2044. In contrast, including amortized construction and decommissioning emissions, the Project would emit 978 MT CO_2e over a 30-year lifetime. It should be noted that the Project is expected to be operational through 2052 and thus it would not avoid GHG emissions from 2045 through 2052.

3.5.2 Would the proposed Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Consistency with the County of Riverside Climate Action Plan

As discussed in Section 3.2.3.3, the County's CAP is a qualified GHG reduction plan according to CEQA Guidelines Section 15183.5 and thus can be used in a cumulative impacts analysis to determine significance. As shown in Section 3.5.1, the Project would not exceed the 3,000 MT CO_2e threshold established by the CAP. Table 15 provides an overview of the measures and goals within the CAP that are applicable to the Project and the Project's consistency with them. As shown in Table 15, the Project does not conflict with any of the GHG-reducing measures or goals within the CAP and thus is consistent with the plan. It should also be noted that the Project would not inhibit the County from implementing any of the measures not listed in Table 15 as they do not apply to the Project.

Table 15. Project Consistency with the County Climate Action Plan Greenhouse Gas Emission Reduction Strategies

Measure Number	Measure Description	Project Consistency
R2-CE1	Clean Energy	Consistent. The Project would produce up to 56 MW of renewable electricity through new wind turbine generators.
R2-CE2	Community Choice Aggregation Program	Consistent. The Project would produce up to 56 MW of renewable electricity through new wind turbine generators and the support the use of a community choice aggregation program.
R2-W1	Water Efficiency through Enhanced Implementation of Senate Bill X7-7	Consistent. The Project would not use water during operation.
R2-S1	Reduce Waste to Landfills	Consistent. The Project will dismantle and recycle as much of the existing WTGs as possible to reduce any waste going to the landfills. Further, the Project will crush all foundation concrete and reuse it onsite.

Source: County of Riverside 2019.

Consistency with the SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

SCAG's 2016 RTP/SCS is a regional growth-management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The 2016 RTP/SCS incorporates local

land use proposed projections and circulation networks in city and county General Plans. The 2016 RTP/SCS is not directly applicable to the Project because the underlying purpose of the 2016 RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development. As the Project does not alter the current use of the property and does not induce growth during operation, development of the Project would not conflict with the critical goals of the 2016 RTP/SCS.

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020–2045 RTP/SCS) and the addendum to the Connect SoCal Program Environmental Impact Report. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Because the Project is not growth inducing, this type of consistency analysis does not apply. However, the major goals of the Connect SoCal are outlined in Table 16, along with the Project's consistency with them.

Table 16. Project Consistency with the 2020 SCAG RTP/SCS – Connect SoCal

RTP/SCS Measure	Project Consistency
Reduce greenhouse gas emissions and improve air quality.	**Consistent**. The Project would result in criteria air pollutant and GHG emissions during construction and operation. However, emissions would not exceed the SCAQMD significance thresholds. The Project would also generate renewable energy.
Adapt to a changing climate and support an integrated regional development pattern and transportation network.	**Consistent**. The Project would generate additional renewable energy, supporting the adaptation to a changing climate.
Promote conservation of natural and agricultural lands and restoration of habitats.	**Consistent**. The Project would not impact natural lands during construction or operation.

Source: SCAG 2020.
Notes: SCAG = Southern California Association of Governments; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy.

As shown in Table 16, the Project would be consistent with all applicable measures within the SCAG Connect SoCal RTP/SCS.

Consistency with CARB's Scoping Plan

As discussed in Section 3.2.2, Potential Effects of Climate Change, the Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific proposed projects, nor is it intended to be used for proposed project-level evaluations.[8] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others.

[8] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009b).

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 17 highlights measures that have been, or will be, developed under the Scoping Plan and the Project's consistency with Scoping Plan measures. To the extent that these regulations are applicable to the Project, its inhabitants, or uses, the Project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Table 17. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	**Consistent**. The Project's employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low-Carbon Fuel Standard	T-2	**Consistent**. Motor vehicles driven by the Project's employees would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Advanced Clean Transit	Proposed	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Last-Mile Delivery	N/A	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Reduction in VMT	N/A	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Ship Electrification at Ports (Shore Power)	T-5	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	**Not applicable**. The Project would not prevent CARB from implementing this measure.

Table 17. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Medium and Heavy-Duty GHG Phase 2	N/A	**Not applicable**. The Project would not prevent CARB from implementing this measure.
High-Speed Rail	T-9	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Energy Efficiency (Natural Gas)	CR-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Combined Heat and Power	E-2	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Renewables Portfolio Standard (33% by 2020)	E-3	**Consistent.** The Project would replace existing aged WTGs with new WTGs to support the RPS.
Renewables Portfolio Standard (50% by 2050)	N/A	**Consistent.** The Project would replace existing aged WTGs with new WTGs to support the RPS.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Water Sector		
Water Use Efficiency	W-1	**Consistent**. The Project would use water for dust suppression during construction. No water use is associated with operation of the Project.
Water Recycling	W-2	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Water System Energy Efficiency	W-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Reuse Urban Runoff	W-4	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Renewable Energy Production	W-5	**Not applicable**. This measure applies to renewable energy within the water sector. The Project would not prevent CARB from implementing this measure.

Table 17. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Green Buildings		
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
4 Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Oil and Gas Extraction GHG Emission Reduction	I-2	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Reduce GHG Emissions by 20% in Oil Refinery Sector	N/A	**Not applicable**. The Project would not prevent CARB from implementing this measure.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Refinery Flare Recovery Process Improvements	I-4	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Increasing the Efficiency of Landfill Methane Capture	RW-2	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Mandatory Commercial Recycling	RW-3	**Consistent**. The Project would recycle the maximum extent that is feasible in accordance with state and local regulations.
Increase Production and Markets for Compost and Other Organics	RW-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.

Table 17. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Anaerobic/Aerobic Digestion	RW-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Extended Producer Responsibility	RW-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Environmentally Preferable Purchasing	RW-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Forests Sector		
Sustainable Forest Target	F-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
High GWP Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Reduction of Perfluorocarbons (PFCs in Semiconductor Manufacturing	H-3	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Limit High GWP Use in Consumer Products	H-4	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	**Not applicable**. The Project would not prevent CARB from implementing this measure.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	**Not applicable**. The Project would not prevent CARB from implementing this measure.
40% reduction in methane and hydrofluorocarbon (HFC) emissions	N/A	**Not applicable**. The Project would not prevent CARB from implementing this measure.
50% reduction in black carbon emissions	N/A	**Not applicable**. The Project would not prevent CARB from implementing this measure.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	**Not applicable**. The Project would not prevent CARB from implementing this measure.

Sources: CARB 2008 and CARB 2017.
Notes: CARB = California Air Resources Board; CCR = California Code of Regulations; GHG = greenhouse gas; GWP = global warming potential; SB = Senate Bill; SF_6 = sulfur hexafluoride.

Based on the analysis in Table 17, the Project would be consistent with the applicable strategies and measures in the Scoping Plan.

The Project would not impede and may help the attainment of the GHG reduction goals for 2030 or 2050 identified in EO S-3-05 and SB 32. As discussed in Section 3.2.2, EO S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

To begin, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). The First Update to the Climate Change Scoping Plan states the following about the 2050 target for reducing GHG emissions to 80% below 1990 levels (CARB 2014):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the Second Update, which states (CARB 2017):

> The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

The Project would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 because the Project would not exceed the SCAQMD's recommended draft interim threshold of 3,000 MT CO_2e per year (SCAQMD 2008). As discussed in Section 3.4.1, this threshold was established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. Because the Project would not exceed the threshold, this analysis provides support for the conclusion that the Project would not impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050.

In addition, as discussed previously, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. In addition, since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the Project would be speculative and cannot be identified at this time. The Project's consistency would assist in meeting the City's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and EO S-3-05, CARB has also made clear its legal interpretation is that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40%

reduction target by 2030 and EO S-3-05's 80% reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets. As discussed in Section 3.5.1, the Project would increase renewable energy production compared to the existing wind turbines and thus would support the goals in SB 32 and EO S-3-05. Based on the considerations previously outlined, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be less than significant.

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13 CCR 2449–2449.3 and Appendix A. General Requirements for In-Use Off-Road Diesel-Fueled Fleets.14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

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5 List of Preparers

Adam Poll, Air Quality Specialist
Jennifer Reed, Air Program Manager
Amy Seals, Technical Editor

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Appendix A

CalEEMod Output Files

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MVPP I & II Wind Repower Project

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.

Grading - Based on applicant provided information.

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

MVPP I & II Wind Repower Project - Riverside-Salton Sea County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	100.00	50.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	10.00	95.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	50.00
tblConstructionPhase	NumDays	1.00	25.00
tblConstructionPhase	NumDays	100.00	20.00
tblConstructionPhase	PhaseEndDate	1/5/2022	2/18/2022
tblConstructionPhase	PhaseEndDate	5/25/2022	4/1/2022
tblConstructionPhase	PhaseEndDate	10/12/2022	5/6/2022
tblConstructionPhase	PhaseEndDate	8/13/2021	12/10/2021
tblConstructionPhase	PhaseEndDate	8/18/2021	10/8/2021
tblConstructionPhase	PhaseEndDate	10/19/2022	12/17/2021
tblConstructionPhase	PhaseEndDate	8/16/2021	5/27/2022
tblConstructionPhase	PhaseStartDate	8/19/2021	12/13/2021
tblConstructionPhase	PhaseStartDate	1/6/2022	2/28/2022
tblConstructionPhase	PhaseStartDate	5/26/2022	4/4/2022
tblConstructionPhase	PhaseStartDate	8/17/2021	8/16/2021
tblConstructionPhase	PhaseStartDate	10/13/2022	10/11/2021
tblConstructionPhase	PhaseStartDate	8/14/2021	4/25/2022
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00

tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialImported	0.00	8,199.00
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	10.00

tblOffRoadEquipment	UsageHours	1.00	10.00
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,268.00

tblTripsAndVMT	HaulingTripNumber	0.00	1,820.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	10.00	64.00
tblTripsAndVMT	WorkerTripNumber	0.00	68.00
tblTripsAndVMT	WorkerTripNumber	0.00	32.00
tblTripsAndVMT	WorkerTripNumber	3.00	6.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2730	3.3468	2.0384	7.8600e-003	4.7614	0.1151	4.8765	0.5761	0.1083	0.6844	0.0000	723.9538	723.9538	0.0897	0.0000	726.1949
2022	0.0636	0.6147	0.6358	1.3700e-003	1.5644	0.0253	1.5897	0.1599	0.0242	0.1841	0.0000	120.8831	120.8831	0.0206	0.0000	121.3982
Maximum	**0.2730**	**3.3468**	**2.0384**	**7.8600e-003**	**4.7614**	**0.1151**	**4.8765**	**0.5761**	**0.1083**	**0.6844**	**0.0000**	**723.9538**	**723.9538**	**0.0897**	**0.0000**	**726.1949**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2730	3.3468	2.0384	7.8600e-003	0.7099	0.1151	0.8250	0.1300	0.1083	0.2383	0.0000	723.9534	723.9534	0.0897	0.0000	726.1946
2022	0.0636	0.6147	0.6358	1.3700e-003	0.1735	0.0253	0.1989	0.0211	0.0242	0.0453	0.0000	120.8830	120.8830	0.0206	0.0000	121.3981
Maximum	**0.2730**	**3.3468**	**2.0384**	**7.8600e-003**	**0.7099**	**0.1151**	**0.8250**	**0.1300**	**0.1083**	**0.2383**	**0.0000**	**723.9534**	**723.9534**	**0.0897**	**0.0000**	**726.1946**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**86.03**	**0.00**	**84.17**	**79.47**	**0.00**	**67.35**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**8-2-2021**	**11-1-2021**	2.1931	2.1931
2	**11-2-2021**	**2-1-2022**	1.5534	1.5534
3	**2-2-2022**	**5-1-2022**	0.3916	0.3916
4	**5-2-2022**	**8-1-2022**	0.0286	0.0286
		Highest	2.1931	2.1931

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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

3.0 Construction Detail

Construction Phase

MVPP I & II Wind Repower Project - Riverside-Salton Sea County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	8/2/2021	12/10/2021	5	95	
2	Restoration	Site Preparation	4/25/2022	5/27/2022	5	25	
3	Grading and Road Upgrades	Grading	8/16/2021	10/8/2021	5	40	
4	WTG/Met Tower Erection	Building Construction	12/13/2021	2/18/2022	5	50	
5	Tower Wiring, Mechanical Completion	Building Construction	2/28/2022	4/1/2022	5	25	
6	Commissioning	Building Construction	4/4/2022	5/6/2022	5	25	
7	WTG Foundation Installation	Paving	10/11/2021	12/17/2021	5	50	
8	Overhead Electrical Collector System Improvements	Building Construction	2/7/2022	3/4/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	1	10.00	231	0.29
WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Grading and Road Upgrades	Concrete/Industrial Saws	0	8.00	81	0.73

Grading and Road Upgrades	Graders	1	10.00	187	0.41
Grading and Road Upgrades	Rollers	2	10.00	80	0.38
Grading and Road Upgrades	Rubber Tired Dozers	1	10.00	247	0.40
Grading and Road Upgrades	Tractors/Loaders/Backhoes	0	6.00	97	0.37
WTG Foundation Installation	Cement and Mortar Mixers	0	6.00	9	0.56
WTG Foundation Installation	Excavators	2	10.00	158	0.38
WTG Foundation Installation	Pavers	0	7.00	130	0.42
WTG Foundation Installation	Pumps	1	10.00	84	0.74
WTG Foundation Installation	Rollers	0	7.00	80	0.38
WTG Foundation Installation	Rubber Tired Dozers	1	10.00	247	0.40
WTG Foundation Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
WTG/Met Tower Erection	Aerial Lifts	1	5.00	63	0.31
WTG/Met Tower Erection	Cranes	2	10.00	231	0.29
WTG/Met Tower Erection	Forklifts	0	6.00	89	0.20
WTG/Met Tower Erection	Generator Sets	1	5.00	84	0.74
WTG/Met Tower Erection	Rough Terrain Forklifts	3	10.00	100	0.40
WTG/Met Tower Erection	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Tower Wiring, Mechanical Completion	Cranes	0	4.00	231	0.29
Tower Wiring, Mechanical Completion	Forklifts	0	6.00	89	0.20
Tower Wiring, Mechanical Completion	Generator Sets	2	10.00	84	0.74
Tower Wiring, Mechanical Completion	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Commissioning	Cranes	0	4.00	231	0.29
Commissioning	Forklifts	0	6.00	89	0.20
Commissioning	Generator Sets	2	10.00	84	0.74

Commissioning	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Overhead Electrical Collector System Improvements	Cranes	1	10.00	231	0.29
Overhead Electrical Collector System Improvements	Forklifts	0	6.00	89	0.20
Overhead Electrical Collector System Improvements	Tractors/Loaders/Backhoes	1	5.00	97	0.37
WTG Removal	Crushing/Proc. Equipment	1	10.00	85	0.78

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	30.00	4.00	2,268.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Grading and Road Upgrades	4	12.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG Foundation Installation	4	64.00	6.00	1,820.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG/Met Tower Erection	7	68.00	8.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Tower Wiring, Mechanical Completio	2	32.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	6.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Commissioning	2	12.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Overhead Electrical Collector System Impr	2	12.00	12.00	24.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1551	0.0000	0.1551	0.0235	0.0000	0.0235	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1150	1.1212	0.9595	1.9100e-003		0.0520	0.0520		0.0496	0.0496	0.0000	166.2353	166.2353	0.0355	0.0000	167.1229
Total	**0.1150**	**1.1212**	**0.9595**	**1.9100e-003**	**0.1551**	**0.0520**	**0.2071**	**0.0235**	**0.0496**	**0.0731**	**0.0000**	**166.2353**	**166.2353**	**0.0355**	**0.0000**	**167.1229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0175	0.7226	0.1144	3.2500e-003	0.9196	3.2600e-003	0.9228	0.1071	3.1200e-003	0.1102	0.0000	313.4583	313.4583	0.0102	0.0000	313.7123
Vendor	4.4000e-004	0.0172	3.3000e-003	4.0000e-005	0.1307	3.0000e-005	0.1307	0.0132	3.0000e-005	0.0133	0.0000	4.2992	4.2992	3.5000e-004	0.0000	4.3079
Worker	6.0800e-003	4.0900e-003	0.0446	1.4000e-004	0.9763	9.0000e-005	0.9764	0.0999	9.0000e-005	0.1000	0.0000	12.5818	12.5818	2.9000e-004	0.0000	12.5891
Total	**0.0240**	**0.7439**	**0.1623**	**3.4300e-003**	**2.0265**	**3.3800e-003**	**2.0299**	**0.2202**	**3.2400e-003**	**0.2235**	**0.0000**	**330.3393**	**330.3393**	**0.0108**	**0.0000**	**330.6094**

3.2 WTG Removal - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0698	0.0000	0.0698	0.0106	0.0000	0.0106	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1150	1.1211	0.9595	1.9100e-003		0.0520	0.0520		0.0496	0.0496	0.0000	166.2351	166.2351	0.0355	0.0000	167.1227
Total	**0.1150**	**1.1211**	**0.9595**	**1.9100e-003**	**0.0698**	**0.0520**	**0.1218**	**0.0106**	**0.0496**	**0.0602**	**0.0000**	**166.2351**	**166.2351**	**0.0355**	**0.0000**	**167.1227**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0175	0.7226	0.1144	3.2500e-003	0.1690	3.2600e-003	0.1723	0.0322	3.1200e-003	0.0353	0.0000	313.4583	313.4583	0.0102	0.0000	313.7123
Vendor	4.4000e-004	0.0172	3.3000e-003	4.0000e-005	0.0137	3.0000e-005	0.0138	1.5600e-003	3.0000e-005	1.5900e-003	0.0000	4.2992	4.2992	3.5000e-004	0.0000	4.3079
Worker	6.0800e-003	4.0900e-003	0.0446	1.4000e-004	0.1093	9.0000e-005	0.1094	0.0134	9.0000e-005	0.0135	0.0000	12.5818	12.5818	2.9000e-004	0.0000	12.5891
Total	**0.0240**	**0.7439**	**0.1623**	**3.4300e-003**	**0.2920**	**3.3800e-003**	**0.2954**	**0.0471**	**3.2400e-003**	**0.0503**	**0.0000**	**330.3393**	**330.3393**	**0.0108**	**0.0000**	**330.6094**

3.3 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	0.0145	0.0217	3.0000e-005		5.4000e-004	5.4000e-004		5.0000e-004	5.0000e-004	0.0000	2.8405	2.8405	9.2000e-004	0.0000	2.8635
Total	**1.0900e-003**	**0.0145**	**0.0217**	**3.0000e-005**	**0.0000**	**5.4000e-004**	**5.4000e-004**	**0.0000**	**5.0000e-004**	**5.0000e-004**	**0.0000**	**2.8405**	**2.8405**	**9.2000e-004**	**0.0000**	**2.8635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.1300e-003	4.0000e-004	1.0000e-005	0.0172	0.0000	0.0172	1.7400e-003	0.0000	1.7400e-003	0.0000	0.5608	0.5608	4.0000e-005	0.0000	0.5619
Worker	3.0000e-004	1.9000e-004	2.1600e-003	1.0000e-005	0.0514	0.0000	0.0514	5.2600e-003	0.0000	5.2600e-003	0.0000	0.6380	0.6380	1.0000e-005	0.0000	0.6384
Total	**3.5000e-004**	**2.3200e-003**	**2.5600e-003**	**2.0000e-005**	**0.0686**	**0.0000**	**0.0686**	**7.0000e-003**	**0.0000**	**7.0000e-003**	**0.0000**	**1.1988**	**1.1988**	**5.0000e-005**	**0.0000**	**1.2003**

3.3 Restoration - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	0.0145	0.0217	3.0000e-005		5.4000e-004	5.4000e-004		5.0000e-004	5.0000e-004	0.0000	2.8405	2.8405	9.2000e-004	0.0000	2.8635
Total	**1.0900e-003**	**0.0145**	**0.0217**	**3.0000e-005**	**0.0000**	**5.4000e-004**	**5.4000e-004**	**0.0000**	**5.0000e-004**	**5.0000e-004**	**0.0000**	**2.8405**	**2.8405**	**9.2000e-004**	**0.0000**	**2.8635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.1300e-003	4.0000e-004	1.0000e-005	1.8000e-003	0.0000	1.8100e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5608	0.5608	4.0000e-005	0.0000	0.5619
Worker	3.0000e-004	1.9000e-004	2.1600e-003	1.0000e-005	5.7500e-003	0.0000	5.7500e-003	7.1000e-004	0.0000	7.1000e-004	0.0000	0.6380	0.6380	1.0000e-005	0.0000	0.6384
Total	**3.5000e-004**	**2.3200e-003**	**2.5600e-003**	**2.0000e-005**	**7.5500e-003**	**0.0000**	**7.5600e-003**	**9.2000e-004**	**0.0000**	**9.2000e-004**	**0.0000**	**1.1988**	**1.1988**	**5.0000e-005**	**0.0000**	**1.2003**

3.4 Grading and Road Upgrades - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1643	0.0000	0.1643	0.0843	0.0000	0.0843	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0470	0.5186	0.2392	5.1000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	44.8425	44.8425	0.0145	0.0000	45.2050
Total	**0.0470**	**0.5186**	**0.2392**	**5.1000e-004**	**0.1643**	**0.0239**	**0.1882**	**0.0843**	**0.0220**	**0.1062**	**0.0000**	**44.8425**	**44.8425**	**0.0145**	**0.0000**	**45.2050**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.6200e-003	7.0000e-004	1.0000e-005	0.0275	1.0000e-005	0.0275	2.7900e-003	1.0000e-005	2.7900e-003	0.0000	0.9051	0.9051	7.0000e-005	0.0000	0.9069
Worker	1.0200e-003	6.9000e-004	7.5100e-003	2.0000e-005	0.1644	2.0000e-005	0.1644	0.0168	1.0000e-005	0.0168	0.0000	2.1190	2.1190	5.0000e-005	0.0000	2.1203
Total	**1.1100e-003**	**4.3100e-003**	**8.2100e-003**	**3.0000e-005**	**0.1919**	**3.0000e-005**	**0.1920**	**0.0196**	**2.0000e-005**	**0.0196**	**0.0000**	**3.0241**	**3.0241**	**1.2000e-004**	**0.0000**	**3.0272**

3.4 Grading and Road Upgrades - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0740	0.0000	0.0740	0.0379	0.0000	0.0379	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0470	0.5186	0.2392	5.1000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	44.8424	44.8424	0.0145	0.0000	45.2050
Total	**0.0470**	**0.5186**	**0.2392**	**5.1000e-004**	**0.0740**	**0.0239**	**0.0978**	**0.0379**	**0.0220**	**0.0599**	**0.0000**	**44.8424**	**44.8424**	**0.0145**	**0.0000**	**45.2050**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.6200e-003	7.0000e-004	1.0000e-005	2.8900e-003	1.0000e-005	2.8900e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9051	0.9051	7.0000e-005	0.0000	0.9069
Worker	1.0200e-003	6.9000e-004	7.5100e-003	2.0000e-005	0.0184	2.0000e-005	0.0184	2.2600e-003	1.0000e-005	2.2700e-003	0.0000	2.1190	2.1190	5.0000e-005	0.0000	2.1203
Total	**1.1100e-003**	**4.3100e-003**	**8.2100e-003**	**3.0000e-005**	**0.0213**	**3.0000e-005**	**0.0213**	**2.5900e-003**	**2.0000e-005**	**2.6000e-003**	**0.0000**	**3.0241**	**3.0241**	**1.2000e-004**	**0.0000**	**3.0272**

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0131	0.1539	0.1241	2.4000e-004		6.2900e-003	6.2900e-003		5.8500e-003	5.8500e-003	0.0000	21.3609	21.3609	6.1900e-003	0.0000	21.5156
Total	**0.0131**	**0.1539**	**0.1241**	**2.4000e-004**		**6.2900e-003**	**6.2900e-003**		**5.8500e-003**	**5.8500e-003**	**0.0000**	**21.3609**	**21.3609**	**6.1900e-003**	**0.0000**	**21.5156**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	5.4200e-003	1.0400e-003	1.0000e-005	0.0413	1.0000e-005	0.0413	4.1800e-003	1.0000e-005	4.1900e-003	0.0000	1.3576	1.3576	1.1000e-004	0.0000	1.3604
Worker	2.1800e-003	1.4600e-003	0.0160	5.0000e-005	0.3494	3.0000e-005	0.3494	0.0358	3.0000e-005	0.0358	0.0000	4.5030	4.5030	1.0000e-004	0.0000	4.5056
Total	**2.3200e-003**	**6.8800e-003**	**0.0170**	**6.0000e-005**	**0.3907**	**4.0000e-005**	**0.3907**	**0.0399**	**4.0000e-005**	**0.0400**	**0.0000**	**5.8606**	**5.8606**	**2.1000e-004**	**0.0000**	**5.8660**

3.5 WTG/Met Tower Erection - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0131	0.1539	0.1241	2.4000e-004		6.2900e-003	6.2900e-003		5.8500e-003	5.8500e-003	0.0000	21.3609	21.3609	6.1900e-003	0.0000	21.5156
Total	**0.0131**	**0.1539**	**0.1241**	**2.4000e-004**		**6.2900e-003**	**6.2900e-003**		**5.8500e-003**	**5.8500e-003**	**0.0000**	**21.3609**	**21.3609**	**6.1900e-003**	**0.0000**	**21.5156**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	5.4200e-003	1.0400e-003	1.0000e-005	4.3300e-003	1.0000e-005	4.3400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3576	1.3576	1.1000e-004	0.0000	1.3604
Worker	2.1800e-003	1.4600e-003	0.0160	5.0000e-005	0.0391	3.0000e-005	0.0391	4.8000e-003	3.0000e-005	4.8300e-003	0.0000	4.5030	4.5030	1.0000e-004	0.0000	4.5056
Total	**2.3200e-003**	**6.8800e-003**	**0.0170**	**6.0000e-005**	**0.0434**	**4.0000e-005**	**0.0435**	**5.2900e-003**	**4.0000e-005**	**5.3300e-003**	**0.0000**	**5.8606**	**5.8606**	**2.1000e-004**	**0.0000**	**5.8660**

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0277	0.3184	0.2851	5.7000e-004		0.0127	0.0127		0.0118	0.0118	0.0000	49.8449	49.8449	0.0144	0.0000	50.2053
Total	**0.0277**	**0.3184**	**0.2851**	**5.7000e-004**		**0.0127**	**0.0127**		**0.0118**	**0.0118**	**0.0000**	**49.8449**	**49.8449**	**0.0144**	**0.0000**	**50.2053**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-004	0.0120	2.2600e-003	3.0000e-005	0.0963	2.0000e-005	0.0963	9.7500e-003	2.0000e-005	9.7700e-003	0.0000	3.1405	3.1405	2.4000e-004	0.0000	3.1466
Worker	4.7600e-003	3.0700e-003	0.0343	1.1000e-004	0.8153	8.0000e-005	0.8153	0.0835	7.0000e-005	0.0835	0.0000	10.1235	10.1235	2.2000e-004	0.0000	10.1290
Total	**5.0600e-003**	**0.0150**	**0.0366**	**1.4000e-004**	**0.9115**	**1.0000e-004**	**0.9116**	**0.0932**	**9.0000e-005**	**0.0933**	**0.0000**	**13.2640**	**13.2640**	**4.6000e-004**	**0.0000**	**13.2756**

3.5 WTG/Met Tower Erection - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0277	0.3184	0.2851	5.7000e-004		0.0127	0.0127		0.0118	0.0118	0.0000	49.8448	49.8448	0.0144	0.0000	50.2052
Total	**0.0277**	**0.3184**	**0.2851**	**5.7000e-004**		**0.0127**	**0.0127**		**0.0118**	**0.0118**	**0.0000**	**49.8448**	**49.8448**	**0.0144**	**0.0000**	**50.2052**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-004	0.0120	2.2600e-003	3.0000e-005	0.0101	2.0000e-005	0.0101	1.1500e-003	2.0000e-005	1.1700e-003	0.0000	3.1405	3.1405	2.4000e-004	0.0000	3.1466
Worker	4.7600e-003	3.0700e-003	0.0343	1.1000e-004	0.0912	8.0000e-005	0.0913	0.0112	7.0000e-005	0.0113	0.0000	10.1235	10.1235	2.2000e-004	0.0000	10.1290
Total	**5.0600e-003**	**0.0150**	**0.0366**	**1.4000e-004**	**0.1014**	**1.0000e-004**	**0.1014**	**0.0123**	**9.0000e-005**	**0.0124**	**0.0000**	**13.2640**	**13.2640**	**4.6000e-004**	**0.0000**	**13.2756**

3.6 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.0915	0.1149	2.1000e-004		4.5900e-003	4.5900e-003		4.5900e-003	4.5900e-003	0.0000	17.6627	17.6627	8.4000e-004	0.0000	17.6837
Total	**0.0103**	**0.0915**	**0.1149**	**2.1000e-004**		**4.5900e-003**	**4.5900e-003**		**4.5900e-003**	**4.5900e-003**	**0.0000**	**17.6627**	**17.6627**	**8.4000e-004**	**0.0000**	**17.6837**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.1300e-003	4.0000e-004	1.0000e-005	0.0172	0.0000	0.0172	1.7400e-003	0.0000	1.7400e-003	0.0000	0.5608	0.5608	4.0000e-005	0.0000	0.5619
Worker	1.6000e-003	1.0300e-003	0.0115	4.0000e-005	0.2740	3.0000e-005	0.2741	0.0281	2.0000e-005	0.0281	0.0000	3.4029	3.4029	7.0000e-005	0.0000	3.4047
Total	**1.6500e-003**	**3.1600e-003**	**0.0119**	**5.0000e-005**	**0.2912**	**3.0000e-005**	**0.2913**	**0.0298**	**2.0000e-005**	**0.0298**	**0.0000**	**3.9637**	**3.9637**	**1.1000e-004**	**0.0000**	**3.9666**

3.6 Tower Wiring, Mechanical Completion - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.0915	0.1149	2.1000e-004		4.5900e-003	4.5900e-003		4.5900e-003	4.5900e-003	0.0000	17.6627	17.6627	8.4000e-004	0.0000	17.6837
Total	**0.0103**	**0.0915**	**0.1149**	**2.1000e-004**		**4.5900e-003**	**4.5900e-003**		**4.5900e-003**	**4.5900e-003**	**0.0000**	**17.6627**	**17.6627**	**8.4000e-004**	**0.0000**	**17.6837**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.1300e-003	4.0000e-004	1.0000e-005	1.8000e-003	0.0000	1.8100e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5608	0.5608	4.0000e-005	0.0000	0.5619
Worker	1.6000e-003	1.0300e-003	0.0115	4.0000e-005	0.0307	3.0000e-005	0.0307	3.7600e-003	2.0000e-005	3.7900e-003	0.0000	3.4029	3.4029	7.0000e-005	0.0000	3.4047
Total	**1.6500e-003**	**3.1600e-003**	**0.0119**	**5.0000e-005**	**0.0325**	**3.0000e-005**	**0.0325**	**3.9700e-003**	**2.0000e-005**	**4.0000e-003**	**0.0000**	**3.9637**	**3.9637**	**1.1000e-004**	**0.0000**	**3.9666**

3.7 Commissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.0915	0.1149	2.1000e-004		4.5900e-003	4.5900e-003		4.5900e-003	4.5900e-003	0.0000	17.6627	17.6627	8.4000e-004	0.0000	17.6837
Total	**0.0103**	**0.0915**	**0.1149**	**2.1000e-004**		**4.5900e-003**	**4.5900e-003**		**4.5900e-003**	**4.5900e-003**	**0.0000**	**17.6627**	**17.6627**	**8.4000e-004**	**0.0000**	**17.6837**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.1300e-003	4.0000e-004	1.0000e-005	0.0172	0.0000	0.0172	1.7400e-003	0.0000	1.7400e-003	0.0000	0.5608	0.5608	4.0000e-005	0.0000	0.5619
Worker	6.0000e-004	3.9000e-004	4.3200e-003	1.0000e-005	0.1028	1.0000e-005	0.1028	0.0105	1.0000e-005	0.0105	0.0000	1.2761	1.2761	3.0000e-005	0.0000	1.2768
Total	**6.5000e-004**	**2.5200e-003**	**4.7200e-003**	**2.0000e-005**	**0.1200**	**1.0000e-005**	**0.1200**	**0.0123**	**1.0000e-005**	**0.0123**	**0.0000**	**1.8369**	**1.8369**	**7.0000e-005**	**0.0000**	**1.8387**

3.7 Commissioning - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.0915	0.1149	2.1000e-004		4.5900e-003	4.5900e-003		4.5900e-003	4.5900e-003	0.0000	17.6627	17.6627	8.4000e-004	0.0000	17.6837
Total	**0.0103**	**0.0915**	**0.1149**	**2.1000e-004**		**4.5900e-003**	**4.5900e-003**		**4.5900e-003**	**4.5900e-003**	**0.0000**	**17.6627**	**17.6627**	**8.4000e-004**	**0.0000**	**17.6837**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.1300e-003	4.0000e-004	1.0000e-005	1.8000e-003	0.0000	1.8100e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5608	0.5608	4.0000e-005	0.0000	0.5619
Worker	6.0000e-004	3.9000e-004	4.3200e-003	1.0000e-005	0.0115	1.0000e-005	0.0115	1.4100e-003	1.0000e-005	1.4200e-003	0.0000	1.2761	1.2761	3.0000e-005	0.0000	1.2768
Total	**6.5000e-004**	**2.5200e-003**	**4.7200e-003**	**2.0000e-005**	**0.0133**	**1.0000e-005**	**0.0133**	**1.6200e-003**	**1.0000e-005**	**1.6300e-003**	**0.0000**	**1.8369**	**1.8369**	**7.0000e-005**	**0.0000**	**1.8387**

3.8 WTG Foundation Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0589	0.5778	0.4476	8.0000e-004		0.0287	0.0287		0.0269	0.0269	0.0000	69.4782	69.4782	0.0177	0.0000	69.9213
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0589**	**0.5778**	**0.4476**	**8.0000e-004**		**0.0287**	**0.0287**		**0.0269**	**0.0269**	**0.0000**	**69.4782**	**69.4782**	**0.0177**	**0.0000**	**69.9213**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5300e-003	0.2022	0.0279	6.8000e-004	0.6336	6.1000e-004	0.6342	0.0659	5.8000e-004	0.0665	0.0000	65.2918	65.2918	3.9900e-003	0.0000	65.3915
Vendor	3.4000e-004	0.0136	2.6100e-003	4.0000e-005	0.1032	2.0000e-005	0.1032	0.0105	2.0000e-005	0.0105	0.0000	3.3941	3.3941	2.8000e-004	0.0000	3.4010
Worker	6.8200e-003	4.5900e-003	0.0501	1.6000e-004	1.0962	1.0000e-004	1.0963	0.1122	1.0000e-004	0.1123	0.0000	14.1269	14.1269	3.3000e-004	0.0000	14.1352
Total	**0.0117**	**0.2203**	**0.0806**	**8.8000e-004**	**1.8330**	**7.3000e-004**	**1.8337**	**0.1886**	**7.0000e-004**	**0.1893**	**0.0000**	**82.8128**	**82.8128**	**4.6000e-003**	**0.0000**	**82.9276**

3.8 WTG Foundation Installation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0589	0.5778	0.4476	8.0000e-004		0.0287	0.0287		0.0269	0.0269	0.0000	69.4781	69.4781	0.0177	0.0000	69.9212
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0589**	**0.5778**	**0.4476**	**8.0000e-004**		**0.0287**	**0.0287**		**0.0269**	**0.0269**	**0.0000**	**69.4781**	**69.4781**	**0.0177**	**0.0000**	**69.9212**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5300e-003	0.2022	0.0279	6.8000e-004	0.0760	6.1000e-004	0.0766	0.0103	5.8000e-004	0.0109	0.0000	65.2918	65.2918	3.9900e-003	0.0000	65.3915
Vendor	3.4000e-004	0.0136	2.6100e-003	4.0000e-005	0.0108	2.0000e-005	0.0109	1.2300e-003	2.0000e-005	1.2600e-003	0.0000	3.3941	3.3941	2.8000e-004	0.0000	3.4010
Worker	6.8200e-003	4.5900e-003	0.0501	1.6000e-004	0.1227	1.0000e-004	0.1228	0.0151	1.0000e-004	0.0151	0.0000	14.1269	14.1269	3.3000e-004	0.0000	14.1352
Total	**0.0117**	**0.2203**	**0.0806**	**8.8000e-004**	**0.2095**	**7.3000e-004**	**0.2102**	**0.0266**	**7.0000e-004**	**0.0273**	**0.0000**	**82.8128**	**82.8128**	**4.6000e-003**	**0.0000**	**82.9276**

3.9 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6900e-003	0.0628	0.0376	9.0000e-005		2.7300e-003	2.7300e-003		2.5200e-003	2.5200e-003	0.0000	8.0450	8.0450	2.6000e-003	0.0000	8.1101
Total	**5.6900e-003**	**0.0628**	**0.0376**	**9.0000e-005**		**2.7300e-003**	**2.7300e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**8.0450**	**8.0450**	**2.6000e-003**	**0.0000**	**8.1101**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.4200e-003	3.6000e-004	1.0000e-005	8.3600e-003	1.0000e-005	8.3600e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	0.8511	0.8511	5.0000e-005	0.0000	0.8524
Vendor	2.6000e-004	0.0103	1.9400e-003	3.0000e-005	0.0825	2.0000e-005	0.0825	8.3600e-003	2.0000e-005	8.3700e-003	0.0000	2.6919	2.6919	2.1000e-004	0.0000	2.6971
Worker	4.8000e-004	3.1000e-004	3.4600e-003	1.0000e-005	0.0822	1.0000e-005	0.0822	8.4200e-003	1.0000e-005	8.4200e-003	0.0000	1.0209	1.0209	2.0000e-005	0.0000	1.0214
Total	**8.0000e-004**	**0.0130**	**5.7600e-003**	**5.0000e-005**	**0.1731**	**4.0000e-005**	**0.1731**	**0.0177**	**4.0000e-005**	**0.0177**	**0.0000**	**4.5638**	**4.5638**	**2.8000e-004**	**0.0000**	**4.5709**

3.9 Overhead Electrical Collector System Improvements - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6900e-003	0.0628	0.0376	9.0000e-005		2.7300e-003	2.7300e-003		2.5200e-003	2.5200e-003	0.0000	8.0450	8.0450	2.6000e-003	0.0000	8.1101
Total	**5.6900e-003**	**0.0628**	**0.0376**	**9.0000e-005**		**2.7300e-003**	**2.7300e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**8.0450**	**8.0450**	**2.6000e-003**	**0.0000**	**8.1101**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.4200e-003	3.6000e-004	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	1.4000e-004	1.0000e-005	1.4000e-004	0.0000	0.8511	0.8511	5.0000e-005	0.0000	0.8524
Vendor	2.6000e-004	0.0103	1.9400e-003	3.0000e-005	8.6600e-003	2.0000e-005	8.6800e-003	9.9000e-004	2.0000e-005	1.0000e-003	0.0000	2.6919	2.6919	2.1000e-004	0.0000	2.6971
Worker	4.8000e-004	3.1000e-004	3.4600e-003	1.0000e-005	9.2000e-003	1.0000e-005	9.2100e-003	1.1300e-003	1.0000e-005	1.1400e-003	0.0000	1.0209	1.0209	2.0000e-005	0.0000	1.0214
Total	**8.0000e-004**	**0.0130**	**5.7600e-003**	**5.0000e-005**	**0.0189**	**4.0000e-005**	**0.0189**	**2.2600e-003**	**4.0000e-005**	**2.2800e-003**	**0.0000**	**4.5638**	**4.5638**	**2.8000e-004**	**0.0000**	**4.5709**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MVPP I & II Wind Repower Project

Riverside-Salton Sea County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.

Grading - Based on applicant provided information.

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

MVPP I & II Wind Repower Project - Riverside-Salton Sea County, Summer

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	100.00	50.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	10.00	95.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	50.00
tblConstructionPhase	NumDays	1.00	25.00
tblConstructionPhase	NumDays	100.00	20.00
tblConstructionPhase	PhaseEndDate	1/5/2022	2/18/2022
tblConstructionPhase	PhaseEndDate	5/25/2022	4/1/2022
tblConstructionPhase	PhaseEndDate	10/12/2022	5/6/2022
tblConstructionPhase	PhaseEndDate	8/13/2021	12/10/2021
tblConstructionPhase	PhaseEndDate	8/18/2021	10/8/2021
tblConstructionPhase	PhaseEndDate	10/19/2022	12/17/2021
tblConstructionPhase	PhaseEndDate	8/16/2021	5/27/2022
tblConstructionPhase	PhaseStartDate	8/19/2021	12/13/2021
tblConstructionPhase	PhaseStartDate	1/6/2022	2/28/2022
tblConstructionPhase	PhaseStartDate	5/26/2022	4/4/2022
tblConstructionPhase	PhaseStartDate	8/17/2021	8/16/2021
tblConstructionPhase	PhaseStartDate	10/13/2022	10/11/2021
tblConstructionPhase	PhaseStartDate	8/14/2021	4/25/2022
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00

tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialImported	0.00	8,199.00
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	10.00

tblOffRoadEquipment	UsageHours	1.00	10.00
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,268.00

tblTripsAndVMT	HaulingTripNumber	0.00	1,820.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	10.00	64.00
tblTripsAndVMT	WorkerTripNumber	0.00	68.00
tblTripsAndVMT	WorkerTripNumber	0.00	32.00
tblTripsAndVMT	WorkerTripNumber	3.00	6.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.7854	70.3178	45.1223	0.1805	135.6858	2.3613	137.7079	13.8996	2.2151	15.8343	0.0000	18,373.1566	18,373.1566	2.0486	0.0000	18,424.3714
2022	2.5503	26.6003	23.0987	0.0555	75.0988	1.0082	76.1070	7.6613	0.9350	8.5963	0.0000	5,439.6934	5,439.6934	1.2548	0.0000	5,471.0625
Maximum	**5.7854**	**70.3178**	**45.1223**	**0.1805**	**135.6858**	**2.3613**	**137.7079**	**13.8996**	**2.2151**	**15.8343**	**0.0000**	**18,373.1566**	**18,373.1566**	**2.0486**	**0.0000**	**18,424.3714**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.7854	70.3178	45.1223	0.1805	16.9630	2.3613	19.3068	3.2886	2.2151	5.5011	0.0000	18,373.1566	18,373.1566	2.0486	0.0000	18,424.3714
2022	2.5503	26.6003	23.0987	0.0555	8.2506	1.0082	9.2587	0.9897	0.9350	1.9247	0.0000	5,439.6934	5,439.6934	1.2548	0.0000	5,471.0625
Maximum	**5.7854**	**70.3178**	**45.1223**	**0.1805**	**16.9630**	**2.3613**	**19.3068**	**3.2886**	**2.2151**	**5.5011**	**0.0000**	**18,373.1566**	**18,373.1566**	**2.0486**	**0.0000**	**18,424.3714**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**88.04**	**0.00**	**86.64**	**80.16**	**0.00**	**69.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	8/2/2021	12/10/2021	5	95	
2	Restoration	Site Preparation	4/25/2022	5/27/2022	5	25	
3	Grading and Road Upgrades	Grading	8/16/2021	10/8/2021	5	40	
4	WTG/Met Tower Erection	Building Construction	12/13/2021	2/18/2022	5	50	
5	Tower Wiring, Mechanical Completion	Building Construction	2/28/2022	4/1/2022	5	25	
6	Commissioning	Building Construction	4/4/2022	5/6/2022	5	25	
7	WTG Foundation Installation	Paving	10/11/2021	12/17/2021	5	50	
8	Overhead Electrical Collector System Improvements	Building Construction	2/7/2022	3/4/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	1	10.00	231	0.29

WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Grading and Road Upgrades	Concrete/Industrial Saws	0	8.00	81	0.73
Grading and Road Upgrades	Graders	1	10.00	187	0.41
Grading and Road Upgrades	Rollers	2	10.00	80	0.38
Grading and Road Upgrades	Rubber Tired Dozers	1	10.00	247	0.40
Grading and Road Upgrades	Tractors/Loaders/Backhoes	0	6.00	97	0.37
WTG Foundation Installation	Cement and Mortar Mixers	0	6.00	9	0.56
WTG Foundation Installation	Excavators	2	10.00	158	0.38
WTG Foundation Installation	Pavers	0	7.00	130	0.42
WTG Foundation Installation	Pumps	1	10.00	84	0.74
WTG Foundation Installation	Rollers	0	7.00	80	0.38
WTG Foundation Installation	Rubber Tired Dozers	1	10.00	247	0.40
WTG Foundation Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
WTG/Met Tower Erection	Aerial Lifts	1	5.00	63	0.31
WTG/Met Tower Erection	Cranes	2	10.00	231	0.29
WTG/Met Tower Erection	Forklifts	0	6.00	89	0.20
WTG/Met Tower Erection	Generator Sets	1	5.00	84	0.74
WTG/Met Tower Erection	Rough Terrain Forklifts	3	10.00	100	0.40
WTG/Met Tower Erection	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Tower Wiring, Mechanical Completion	Cranes	0	4.00	231	0.29
Tower Wiring, Mechanical Completion	Forklifts	0	6.00	89	0.20
Tower Wiring, Mechanical Completion	Generator Sets	2	10.00	84	0.74
Tower Wiring, Mechanical Completion	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Commissioning	Cranes	0	4.00	231	0.29
Commissioning	Forklifts	0	6.00	89	0.20
Commissioning	Generator Sets	2	10.00	84	0.74
Commissioning	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Overhead Electrical Collector System Improvements	Cranes	1	10.00	231	0.29
Overhead Electrical Collector System Improvements	Forklifts	0	6.00	89	0.20
Overhead Electrical Collector System Improvements	Tractors/Loaders/Backhoes	1	5.00	97	0.37
WTG Removal	Crushing/Proc. Equipment	1	10.00	85	0.78

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	30.00	4.00	2,268.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Grading and Road Upgrades	4	12.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG Foundation Installation	4	64.00	6.00	1,820.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG/Met Tower Erection	7	68.00	8.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Tower Wiring, Mechanical Completio	2	32.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	6.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Commissioning	2	12.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Overhead Electrical Collector System Impr	2	12.00	12.00	24.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2646	0.0000	3.2646	0.4943	0.0000	0.4943			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448		3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**3.2646**	**1.0948**	**4.3594**	**0.4943**	**1.0448**	**1.5391**		**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3659	14.5419	2.3659	0.0687	20.8415	0.0685	20.9100	2.4056	0.0655	2.4711		7,294.4251	7,294.4251	0.2313		7,300.2084
Vendor	8.9700e-003	0.3595	0.0638	9.6000e-004	2.9780	6.4000e-004	2.9787	0.3013	6.1000e-004	0.3019		101.4961	101.4961	7.7100e-003		101.6888
Worker	0.1416	0.0805	1.1024	3.1800e-003	22.2394	1.9600e-003	22.2414	2.2729	1.8100e-003	2.2747		317.2973	317.2973	7.5700e-003		317.4865
Total	**0.5164**	**14.9818**	**3.5320**	**0.0728**	**46.0590**	**0.0711**	**46.1300**	**4.9798**	**0.0679**	**5.0477**		**7,713.2185**	**7,713.2185**	**0.2466**		**7,719.3837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4691	0.0000	1.4691	0.2224	0.0000	0.2224			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448	0.0000	3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**1.4691**	**1.0948**	**2.5639**	**0.2224**	**1.0448**	**1.2672**	**0.0000**	**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3659	14.5419	2.3659	0.0687	3.7275	0.0685	3.7960	0.6976	0.0655	0.7631		7,294.4251	7,294.4251	0.2313		7,300.2084
Vendor	8.9700e-003	0.3595	0.0638	9.6000e-004	0.3113	6.4000e-004	0.3119	0.0352	6.1000e-004	0.0358		101.4961	101.4961	7.7100e-003		101.6888
Worker	0.1416	0.0805	1.1024	3.1800e-003	2.4701	1.9600e-003	2.4721	0.2999	1.8100e-003	0.3017		317.2973	317.2973	7.5700e-003		317.4865
Total	**0.5164**	**14.9818**	**3.5320**	**0.0728**	**6.5089**	**0.0711**	**6.5800**	**1.0326**	**0.0679**	**1.1006**		**7,713.2185**	**7,713.2185**	**0.2466**		**7,719.3837**

3.3 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397		250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**		**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.3 Restoration - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1800e-003	0.1700	0.0296	4.8000e-004	1.4890	2.7000e-004	1.4893	0.1507	2.6000e-004	0.1509		50.3155	50.3155	3.6500e-003		50.4066
Worker	0.0265	0.0145	0.2034	6.1000e-004	4.4479	3.8000e-004	4.4483	0.4546	3.5000e-004	0.4549		61.1407	61.1407	1.3600e-003		61.1747
Total	**0.0307**	**0.1845**	**0.2330**	**1.0900e-003**	**5.9369**	**6.5000e-004**	**5.9375**	**0.6052**	**6.1000e-004**	**0.6058**		**111.4562**	**111.4562**	**5.0100e-003**		**111.5814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397	0.0000	250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**	**0.0000**	**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.3 Restoration - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1800e-003	0.1700	0.0296	4.8000e-004	0.1557	2.7000e-004	0.1559	0.0176	2.6000e-004	0.0178		50.3155	50.3155	3.6500e-003		50.4066
Worker	0.0265	0.0145	0.2034	6.1000e-004	0.4940	3.8000e-004	0.4944	0.0600	3.5000e-004	0.0603		61.1407	61.1407	1.3600e-003		61.1747
Total	**0.0307**	**0.1845**	**0.2330**	**1.0900e-003**	**0.6497**	**6.5000e-004**	**0.6503**	**0.0776**	**6.1000e-004**	**0.0782**		**111.4562**	**111.4562**	**5.0100e-003**		**111.5814**

3.4 Grading and Road Upgrades - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2164	0.0000	8.2164	4.2133	0.0000	4.2133			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987		2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**8.2164**	**1.1943**	**9.4107**	**4.2133**	**1.0987**	**5.3120**		**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.4 Grading and Road Upgrades - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4900e-003	0.1797	0.0319	4.8000e-004	1.4890	3.2000e-004	1.4893	0.1507	3.1000e-004	0.1510		50.7481	50.7481	3.8500e-003		50.8444
Worker	0.0566	0.0322	0.4409	1.2700e-003	8.8958	7.9000e-004	8.8966	0.9092	7.2000e-004	0.9099		126.9189	126.9189	3.0300e-003		126.9946
Total	**0.0611**	**0.2119**	**0.4728**	**1.7500e-003**	**10.3848**	**1.1100e-003**	**10.3859**	**1.0598**	**1.0300e-003**	**1.0608**		**177.6670**	**177.6670**	**6.8800e-003**		**177.8390**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6974	0.0000	3.6974	1.8960	0.0000	1.8960			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987	0.0000	2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**3.6974**	**1.1943**	**4.8916**	**1.8960**	**1.0987**	**2.9947**	**0.0000**	**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.4 Grading and Road Upgrades - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4900e-003	0.1797	0.0319	4.8000e-004	0.1557	3.2000e-004	0.1560	0.0176	3.1000e-004	0.0179		50.7481	50.7481	3.8500e-003		50.8444
Worker	0.0566	0.0322	0.4409	1.2700e-003	0.9881	7.9000e-004	0.9888	0.1199	7.2000e-004	0.1207		126.9189	126.9189	3.0300e-003		126.9946
Total	**0.0611**	**0.2119**	**0.4728**	**1.7500e-003**	**1.1437**	**1.1100e-003**	**1.1448**	**0.1375**	**1.0300e-003**	**0.1386**		**177.6670**	**177.6670**	**6.8800e-003**		**177.8390**

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798		3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**		**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0180	0.7189	0.1275	1.9200e-003	5.9560	1.2800e-003	5.9573	0.6026	1.2200e-003	0.6038		202.9922	202.9922	0.0154		203.3776
Worker	0.3208	0.1825	2.4987	7.2200e-003	50.4094	4.4500e-003	50.4139	5.1518	4.1000e-003	5.1559		719.2072	719.2072	0.0172		719.6361
Total	**0.3388**	**0.9015**	**2.6262**	**9.1400e-003**	**56.3654**	**5.7300e-003**	**56.3711**	**5.7545**	**5.3200e-003**	**5.7598**		**922.1994**	**922.1994**	**0.0326**		**923.0136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798	0.0000	3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**	**0.0000**	**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0180	0.7189	0.1275	1.9200e-003	0.6226	1.2800e-003	0.6239	0.0703	1.2200e-003	0.0716		202.9922	202.9922	0.0154		203.3776
Worker	0.3208	0.1825	2.4987	7.2200e-003	5.5989	4.4500e-003	5.6034	0.6797	4.1000e-003	0.6838		719.2072	719.2072	0.0172		719.6361
Total	**0.3388**	**0.9015**	**2.6262**	**9.1400e-003**	**6.2215**	**5.7300e-003**	**6.2273**	**0.7500**	**5.3200e-003**	**0.7553**		**922.1994**	**922.1994**	**0.0326**		**923.0136**

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755		3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**		**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0167	0.6799	0.1186	1.9100e-003	5.9560	1.0800e-003	5.9571	0.6026	1.0300e-003	0.6036		201.2618	201.2618	0.0146		201.6266
Worker	0.3001	0.1643	2.3047	6.9500e-003	50.4094	4.3300e-003	50.4137	5.1518	3.9900e-003	5.1558		692.9284	692.9284	0.0154		693.3136
Total	**0.3168**	**0.8441**	**2.4232**	**8.8600e-003**	**56.3654**	**5.4100e-003**	**56.3708**	**5.7545**	**5.0200e-003**	**5.7595**		**894.1902**	**894.1902**	**0.0300**		**894.9402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755	0.0000	3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**	**0.0000**	**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0167	0.6799	0.1186	1.9100e-003	0.6226	1.0800e-003	0.6237	0.0703	1.0300e-003	0.0714		201.2618	201.2618	0.0146		201.6266
Worker	0.3001	0.1643	2.3047	6.9500e-003	5.5989	4.3300e-003	5.6033	0.6797	3.9900e-003	0.6837		692.9284	692.9284	0.0154		693.3136
Total	**0.3168**	**0.8441**	**2.4232**	**8.8600e-003**	**6.2215**	**5.4100e-003**	**6.2269**	**0.7500**	**5.0200e-003**	**0.7550**		**894.1902**	**894.1902**	**0.0300**		**894.9402**

3.6 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.6 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1800e-003	0.1700	0.0296	4.8000e-004	1.4890	2.7000e-004	1.4893	0.1507	2.6000e-004	0.1509		50.3155	50.3155	3.6500e-003		50.4066
Worker	0.1412	0.0773	1.0846	3.2700e-003	23.7221	2.0400e-003	23.7241	2.4244	1.8800e-003	2.4263		326.0840	326.0840	7.2500e-003		326.2652
Total	**0.1454**	**0.2473**	**1.1142**	**3.7500e-003**	**25.2111**	**2.3100e-003**	**25.2134**	**2.5751**	**2.1400e-003**	**2.5772**		**376.3994**	**376.3994**	**0.0109**		**376.6719**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.6 Tower Wiring, Mechanical Completion - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1800e-003	0.1700	0.0296	4.8000e-004	0.1557	2.7000e-004	0.1559	0.0176	2.6000e-004	0.0178		50.3155	50.3155	3.6500e-003		50.4066
Worker	0.1412	0.0773	1.0846	3.2700e-003	2.6348	2.0400e-003	2.6368	0.3199	1.8800e-003	0.3217		326.0840	326.0840	7.2500e-003		326.2652
Total	**0.1454**	**0.2473**	**1.1142**	**3.7500e-003**	**2.7904**	**2.3100e-003**	**2.7928**	**0.3374**	**2.1400e-003**	**0.3396**		**376.3994**	**376.3994**	**0.0109**		**376.6719**

3.7 Commissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Commissioning - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1800e-003	0.1700	0.0296	4.8000e-004	1.4890	2.7000e-004	1.4893	0.1507	2.6000e-004	0.1509		50.3155	50.3155	3.6500e-003		50.4066
Worker	0.0530	0.0290	0.4067	1.2300e-003	8.8958	7.6000e-004	8.8965	0.9092	7.0000e-004	0.9099		122.2815	122.2815	2.7200e-003		122.3495
Total	**0.0571**	**0.1990**	**0.4363**	**1.7100e-003**	**10.3848**	**1.0300e-003**	**10.3858**	**1.0598**	**9.6000e-004**	**1.0608**		**172.5969**	**172.5969**	**6.3700e-003**		**172.7561**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Commissioning - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1800e-003	0.1700	0.0296	4.8000e-004	0.1557	2.7000e-004	0.1559	0.0176	2.6000e-004	0.0178		50.3155	50.3155	3.6500e-003		50.4066
Worker	0.0530	0.0290	0.4067	1.2300e-003	0.9881	7.6000e-004	0.9888	0.1199	7.0000e-004	0.1207		122.2815	122.2815	2.7200e-003		122.3495
Total	**0.0571**	**0.1990**	**0.4363**	**1.7100e-003**	**1.1437**	**1.0300e-003**	**1.1447**	**0.1375**	**9.6000e-004**	**0.1385**		**172.5969**	**172.5969**	**6.3700e-003**		**172.7561**

3.8 WTG Foundation Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745		3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**		**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.8 WTG Foundation Installation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1772	7.9118	1.0404	0.0274	27.4092	0.0241	27.4333	2.8443	0.0231	2.8674		2,909.5796	2,909.5796	0.1690		2,913.8045
Vendor	0.0135	0.5392	0.0957	1.4400e-003	4.4670	9.6000e-004	4.4680	0.4520	9.2000e-004	0.4529		152.2442	152.2442	0.0116		152.5332
Worker	0.3020	0.1718	2.3517	6.7900e-003	47.4441	4.1900e-003	47.4483	4.8488	3.8600e-003	4.8527		676.9009	676.9009	0.0162		677.3045
Total	**0.4926**	**8.6228**	**3.4877**	**0.0356**	**79.3204**	**0.0292**	**79.3496**	**8.1451**	**0.0278**	**8.1729**		**3,738.7246**	**3,738.7246**	**0.1967**		**3,743.6422**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745	0.0000	3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**	**0.0000**	**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.8 WTG Foundation Installation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1772	7.9118	1.0404	0.0274	3.2485	0.0241	3.2726	0.4331	0.0231	0.4561		2,909.5796	2,909.5796	0.1690		2,913.8045
Vendor	0.0135	0.5392	0.0957	1.4400e-003	0.4670	9.6000e-004	0.4679	0.0528	9.2000e-004	0.0537		152.2442	152.2442	0.0116		152.5332
Worker	0.3020	0.1718	2.3517	6.7900e-003	5.2696	4.1900e-003	5.2738	0.6397	3.8600e-003	0.6436		676.9009	676.9009	0.0162		677.3045
Total	**0.4926**	**8.6228**	**3.4877**	**0.0356**	**8.9850**	**0.0292**	**9.0143**	**1.1255**	**0.0278**	**1.1533**		**3,738.7246**	**3,738.7246**	**0.1967**		**3,743.6422**

3.9 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516		886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**		**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.9 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.4900e-003	0.2377	0.0333	8.9000e-004	0.9036	6.6000e-004	0.9043	0.0938	6.3000e-004	0.0944		94.8275	94.8275	5.3500e-003		94.9612
Vendor	0.0251	1.0198	0.1779	2.8600e-003	8.9340	1.6100e-003	8.9356	0.9039	1.5400e-003	0.9055		301.8927	301.8927	0.0219		302.4398
Worker	0.0530	0.0290	0.4067	1.2300e-003	8.8958	7.6000e-004	8.8965	0.9092	7.0000e-004	0.9099		122.2815	122.2815	2.7200e-003		122.3495
Total	**0.0836**	**1.2864**	**0.6178**	**4.9800e-003**	**18.7334**	**3.0300e-003**	**18.7364**	**1.9068**	**2.8700e-003**	**1.9097**		**519.0017**	**519.0017**	**0.0300**		**519.7505**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516	0.0000	886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**	**0.0000**	**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.9 Overhead Electrical Collector System Improvements - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.4900e-003	0.2377	0.0333	8.9000e-004	0.1071	6.6000e-004	0.1078	0.0143	6.3000e-004	0.0149		94.8275	94.8275	5.3500e-003		94.9612
Vendor	0.0251	1.0198	0.1779	2.8600e-003	0.9339	1.6100e-003	0.9355	0.1055	1.5400e-003	0.1070		301.8927	301.8927	0.0219		302.4398
Worker	0.0530	0.0290	0.4067	1.2300e-003	0.9881	7.6000e-004	0.9888	0.1199	7.0000e-004	0.1207		122.2815	122.2815	2.7200e-003		122.3495
Total	**0.0836**	**1.2864**	**0.6178**	**4.9800e-003**	**2.0290**	**3.0300e-003**	**2.0321**	**0.2397**	**2.8700e-003**	**0.2426**		**519.0017**	**519.0017**	**0.0300**		**519.7505**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MVPP I & II Wind Repower Project

Riverside-Salton Sea County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.

Grading - Based on applicant provided information.

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

MVPP I & II Wind Repower Project - Riverside-Salton Sea County, Winter

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	100.00	50.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	10.00	95.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	50.00
tblConstructionPhase	NumDays	1.00	25.00
tblConstructionPhase	NumDays	100.00	20.00
tblConstructionPhase	PhaseEndDate	1/5/2022	2/18/2022
tblConstructionPhase	PhaseEndDate	5/25/2022	4/1/2022
tblConstructionPhase	PhaseEndDate	10/12/2022	5/6/2022
tblConstructionPhase	PhaseEndDate	8/13/2021	12/10/2021
tblConstructionPhase	PhaseEndDate	8/18/2021	10/8/2021
tblConstructionPhase	PhaseEndDate	10/19/2022	12/17/2021
tblConstructionPhase	PhaseEndDate	8/16/2021	5/27/2022
tblConstructionPhase	PhaseStartDate	8/19/2021	12/13/2021
tblConstructionPhase	PhaseStartDate	1/6/2022	2/28/2022
tblConstructionPhase	PhaseStartDate	5/26/2022	4/4/2022
tblConstructionPhase	PhaseStartDate	8/17/2021	8/16/2021
tblConstructionPhase	PhaseStartDate	10/13/2022	10/11/2021
tblConstructionPhase	PhaseStartDate	8/14/2021	4/25/2022
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00

tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialImported	0.00	8,199.00
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	10.00

tblOffRoadEquipment	UsageHours	1.00	10.00
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,268.00

tblTripsAndVMT	HaulingTripNumber	0.00	1,820.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	10.00	64.00
tblTripsAndVMT	WorkerTripNumber	0.00	68.00
tblTripsAndVMT	WorkerTripNumber	0.00	32.00
tblTripsAndVMT	WorkerTripNumber	3.00	6.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.7936	70.8947	44.7665	0.1782	135.6858	2.3615	137.7083	13.8996	2.2157	15.8349	0.0000	18,139.5429	18,139.5429	2.0740	0.0000	18,191.3927
2022	2.5476	26.5879	22.6363	0.0545	75.0988	1.0083	76.1071	7.6613	0.9351	8.5964	0.0000	5,332.9593	5,332.9593	1.2572	0.0000	5,364.3890
Maximum	**5.7936**	**70.8947**	**44.7665**	**0.1782**	**135.6858**	**2.3615**	**137.7083**	**13.8996**	**2.2157**	**15.8349**	**0.0000**	**18,139.5429**	**18,139.5429**	**2.0740**	**0.0000**	**18,191.3927**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.7936	70.8947	44.7665	0.1782	16.9630	2.3615	19.3074	3.2886	2.2157	5.5013	0.0000	18,139.5429	18,139.5429	2.0740	0.0000	18,191.3927
2022	2.5476	26.5879	22.6363	0.0545	8.2506	1.0083	9.2588	0.9897	0.9351	1.9248	0.0000	5,332.9593	5,332.9593	1.2572	0.0000	5,364.3890
Maximum	**5.7936**	**70.8947**	**44.7665**	**0.1782**	**16.9630**	**2.3615**	**19.3074**	**3.2886**	**2.2157**	**5.5013**	**0.0000**	**18,139.5429**	**18,139.5429**	**2.0740**	**0.0000**	**18,191.3927**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**88.04**	**0.00**	**86.64**	**80.16**	**0.00**	**69.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	8/2/2021	12/10/2021	5	95	
2	Restoration	Site Preparation	4/25/2022	5/27/2022	5	25	
3	Grading and Road Upgrades	Grading	8/16/2021	10/8/2021	5	40	
4	WTG/Met Tower Erection	Building Construction	12/13/2021	2/18/2022	5	50	
5	Tower Wiring, Mechanical Completion	Building Construction	2/28/2022	4/1/2022	5	25	
6	Commissioning	Building Construction	4/4/2022	5/6/2022	5	25	
7	WTG Foundation Installation	Paving	10/11/2021	12/17/2021	5	50	
8	Overhead Electrical Collector System Improvements	Building Construction	2/7/2022	3/4/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	1	10.00	231	0.29

WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Grading and Road Upgrades	Concrete/Industrial Saws	0	8.00	81	0.73
Grading and Road Upgrades	Graders	1	10.00	187	0.41
Grading and Road Upgrades	Rollers	2	10.00	80	0.38
Grading and Road Upgrades	Rubber Tired Dozers	1	10.00	247	0.40
Grading and Road Upgrades	Tractors/Loaders/Backhoes	0	6.00	97	0.37
WTG Foundation Installation	Cement and Mortar Mixers	0	6.00	9	0.56
WTG Foundation Installation	Excavators	2	10.00	158	0.38
WTG Foundation Installation	Pavers	0	7.00	130	0.42
WTG Foundation Installation	Pumps	1	10.00	84	0.74
WTG Foundation Installation	Rollers	0	7.00	80	0.38
WTG Foundation Installation	Rubber Tired Dozers	1	10.00	247	0.40
WTG Foundation Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
WTG/Met Tower Erection	Aerial Lifts	1	5.00	63	0.31
WTG/Met Tower Erection	Cranes	2	10.00	231	0.29
WTG/Met Tower Erection	Forklifts	0	6.00	89	0.20
WTG/Met Tower Erection	Generator Sets	1	5.00	84	0.74
WTG/Met Tower Erection	Rough Terrain Forklifts	3	10.00	100	0.40
WTG/Met Tower Erection	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Tower Wiring, Mechanical Completion	Cranes	0	4.00	231	0.29
Tower Wiring, Mechanical Completion	Forklifts	0	6.00	89	0.20
Tower Wiring, Mechanical Completion	Generator Sets	2	10.00	84	0.74
Tower Wiring, Mechanical Completion	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Commissioning	Cranes	0	4.00	231	0.29
Commissioning	Forklifts	0	6.00	89	0.20
Commissioning	Generator Sets	2	10.00	84	0.74
Commissioning	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Overhead Electrical Collector System Improvements	Cranes	1	10.00	231	0.29
Overhead Electrical Collector System Improvements	Forklifts	0	6.00	89	0.20
Overhead Electrical Collector System Improvements	Tractors/Loaders/Backhoes	1	5.00	97	0.37
WTG Removal	Crushing/Proc. Equipment	1	10.00	85	0.78

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	30.00	4.00	2,268.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Grading and Road Upgrades	4	12.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG Foundation Installation	4	64.00	6.00	1,820.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG/Met Tower Erection	7	68.00	8.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Tower Wiring, Mechanical Completio	2	32.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	6.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Commissioning	2	12.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Overhead Electrical Collector System Impr	2	12.00	12.00	24.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2646	0.0000	3.2646	0.4943	0.0000	0.4943			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448		3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**3.2646**	**1.0948**	**4.3594**	**0.4943**	**1.0448**	**1.5391**		**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3719	15.0659	2.4718	0.0682	20.8415	0.0687	20.9102	2.4056	0.0657	2.4714		7,246.4795	7,246.4795	0.2417		7,252.5221
Vendor	9.5500e-003	0.3557	0.0759	9.2000e-004	2.9780	6.6000e-004	2.9787	0.3013	6.3000e-004	0.3019		97.3850	97.3850	8.6000e-003		97.6000
Worker	0.1388	0.0833	0.8901	2.8600e-003	22.2394	1.9600e-003	22.2414	2.2729	1.8100e-003	2.2747		284.6522	284.6522	6.5800e-003		284.8167
Total	**0.5202**	**15.5049**	**3.4377**	**0.0720**	**46.0590**	**0.0713**	**46.1303**	**4.9798**	**0.0682**	**5.0480**		**7,628.5166**	**7,628.5166**	**0.2569**		**7,634.9388**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4691	0.0000	1.4691	0.2224	0.0000	0.2224			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448	0.0000	3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**1.4691**	**1.0948**	**2.5639**	**0.2224**	**1.0448**	**1.2672**	**0.0000**	**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3719	15.0659	2.4718	0.0682	3.7275	0.0687	3.7962	0.6976	0.0657	0.7634		7,246.4795	7,246.4795	0.2417		7,252.5221
Vendor	9.5500e-003	0.3557	0.0759	9.2000e-004	0.3113	6.6000e-004	0.3120	0.0352	6.3000e-004	0.0358		97.3850	97.3850	8.6000e-003		97.6000
Worker	0.1388	0.0833	0.8901	2.8600e-003	2.4701	1.9600e-003	2.4721	0.2999	1.8100e-003	0.3017		284.6522	284.6522	6.5800e-003		284.8167
Total	**0.5202**	**15.5049**	**3.4377**	**0.0720**	**6.5089**	**0.0713**	**6.5802**	**1.0326**	**0.0682**	**1.1008**		**7,628.5166**	**7,628.5166**	**0.2569**		**7,634.9388**

3.3 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397		250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**		**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.3 Restoration - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4600e-003	0.1680	0.0354	4.6000e-004	1.4890	2.8000e-004	1.4893	0.1507	2.7000e-004	0.1509		48.2659	48.2659	4.0700e-003		48.3677
Worker	0.0261	0.0150	0.1639	5.5000e-004	4.4479	3.8000e-004	4.4483	0.4546	3.5000e-004	0.4549		54.8531	54.8531	1.1800e-003		54.8827
Total	**0.0305**	**0.1830**	**0.1993**	**1.0100e-003**	**5.9369**	**6.6000e-004**	**5.9376**	**0.6052**	**6.2000e-004**	**0.6059**		**103.1189**	**103.1189**	**5.2500e-003**		**103.2504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397	0.0000	250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**	**0.0000**	**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.3 Restoration - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4600e-003	0.1680	0.0354	4.6000e-004	0.1557	2.8000e-004	0.1559	0.0176	2.7000e-004	0.0179		48.2659	48.2659	4.0700e-003		48.3677
Worker	0.0261	0.0150	0.1639	5.5000e-004	0.4940	3.8000e-004	0.4944	0.0600	3.5000e-004	0.0603		54.8531	54.8531	1.1800e-003		54.8827
Total	**0.0305**	**0.1830**	**0.1993**	**1.0100e-003**	**0.6497**	**6.6000e-004**	**0.6503**	**0.0776**	**6.2000e-004**	**0.0782**		**103.1189**	**103.1189**	**5.2500e-003**		**103.2504**

3.4 Grading and Road Upgrades - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2164	0.0000	8.2164	4.2133	0.0000	4.2133			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987		2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**8.2164**	**1.1943**	**9.4107**	**4.2133**	**1.0987**	**5.3120**		**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.4 Grading and Road Upgrades - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7800e-003	0.1779	0.0379	4.6000e-004	1.4890	3.3000e-004	1.4893	0.1507	3.2000e-004	0.1510		48.6925	48.6925	4.3000e-003		48.8000
Worker	0.0555	0.0333	0.3560	1.1400e-003	8.8958	7.9000e-004	8.8966	0.9092	7.2000e-004	0.9099		113.8609	113.8609	2.6300e-003		113.9267
Total	**0.0603**	**0.2112**	**0.3940**	**1.6000e-003**	**10.3848**	**1.1200e-003**	**10.3859**	**1.0598**	**1.0400e-003**	**1.0608**		**162.5534**	**162.5534**	**6.9300e-003**		**162.7267**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6974	0.0000	3.6974	1.8960	0.0000	1.8960			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987	0.0000	2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**3.6974**	**1.1943**	**4.8916**	**1.8960**	**1.0987**	**2.9947**	**0.0000**	**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.4 Grading and Road Upgrades - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.7800e-003	0.1779	0.0379	4.6000e-004	0.1557	3.3000e-004	0.1560	0.0176	3.2000e-004	0.0179		48.6925	48.6925	4.3000e-003		48.8000
Worker	0.0555	0.0333	0.3560	1.1400e-003	0.9881	7.9000e-004	0.9888	0.1199	7.2000e-004	0.1207		113.8609	113.8609	2.6300e-003		113.9267
Total	**0.0603**	**0.2112**	**0.3940**	**1.6000e-003**	**1.1437**	**1.1200e-003**	**1.1448**	**0.1375**	**1.0400e-003**	**0.1386**		**162.5534**	**162.5534**	**6.9300e-003**		**162.7267**

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798		3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**		**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0191	0.7114	0.1518	1.8500e-003	5.9560	1.3200e-003	5.9573	0.6026	1.2600e-003	0.6039		194.7700	194.7700	0.0172		195.2000
Worker	0.3147	0.1888	2.0175	6.4700e-003	50.4094	4.4500e-003	50.4139	5.1518	4.1000e-003	5.1559		645.2116	645.2116	0.0149		645.5845
Total	**0.3338**	**0.9002**	**2.1692**	**8.3200e-003**	**56.3654**	**5.7700e-003**	**56.3712**	**5.7545**	**5.3600e-003**	**5.7598**		**839.9815**	**839.9815**	**0.0321**		**840.7845**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798	0.0000	3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**	**0.0000**	**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0191	0.7114	0.1518	1.8500e-003	0.6226	1.3200e-003	0.6239	0.0703	1.2600e-003	0.0716		194.7700	194.7700	0.0172		195.2000
Worker	0.3147	0.1888	2.0175	6.4700e-003	5.5989	4.4500e-003	5.6034	0.6797	4.1000e-003	0.6838		645.2116	645.2116	0.0149		645.5845
Total	**0.3338**	**0.9002**	**2.1692**	**8.3200e-003**	**6.2215**	**5.7700e-003**	**6.2273**	**0.7500**	**5.3600e-003**	**0.7554**		**839.9815**	**839.9815**	**0.0321**		**840.7845**

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755		3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**		**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0178	0.6719	0.1416	1.8300e-003	5.9560	1.1100e-003	5.9571	0.6026	1.0600e-003	0.6037		193.0634	193.0634	0.0163		193.4709
Worker	0.2952	0.1698	1.8580	6.2300e-003	50.4094	4.3300e-003	50.4137	5.1518	3.9900e-003	5.1558		621.6683	621.6683	0.0134		622.0037
Total	**0.3130**	**0.8417**	**1.9996**	**8.0600e-003**	**56.3654**	**5.4400e-003**	**56.3709**	**5.7545**	**5.0500e-003**	**5.7595**		**814.7317**	**814.7317**	**0.0297**		**815.4745**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755	0.0000	3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**	**0.0000**	**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0178	0.6719	0.1416	1.8300e-003	0.6226	1.1100e-003	0.6237	0.0703	1.0600e-003	0.0714		193.0634	193.0634	0.0163		193.4709
Worker	0.2952	0.1698	1.8580	6.2300e-003	5.5989	4.3300e-003	5.6033	0.6797	3.9900e-003	0.6837		621.6683	621.6683	0.0134		622.0037
Total	**0.3130**	**0.8417**	**1.9996**	**8.0600e-003**	**6.2215**	**5.4400e-003**	**6.2270**	**0.7500**	**5.0500e-003**	**0.7551**		**814.7317**	**814.7317**	**0.0297**		**815.4745**

3.6 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.6 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4600e-003	0.1680	0.0354	4.6000e-004	1.4890	2.8000e-004	1.4893	0.1507	2.7000e-004	0.1509		48.2659	48.2659	4.0700e-003		48.3677
Worker	0.1389	0.0799	0.8744	2.9300e-003	23.7221	2.0400e-003	23.7241	2.4244	1.8800e-003	2.4263		292.5498	292.5498	6.3100e-003		292.7076
Total	**0.1434**	**0.2479**	**0.9098**	**3.3900e-003**	**25.2111**	**2.3200e-003**	**25.2134**	**2.5751**	**2.1500e-003**	**2.5772**		**340.8156**	**340.8156**	**0.0104**		**341.0753**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.6 Tower Wiring, Mechanical Completion - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4600e-003	0.1680	0.0354	4.6000e-004	0.1557	2.8000e-004	0.1559	0.0176	2.7000e-004	0.0179		48.2659	48.2659	4.0700e-003		48.3677
Worker	0.1389	0.0799	0.8744	2.9300e-003	2.6348	2.0400e-003	2.6368	0.3199	1.8800e-003	0.3217		292.5498	292.5498	6.3100e-003		292.7076
Total	**0.1434**	**0.2479**	**0.9098**	**3.3900e-003**	**2.7904**	**2.3200e-003**	**2.7928**	**0.3374**	**2.1500e-003**	**0.3396**		**340.8156**	**340.8156**	**0.0104**		**341.0753**

3.7 Commissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Commissioning - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4600e-003	0.1680	0.0354	4.6000e-004	1.4890	2.8000e-004	1.4893	0.1507	2.7000e-004	0.1509		48.2659	48.2659	4.0700e-003		48.3677
Worker	0.0521	0.0300	0.3279	1.1000e-003	8.8958	7.6000e-004	8.8965	0.9092	7.0000e-004	0.9099		109.7062	109.7062	2.3700e-003		109.7654
Total	**0.0566**	**0.1979**	**0.3633**	**1.5600e-003**	**10.3848**	**1.0400e-003**	**10.3858**	**1.0598**	**9.7000e-004**	**1.0608**		**157.9720**	**157.9720**	**6.4400e-003**		**158.1331**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Commissioning - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.4600e-003	0.1680	0.0354	4.6000e-004	0.1557	2.8000e-004	0.1559	0.0176	2.7000e-004	0.0179		48.2659	48.2659	4.0700e-003		48.3677
Worker	0.0521	0.0300	0.3279	1.1000e-003	0.9881	7.6000e-004	0.9888	0.1199	7.0000e-004	0.1207		109.7062	109.7062	2.3700e-003		109.7654
Total	**0.0566**	**0.1979**	**0.3633**	**1.5600e-003**	**1.1437**	**1.0400e-003**	**1.1447**	**0.1375**	**9.7000e-004**	**0.1385**		**157.9720**	**157.9720**	**6.4400e-003**		**158.1331**

3.8 WTG Foundation Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745		3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**		**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.8 WTG Foundation Installation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1865	7.9654	1.2136	0.0267	27.4092	0.0244	27.4337	2.8443	0.0234	2.8677		2,836.4773	2,836.4773	0.1849		2,841.0995
Vendor	0.0143	0.5336	0.1138	1.3900e-003	4.4670	9.9000e-004	4.4680	0.4520	9.5000e-004	0.4529		146.0775	146.0775	0.0129		146.4000
Worker	0.2962	0.1777	1.8988	6.0900e-003	47.4441	4.1900e-003	47.4483	4.8488	3.8600e-003	4.8527		607.2579	607.2579	0.0140		607.6089
Total	**0.4970**	**8.6766**	**3.2263**	**0.0342**	**79.3204**	**0.0296**	**79.3500**	**8.1451**	**0.0282**	**8.1733**		**3,589.8127**	**3,589.8127**	**0.2118**		**3,595.1084**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745	0.0000	3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**	**0.0000**	**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.8 WTG Foundation Installation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1865	7.9654	1.2136	0.0267	3.2485	0.0244	3.2729	0.4331	0.0234	0.4564		2,836.4773	2,836.4773	0.1849		2,841.0995
Vendor	0.0143	0.5336	0.1138	1.3900e-003	0.4670	9.9000e-004	0.4679	0.0528	9.5000e-004	0.0537		146.0775	146.0775	0.0129		146.4000
Worker	0.2962	0.1777	1.8988	6.0900e-003	5.2696	4.1900e-003	5.2738	0.6397	3.8600e-003	0.6436		607.2579	607.2579	0.0140		607.6089
Total	**0.4970**	**8.6766**	**3.2263**	**0.0342**	**8.9850**	**0.0296**	**9.0147**	**1.1255**	**0.0282**	**1.1537**		**3,589.8127**	**3,589.8127**	**0.2118**		**3,595.1084**

3.9 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516		886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**		**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.9 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.7800e-003	0.2387	0.0387	8.7000e-004	0.9036	6.7000e-004	0.9043	0.0938	6.4000e-004	0.0944		92.4249	92.4249	5.8500e-003		92.5711
Vendor	0.0268	1.0078	0.2124	2.7500e-003	8.9340	1.6700e-003	8.9357	0.9039	1.6000e-003	0.9055		289.5951	289.5951	0.0245		290.2063
Worker	0.0521	0.0300	0.3279	1.1000e-003	8.8958	7.6000e-004	8.8965	0.9092	7.0000e-004	0.9099		109.7062	109.7062	2.3700e-003		109.7654
Total	**0.0846**	**1.2765**	**0.5790**	**4.7200e-003**	**18.7334**	**3.1000e-003**	**18.7365**	**1.9068**	**2.9400e-003**	**1.9098**		**491.7262**	**491.7262**	**0.0327**		**492.5427**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516	0.0000	886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**	**0.0000**	**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.9 Overhead Electrical Collector System Improvements - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.7800e-003	0.2387	0.0387	8.7000e-004	0.1071	6.7000e-004	0.1078	0.0143	6.4000e-004	0.0149		92.4249	92.4249	5.8500e-003		92.5711
Vendor	0.0268	1.0078	0.2124	2.7500e-003	0.9339	1.6700e-003	0.9356	0.1055	1.6000e-003	0.1071		289.5951	289.5951	0.0245		290.2063
Worker	0.0521	0.0300	0.3279	1.1000e-003	0.9881	7.6000e-004	0.9888	0.1199	7.0000e-004	0.1207		109.7062	109.7062	2.3700e-003		109.7654
Total	**0.0846**	**1.2765**	**0.5790**	**4.7200e-003**	**2.0290**	**3.1000e-003**	**2.0321**	**0.2397**	**2.9400e-003**	**0.2427**		**491.7262**	**491.7262**	**0.0327**		**492.5427**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MVPP I & II Wind Repower Project LST

Riverside-Salton Sea County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.

Grading - Based on applicant provided information.

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

MVPP I & II Wind Repower Project LST - Riverside-Salton Sea County, Summer

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	95.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	50.00
tblConstructionPhase	NumDays	100.00	50.00
tblConstructionPhase	NumDays	100.00	20.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	1.00	25.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialImported	0.00	8,199.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	1.00	10.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90

tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	1,424.00	0.00
tblTripsAndVMT	HaulingTripNumber	1,025.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7764	49.5335	38.1026	0.0720	11.4809	2.2891	13.7700	4.7076	2.1435	6.8511	0.0000	6,921.2135	6,921.2135	1.6907	0.0000	6,961.3455
2022	2.1499	24.4698	20.0577	0.0417	0.0000	0.9997	0.9997	0.0000	0.9271	0.9271	0.0000	4,026.5015	4,026.5015	1.1948	0.0000	4,056.3718
Maximum	**4.7764**	**49.5335**	**38.1026**	**0.0720**	**11.4809**	**2.2891**	**13.7700**	**4.7076**	**2.1435**	**6.8511**	**0.0000**	**6,921.2135**	**6,921.2135**	**1.6907**	**0.0000**	**6,961.3455**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7764	49.5335	38.1026	0.0720	5.1664	2.2891	7.4555	2.1184	2.1435	4.2620	0.0000	6,921.2135	6,921.2135	1.6907	0.0000	6,961.3455
2022	2.1499	24.4698	20.0577	0.0417	0.0000	0.9997	0.9997	0.0000	0.9271	0.9271	0.0000	4,026.5015	4,026.5015	1.1948	0.0000	4,056.3718
Maximum	**4.7764**	**49.5335**	**38.1026**	**0.0720**	**5.1664**	**2.2891**	**7.4555**	**2.1184**	**2.1435**	**4.2620**	**0.0000**	**6,921.2135**	**6,921.2135**	**1.6907**	**0.0000**	**6,961.3455**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.00**	**0.00**	**42.75**	**55.00**	**0.00**	**33.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	8/2/2021	12/10/2021	5	95	
2	Grading and Road Upgrades	Grading	8/16/2021	10/8/2021	5	40	
3	WTG Foundation Installation	Paving	10/11/2021	12/17/2021	5	50	
4	WTG/Met Tower Erection	Building Construction	12/13/2021	2/18/2022	5	50	
5	Overhead Electrical Collector System Improvements	Building Construction	2/7/2022	3/4/2022	5	20	
6	Tower Wiring, Mechanical Completion	Building Construction	2/28/2022	4/1/2022	5	25	
7	Commissioning	Building Construction	4/4/2022	5/6/2022	5	25	
8	Restoration	Site Preparation	4/25/2022	5/27/2022	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	1	10.00	231	0.29

WTG Removal	Crushing/Proc. Equipment	1	10.00	85	0.78
WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading and Road Upgrades	Concrete/Industrial Saws	0	8.00	81	0.73
Grading and Road Upgrades	Graders	1	10.00	187	0.41
Grading and Road Upgrades	Rollers	2	10.00	80	0.38
Grading and Road Upgrades	Rubber Tired Dozers	1	10.00	247	0.40
Grading and Road Upgrades	Tractors/Loaders/Backhoes	0	6.00	97	0.37
WTG/Met Tower Erection	Aerial Lifts	1	5.00	63	0.31
WTG/Met Tower Erection	Cranes	2	10.00	231	0.29
WTG/Met Tower Erection	Forklifts	0	6.00	89	0.20
WTG/Met Tower Erection	Generator Sets	1	5.00	84	0.74
WTG/Met Tower Erection	Rough Terrain Forklifts	3	10.00	100	0.40
WTG/Met Tower Erection	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Tower Wiring, Mechanical Completion	Cranes	0	4.00	231	0.29
Tower Wiring, Mechanical Completion	Forklifts	0	6.00	89	0.20
Tower Wiring, Mechanical Completion	Generator Sets	2	10.00	84	0.74
Tower Wiring, Mechanical Completion	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Commissioning	Cranes	0	4.00	231	0.29
Commissioning	Forklifts	0	6.00	89	0.20
Commissioning	Generator Sets	2	10.00	84	0.74

Commissioning	Tractors/Loaders/Backhoes	0	8.00	97	0.37
WTG Foundation Installation	Cement and Mortar Mixers	0	6.00	9	0.56
WTG Foundation Installation	Excavators	2	10.00	158	0.38
WTG Foundation Installation	Pavers	0	7.00	130	0.42
WTG Foundation Installation	Pumps	1	10.00	84	0.74
WTG Foundation Installation	Rollers	0	7.00	80	0.38
WTG Foundation Installation	Rubber Tired Dozers	1	10.00	247	0.40
WTG Foundation Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Overhead Electrical Collector System Improvements	Cranes	1	10.00	231	0.29
Overhead Electrical Collector System Improvements	Forklifts	0	6.00	89	0.20
Overhead Electrical Collector System Improvements	Tractors/Loaders/Backhoes	1	5.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	0.00	0.00	0.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Road Upgrades	4	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG/Met Tower Erection	7	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Tower Wiring, Mechanical Completio	2	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Commissioning	2	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG Foundation Installation	4	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Overhead Electrical Collector System Impr	2	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2646	0.0000	3.2646	0.4943	0.0000	0.4943			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448		3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**3.2646**	**1.0948**	**4.3594**	**0.4943**	**1.0448**	**1.5391**		**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4691	0.0000	1.4691	0.2224	0.0000	0.2224			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448	0.0000	3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**1.4691**	**1.0948**	**2.5639**	**0.2224**	**1.0448**	**1.2672**	**0.0000**	**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Mitigated Construction Off-Site

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

3.3 Grading and Road Upgrades - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2164	0.0000	8.2164	4.2133	0.0000	4.2133			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987		2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**8.2164**	**1.1943**	**9.4107**	**4.2133**	**1.0987**	**5.3120**		**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.3 Grading and Road Upgrades - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6974	0.0000	3.6974	1.8960	0.0000	1.8960			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987	0.0000	2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**3.6974**	**1.1943**	**4.8916**	**1.8960**	**1.0987**	**2.9947**	**0.0000**	**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.3 Grading and Road Upgrades - 2021

Mitigated Construction Off-Site

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

3.4 WTG Foundation Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745		3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**		**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.4 WTG Foundation Installation - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745	0.0000	3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**	**0.0000**	**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.4 WTG Foundation Installation - 2021

Mitigated Construction Off-Site

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

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798		3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**		**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798	0.0000	3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**	**0.0000**	**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Mitigated Construction Off-Site

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

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755		3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**		**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755	0.0000	3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**	**0.0000**	**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Mitigated Construction Off-Site

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

3.6 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516		886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**		**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.6 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516	0.0000	886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**	**0.0000**	**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.6 Overhead Electrical Collector System Improvements - 2022

Mitigated Construction Off-Site

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

3.7 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Tower Wiring, Mechanical Completion - 2022

Mitigated Construction Off-Site

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

3.8 Commissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.8 Commissioning - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.8 Commissioning - 2022

Mitigated Construction Off-Site

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

3.9 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397		250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**		**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.9 Restoration - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397	0.0000	250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**	**0.0000**	**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.9 Restoration - 2022

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MVPP I & II Wind Repower Project LST

Riverside-Salton Sea County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.

Grading - Based on applicant provided information.

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

MVPP I & II Wind Repower Project LST - Riverside-Salton Sea County, Winter

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	95.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	50.00
tblConstructionPhase	NumDays	100.00	50.00
tblConstructionPhase	NumDays	100.00	20.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	1.00	25.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialImported	0.00	8,199.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	1.00	10.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	HaulingPercentPave	100.00	97.50
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90

tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	1,424.00	0.00
tblTripsAndVMT	HaulingTripNumber	1,025.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7764	49.5335	38.1026	0.0720	11.4809	2.2891	13.7700	4.7076	2.1435	6.8511	0.0000	6,921.2135	6,921.2135	1.6907	0.0000	6,961.3455
2022	2.1499	24.4698	20.0577	0.0417	0.0000	0.9997	0.9997	0.0000	0.9271	0.9271	0.0000	4,026.5015	4,026.5015	1.1948	0.0000	4,056.3718
Maximum	**4.7764**	**49.5335**	**38.1026**	**0.0720**	**11.4809**	**2.2891**	**13.7700**	**4.7076**	**2.1435**	**6.8511**	**0.0000**	**6,921.2135**	**6,921.2135**	**1.6907**	**0.0000**	**6,961.3455**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7764	49.5335	38.1026	0.0720	5.1664	2.2891	7.4555	2.1184	2.1435	4.2620	0.0000	6,921.2135	6,921.2135	1.6907	0.0000	6,961.3455
2022	2.1499	24.4698	20.0577	0.0417	0.0000	0.9997	0.9997	0.0000	0.9271	0.9271	0.0000	4,026.5015	4,026.5015	1.1948	0.0000	4,056.3718
Maximum	**4.7764**	**49.5335**	**38.1026**	**0.0720**	**5.1664**	**2.2891**	**7.4555**	**2.1184**	**2.1435**	**4.2620**	**0.0000**	**6,921.2135**	**6,921.2135**	**1.6907**	**0.0000**	**6,961.3455**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.00**	**0.00**	**42.75**	**55.00**	**0.00**	**33.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	8/2/2021	12/10/2021	5	95	
2	Grading and Road Upgrades	Grading	8/16/2021	10/8/2021	5	40	
3	WTG Foundation Installation	Paving	10/11/2021	12/17/2021	5	50	
4	WTG/Met Tower Erection	Building Construction	12/13/2021	2/18/2022	5	50	
5	Overhead Electrical Collector System Improvements	Building Construction	2/7/2022	3/4/2022	5	20	
6	Tower Wiring, Mechanical Completion	Building Construction	2/28/2022	4/1/2022	5	25	
7	Commissioning	Building Construction	4/4/2022	5/6/2022	5	25	
8	Restoration	Site Preparation	4/25/2022	5/27/2022	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	1	10.00	231	0.29

MVPP I & II Wind Repower Project LST - Riverside-Salton Sea County, Winter

WTG Removal	Crushing/Proc. Equipment	1	10.00	85	0.78
WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading and Road Upgrades	Concrete/Industrial Saws	0	8.00	81	0.73
Grading and Road Upgrades	Graders	1	10.00	187	0.41
Grading and Road Upgrades	Rollers	2	10.00	80	0.38
Grading and Road Upgrades	Rubber Tired Dozers	1	10.00	247	0.40
Grading and Road Upgrades	Tractors/Loaders/Backhoes	0	6.00	97	0.37
WTG/Met Tower Erection	Aerial Lifts	1	5.00	63	0.31
WTG/Met Tower Erection	Cranes	2	10.00	231	0.29
WTG/Met Tower Erection	Forklifts	0	6.00	89	0.20
WTG/Met Tower Erection	Generator Sets	1	5.00	84	0.74
WTG/Met Tower Erection	Rough Terrain Forklifts	3	10.00	100	0.40
WTG/Met Tower Erection	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Tower Wiring, Mechanical Completion	Cranes	0	4.00	231	0.29
Tower Wiring, Mechanical Completion	Forklifts	0	6.00	89	0.20
Tower Wiring, Mechanical Completion	Generator Sets	2	10.00	84	0.74
Tower Wiring, Mechanical Completion	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Commissioning	Cranes	0	4.00	231	0.29
Commissioning	Forklifts	0	6.00	89	0.20
Commissioning	Generator Sets	2	10.00	84	0.74

Commissioning	Tractors/Loaders/Backhoes	0	8.00	97	0.37
WTG Foundation Installation	Cement and Mortar Mixers	0	6.00	9	0.56
WTG Foundation Installation	Excavators	2	10.00	158	0.38
WTG Foundation Installation	Pavers	0	7.00	130	0.42
WTG Foundation Installation	Pumps	1	10.00	84	0.74
WTG Foundation Installation	Rollers	0	7.00	80	0.38
WTG Foundation Installation	Rubber Tired Dozers	1	10.00	247	0.40
WTG Foundation Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Overhead Electrical Collector System Improvements	Cranes	1	10.00	231	0.29
Overhead Electrical Collector System Improvements	Forklifts	0	6.00	89	0.20
Overhead Electrical Collector System Improvements	Tractors/Loaders/Backhoes	1	5.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	0.00	0.00	0.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Grading and Road Upgrades	4	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG/Met Tower Erection	7	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Tower Wiring, Mechanical Completio	2	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Commissioning	2	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
WTG Foundation Installation	4	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Overhead Electrical Collector System Impr	2	0.00	0.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2646	0.0000	3.2646	0.4943	0.0000	0.4943			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448		3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**3.2646**	**1.0948**	**4.3594**	**0.4943**	**1.0448**	**1.5391**		**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4691	0.0000	1.4691	0.2224	0.0000	0.2224			0.0000			0.0000
Off-Road	2.4199	23.6031	20.2000	0.0402		1.0948	1.0948		1.0448	1.0448	0.0000	3,857.7488	3,857.7488	0.8239		3,878.3460
Total	**2.4199**	**23.6031**	**20.2000**	**0.0402**	**1.4691**	**1.0948**	**2.5639**	**0.2224**	**1.0448**	**1.2672**	**0.0000**	**3,857.7488**	**3,857.7488**	**0.8239**		**3,878.3460**

3.2 WTG Removal - 2021

Mitigated Construction Off-Site

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

3.3 Grading and Road Upgrades - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2164	0.0000	8.2164	4.2133	0.0000	4.2133			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987		2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**8.2164**	**1.1943**	**9.4107**	**4.2133**	**1.0987**	**5.3120**		**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.3 Grading and Road Upgrades - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6974	0.0000	3.6974	1.8960	0.0000	1.8960			0.0000			0.0000
Off-Road	2.3479	25.9304	11.9573	0.0255		1.1943	1.1943		1.0987	1.0987	0.0000	2,471.5176	2,471.5176	0.7993		2,491.5011
Total	**2.3479**	**25.9304**	**11.9573**	**0.0255**	**3.6974**	**1.1943**	**4.8916**	**1.8960**	**1.0987**	**2.9947**	**0.0000**	**2,471.5176**	**2,471.5176**	**0.7993**		**2,491.5011**

3.3 Grading and Road Upgrades - 2021

Mitigated Construction Off-Site

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

3.4 WTG Foundation Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745		3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**		**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.4 WTG Foundation Installation - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3565	23.1101	17.9025	0.0318		1.1487	1.1487		1.0745	1.0745	0.0000	3,063.4648	3,063.4648	0.7814		3,082.9995
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3565**	**23.1101**	**17.9025**	**0.0318**		**1.1487**	**1.1487**		**1.0745**	**1.0745**	**0.0000**	**3,063.4648**	**3,063.4648**	**0.7814**		**3,082.9995**

3.4 WTG Foundation Installation - 2021

Mitigated Construction Off-Site

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

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798		3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**		**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7411	20.5235	16.5469	0.0325		0.8385	0.8385		0.7798	0.7798	0.0000	3,139.5157	3,139.5157	0.9093		3,162.2486
Total	**1.7411**	**20.5235**	**16.5469**	**0.0325**		**0.8385**	**0.8385**		**0.7798**	**0.7798**	**0.0000**	**3,139.5157**	**3,139.5157**	**0.9093**		**3,162.2486**

3.5 WTG/Met Tower Erection - 2021

Mitigated Construction Off-Site

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

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755		3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**		**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5807	18.1922	16.2935	0.0325		0.7262	0.7262		0.6755	0.6755	0.0000	3,139.6892	3,139.6892	0.9080		3,162.3892
Total	**1.5807**	**18.1922**	**16.2935**	**0.0325**		**0.7262**	**0.7262**		**0.6755**	**0.6755**	**0.0000**	**3,139.6892**	**3,139.6892**	**0.9080**		**3,162.3892**

3.5 WTG/Met Tower Erection - 2022

Mitigated Construction Off-Site

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

3.6 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516		886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**		**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.6 Overhead Electrical Collector System Improvements - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5692	6.2776	3.7641	9.1600e-003		0.2735	0.2735		0.2516	0.2516	0.0000	886.8123	886.8123	0.2868		893.9826
Total	**0.5692**	**6.2776**	**3.7641**	**9.1600e-003**		**0.2735**	**0.2735**		**0.2516**	**0.2516**	**0.0000**	**886.8123**	**886.8123**	**0.2868**		**893.9826**

3.6 Overhead Electrical Collector System Improvements - 2022

Mitigated Construction Off-Site

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

3.7 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Tower Wiring, Mechanical Completion - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.7 Tower Wiring, Mechanical Completion - 2022

Mitigated Construction Off-Site

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

3.8 Commissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673		1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**		**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.8 Commissioning - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8250	7.3206	9.1899	0.0164		0.3673	0.3673		0.3673	0.3673	0.0000	1,557.5864	1,557.5864	0.0740		1,559.4365
Total	**0.8250**	**7.3206**	**9.1899**	**0.0164**		**0.3673**	**0.3673**		**0.3673**	**0.3673**	**0.0000**	**1,557.5864**	**1,557.5864**	**0.0740**		**1,559.4365**

3.8 Commissioning - 2022

Mitigated Construction Off-Site

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

3.9 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397		250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**		**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.9 Restoration - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0870	1.1608	1.7340	2.5900e-003		0.0431	0.0431		0.0397	0.0397	0.0000	250.4891	250.4891	0.0810		252.5144
Total	**0.0870**	**1.1608**	**1.7340**	**2.5900e-003**	**0.0000**	**0.0431**	**0.0431**	**0.0000**	**0.0397**	**0.0397**	**0.0000**	**250.4891**	**250.4891**	**0.0810**		**252.5144**

3.9 Restoration - 2022

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MVPP I & II Wind Repower Project Decommissioning

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2050
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.
Grading -

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	PhaseEndDate	1/14/2053	4/1/2053
tblConstructionPhase	PhaseEndDate	1/15/2053	5/1/2053

tblConstructionPhase	PhaseStartDate	1/15/2053	4/2/2053
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00

tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	1,424.00	2,232.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	3.00	6.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2053	0.0503	0.2026	0.5388	1.5200e-003	1.8546	3.4100e-003	1.8580	0.2040	3.4100e-003	0.2074	0.0000	130.4886	130.4886	3.9800e-003	0.0000	130.5880
Maximum	**0.0503**	**0.2026**	**0.5388**	**1.5200e-003**	**1.8546**	**3.4100e-003**	**1.8580**	**0.2040**	**3.4100e-003**	**0.2074**	**0.0000**	**130.4886**	**130.4886**	**3.9800e-003**	**0.0000**	**130.5880**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2053	0.0503	0.2026	0.5388	1.5200e-003	0.3038	3.4100e-003	0.3072	0.0448	3.4100e-003	0.0482	0.0000	130.4884	130.4884	3.9800e-003	0.0000	130.5878
Maximum	**0.0503**	**0.2026**	**0.5388**	**1.5200e-003**	**0.3038**	**3.4100e-003**	**0.3072**	**0.0448**	**3.4100e-003**	**0.0482**	**0.0000**	**130.4884**	**130.4884**	**3.9800e-003**	**0.0000**	**130.5878**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**83.62**	**0.00**	**83.47**	**78.04**	**0.00**	**76.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2053**	**3-31-2053**	0.2406	0.2406
2	**4-1-2053**	**6-30-2053**	0.0120	0.0120
		Highest	0.2406	0.2406

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	1/1/2053	4/1/2053	5	65	
2	Restoration	Site Preparation	4/2/2053	5/1/2053	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	2	10.00	231	0.29
WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	30.00	4.00	2,232.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	6.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1551	0.0000	0.1551	0.0235	0.0000	0.0235	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0491	0.1942	0.5181	1.4800e-003		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	127.4817	127.4817	3.8800e-003	0.0000	127.5786
Total	**0.0491**	**0.1942**	**0.5181**	**1.4800e-003**	**0.1551**	**3.3300e-003**	**0.1584**	**0.0235**	**3.3300e-003**	**0.0268**	**0.0000**	**127.4817**	**127.4817**	**3.8800e-003**	**0.0000**	**127.5786**

3.2 WTG Removal - 2053

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.8836	0.0000	0.8836	0.0976	0.0000	0.0976	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0892	0.0000	0.0892	8.9700e-003	0.0000	8.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.6666	0.0000	0.6666	0.0678	0.0000	0.0678	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.6393**	**0.0000**	**1.6393**	**0.1744**	**0.0000**	**0.1744**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0698	0.0000	0.0698	0.0106	0.0000	0.0106	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0491	0.1942	0.5181	1.4800e-003		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	127.4815	127.4815	3.8800e-003	0.0000	127.5785
Total	**0.0491**	**0.1942**	**0.5181**	**1.4800e-003**	**0.0698**	**3.3300e-003**	**0.0731**	**0.0106**	**3.3300e-003**	**0.0139**	**0.0000**	**127.4815**	**127.4815**	**3.8800e-003**	**0.0000**	**127.5785**

3.2 WTG Removal - 2053

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.1450	0.0000	0.1450	0.0239	0.0000	0.0239	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					9.1700e-003	0.0000	9.1700e-003	9.8000e-004	0.0000	9.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0733	0.0000	0.0733	8.6100e-003	0.0000	8.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.2275**	**0.0000**	**0.2275**	**0.0335**	**0.0000**	**0.0335**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Restoration - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2300e-003	8.3700e-003	0.0207	3.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	3.0069	3.0069	1.0000e-004	0.0000	3.0094
Total	**1.2300e-003**	**8.3700e-003**	**0.0207**	**3.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**3.0069**	**3.0069**	**1.0000e-004**	**0.0000**	**3.0094**

3.3 Restoration - 2053

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0151	0.0000	0.0151	1.5200e-003	0.0000	1.5200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0451	0.0000	0.0451	4.5900e-003	0.0000	4.5900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.0602**	**0.0000**	**0.0602**	**6.1100e-003**	**0.0000**	**6.1100e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2300e-003	8.3700e-003	0.0207	3.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	3.0069	3.0069	1.0000e-004	0.0000	3.0094
Total	**1.2300e-003**	**8.3700e-003**	**0.0207**	**3.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**3.0069**	**3.0069**	**1.0000e-004**	**0.0000**	**3.0094**

3.3 Restoration - 2053

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					1.5500e-003	0.0000	1.5500e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					4.9600e-003	0.0000	4.9600e-003	5.8000e-004	0.0000	5.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**6.5100e-003**	**0.0000**	**6.5100e-003**	**7.5000e-004**	**0.0000**	**7.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.9100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MVPP I & II Wind Repower Project Decommissioning

Riverside-Salton Sea County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2050
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.
Grading -

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	PhaseEndDate	1/14/2053	4/1/2053
tblConstructionPhase	PhaseEndDate	1/15/2053	5/1/2053

MVPP I & II Wind Repower Project Decommissioning - Riverside-Salton Sea County, Summer

tblConstructionPhase	PhaseStartDate	1/15/2053	4/2/2053
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00

tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	1,424.00	2,232.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	3.00	6.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2053	1.5108	5.9753	15.9419	0.0457	59.2583	0.1026	59.3608	6.4983	0.1026	6.6008	0.0000	4,323.8308	4,323.8308	0.1315	0.0000	4,327.1183
Maximum	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**59.2583**	**0.1026**	**59.3608**	**6.4983**	**0.1026**	**6.6008**	**0.0000**	**4,323.8308**	**4,323.8308**	**0.1315**	**0.0000**	**4,327.1183**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2053	1.5108	5.9753	15.9419	0.0457	9.5823	0.1026	9.6848	1.4051	0.1026	1.5077	0.0000	4,323.8308	4,323.8308	0.1315	0.0000	4,327.1183
Maximum	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**9.5823**	**0.1026**	**9.6848**	**1.4051**	**0.1026**	**1.5077**	**0.0000**	**4,323.8308**	**4,323.8308**	**0.1315**	**0.0000**	**4,327.1183**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**83.83**	**0.00**	**83.68**	**78.38**	**0.00**	**77.16**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	1/1/2053	4/1/2053	5	65	
2	Restoration	Site Preparation	4/2/2053	5/1/2053	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	2	10.00	231	0.29
WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	30.00	4.00	2,232.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	6.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7713	0.0000	4.7713	0.7224	0.0000	0.7224			0.0000			0.0000
Off-Road	1.5108	5.9753	15.9419	0.0457		0.1026	0.1026		0.1026	0.1026		4,323.8308	4,323.8308	0.1315		4,327.1183
Total	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**4.7713**	**0.1026**	**4.8738**	**0.7224**	**0.1026**	**0.8250**		**4,323.8308**	**4,323.8308**	**0.1315**		**4,327.1183**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					29.3197	0.0000	29.3197	3.2215	0.0000	3.2215			0.0000			0.0000
Vendor					2.9714	0.0000	2.9714	0.2987	0.0000	0.2987			0.0000			0.0000
Worker					22.1959	0.0000	22.1959	2.2556	0.0000	2.2556			0.0000			0.0000
Total					**54.4870**	**0.0000**	**54.4870**	**5.7759**	**0.0000**	**5.7759**			**0.0000**			**0.0000**

3.2 WTG Removal - 2053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1471	0.0000	2.1471	0.3251	0.0000	0.3251			0.0000			0.0000
Off-Road	1.5108	5.9753	15.9419	0.0457		0.1026	0.1026		0.1026	0.1026	0.0000	4,323.8308	4,323.8308	0.1315		4,327.1183
Total	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**2.1471**	**0.1026**	**2.2496**	**0.3251**	**0.1026**	**0.4277**	**0.0000**	**4,323.8308**	**4,323.8308**	**0.1315**		**4,327.1183**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					4.7039	0.0000	4.7039	0.7648	0.0000	0.7648			0.0000			0.0000
Vendor					0.3047	0.0000	0.3047	0.0326	0.0000	0.0326			0.0000			0.0000
Worker					2.4266	0.0000	2.4266	0.2826	0.0000	0.2826			0.0000			0.0000
Total					**7.4352**	**0.0000**	**7.4352**	**1.0800**	**0.0000**	**1.0800**			**0.0000**			**0.0000**

3.3 Restoration - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1119	0.7609	1.8770	3.1800e-003		6.8900e-003	6.8900e-003		6.8900e-003	6.8900e-003		301.3193	301.3193	0.0101		301.5712
Total	**0.1119**	**0.7609**	**1.8770**	**3.1800e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**		**301.3193**	**301.3193**	**0.0101**		**301.5712**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					1.4857	0.0000	1.4857	0.1494	0.0000	0.1494			0.0000			0.0000
Worker					4.4392	0.0000	4.4392	0.4511	0.0000	0.4511			0.0000			0.0000
Total					**5.9249**	**0.0000**	**5.9249**	**0.6005**	**0.0000**	**0.6005**			**0.0000**			**0.0000**

3.3 Restoration - 2053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1119	0.7609	1.8770	3.1800e-003		6.8900e-003	6.8900e-003		6.8900e-003	6.8900e-003	0.0000	301.3193	301.3193	0.0101		301.5712
Total	**0.1119**	**0.7609**	**1.8770**	**3.1800e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**	**0.0000**	**301.3193**	**301.3193**	**0.0101**		**301.5712**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.1523	0.0000	0.1523	0.0163	0.0000	0.0163			0.0000			0.0000
Worker					0.4853	0.0000	0.4853	0.0565	0.0000	0.0565			0.0000			0.0000
Total					**0.6377**	**0.0000**	**0.6377**	**0.0728**	**0.0000**	**0.0728**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MVPP I & II Wind Repower Project Decommissioning

Riverside-Salton Sea County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2050
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a surrogate, no operational emissions.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

On-road Fugitive Dust - Assumed 0.5 mile of unpaved road travel per trip.

Demolition - Based on applicant provided information.
Grading -

Architectural Coating -

Vehicle Trips - Construction only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products - Construction only.

Area Coating - Construction only.

Landscape Equipment - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403 and 403.1.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	PhaseEndDate	1/14/2053	4/1/2053
tblConstructionPhase	PhaseEndDate	1/15/2053	5/1/2053

MVPP I & II Wind Repower Project Decommissioning - Riverside-Salton Sea County, Winter

tblConstructionPhase	PhaseStartDate	1/15/2053	4/2/2053
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	PhaseName		WTG Removal
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOnRoadDust	HaulingPercentPave	100.00	99.40
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	VendorPercentPave	100.00	91.90
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblOnRoadDust	WorkerPercentPave	100.00	96.60
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00

tblTripsAndVMT	HaulingTripLength	20.00	90.00
tblTripsAndVMT	HaulingTripNumber	1,424.00	2,232.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	3.00	6.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2053	1.5108	5.9753	15.9419	0.0457	59.2583	0.1026	59.3608	6.4983	0.1026	6.6008	0.0000	4,323.8308	4,323.8308	0.1315	0.0000	4,327.1183
Maximum	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**59.2583**	**0.1026**	**59.3608**	**6.4983**	**0.1026**	**6.6008**	**0.0000**	**4,323.8308**	**4,323.8308**	**0.1315**	**0.0000**	**4,327.1183**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2053	1.5108	5.9753	15.9419	0.0457	9.5823	0.1026	9.6848	1.4051	0.1026	1.5077	0.0000	4,323.8308	4,323.8308	0.1315	0.0000	4,327.1183
Maximum	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**9.5823**	**0.1026**	**9.6848**	**1.4051**	**0.1026**	**1.5077**	**0.0000**	**4,323.8308**	**4,323.8308**	**0.1315**	**0.0000**	**4,327.1183**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**83.83**	**0.00**	**83.68**	**78.38**	**0.00**	**77.16**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	WTG Removal	Demolition	1/1/2053	4/1/2053	5	65	
2	Restoration	Site Preparation	4/2/2053	5/1/2053	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
WTG Removal	Concrete/Industrial Saws	0	8.00	81	0.73
WTG Removal	Cranes	2	10.00	231	0.29
WTG Removal	Generator Sets	1	10.00	84	0.74
WTG Removal	Rough Terrain Forklifts	1	10.00	100	0.40
WTG Removal	Rubber Tired Dozers	0	1.00	247	0.40
WTG Removal	Rubber Tired Loaders	1	10.00	203	0.36
WTG Removal	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Restoration	Graders	0	8.00	187	0.41
Restoration	Skid Steer Loaders	1	10.00	65	0.37
Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
WTG Removal	6	30.00	4.00	2,232.00	14.60	6.20	90.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	6.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 WTG Removal - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7713	0.0000	4.7713	0.7224	0.0000	0.7224			0.0000			0.0000
Off-Road	1.5108	5.9753	15.9419	0.0457		0.1026	0.1026		0.1026	0.1026		4,323.8308	4,323.8308	0.1315		4,327.1183
Total	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**4.7713**	**0.1026**	**4.8738**	**0.7224**	**0.1026**	**0.8250**		**4,323.8308**	**4,323.8308**	**0.1315**		**4,327.1183**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					29.3197	0.0000	29.3197	3.2215	0.0000	3.2215			0.0000			0.0000
Vendor					2.9714	0.0000	2.9714	0.2987	0.0000	0.2987			0.0000			0.0000
Worker					22.1959	0.0000	22.1959	2.2556	0.0000	2.2556			0.0000			0.0000
Total					**54.4870**	**0.0000**	**54.4870**	**5.7759**	**0.0000**	**5.7759**			**0.0000**			**0.0000**

3.2 WTG Removal - 2053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1471	0.0000	2.1471	0.3251	0.0000	0.3251			0.0000			0.0000
Off-Road	1.5108	5.9753	15.9419	0.0457		0.1026	0.1026		0.1026	0.1026	0.0000	4,323.8308	4,323.8308	0.1315		4,327.1183
Total	**1.5108**	**5.9753**	**15.9419**	**0.0457**	**2.1471**	**0.1026**	**2.2496**	**0.3251**	**0.1026**	**0.4277**	**0.0000**	**4,323.8308**	**4,323.8308**	**0.1315**		**4,327.1183**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					4.7039	0.0000	4.7039	0.7648	0.0000	0.7648			0.0000			0.0000
Vendor					0.3047	0.0000	0.3047	0.0326	0.0000	0.0326			0.0000			0.0000
Worker					2.4266	0.0000	2.4266	0.2826	0.0000	0.2826			0.0000			0.0000
Total					**7.4352**	**0.0000**	**7.4352**	**1.0800**	**0.0000**	**1.0800**			**0.0000**			**0.0000**

3.3 Restoration - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1119	0.7609	1.8770	3.1800e-003		6.8900e-003	6.8900e-003		6.8900e-003	6.8900e-003		301.3193	301.3193	0.0101		301.5712
Total	**0.1119**	**0.7609**	**1.8770**	**3.1800e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**		**301.3193**	**301.3193**	**0.0101**		**301.5712**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					1.4857	0.0000	1.4857	0.1494	0.0000	0.1494			0.0000			0.0000
Worker					4.4392	0.0000	4.4392	0.4511	0.0000	0.4511			0.0000			0.0000
Total					**5.9249**	**0.0000**	**5.9249**	**0.6005**	**0.0000**	**0.6005**			**0.0000**			**0.0000**

3.3 Restoration - 2053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1119	0.7609	1.8770	3.1800e-003		6.8900e-003	6.8900e-003		6.8900e-003	6.8900e-003	0.0000	301.3193	301.3193	0.0101		301.5712
Total	**0.1119**	**0.7609**	**1.8770**	**3.1800e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**	**0.0000**	**6.8900e-003**	**6.8900e-003**	**0.0000**	**301.3193**	**301.3193**	**0.0101**		**301.5712**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Vendor					0.1523	0.0000	0.1523	0.0163	0.0000	0.0163			0.0000			0.0000
Worker					0.4853	0.0000	0.4853	0.0565	0.0000	0.0565			0.0000			0.0000
Total					**0.6377**	**0.0000**	**0.6377**	**0.0728**	**0.0000**	**0.0728**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548600	0.036250	0.186898	0.112544	0.014284	0.004806	0.017604	0.070134	0.001409	0.001147	0.004508	0.000918	0.000898

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Year	SCE GHG Emission Factor	Avoided GHG Emissions
	lb CO_2e/MWh	MT CO_2e
2019	534.00	-
2020	513.46	-
2021	492.92	-
2022	472.38	-
2023	451.85	5,286.50
2024	431.31	5,046.20
2025	410.77	4,805.91
2026	390.23	4,565.61
2027	369.69	4,325.32
2028	349.15	4,085.02
2029	328.62	3,844.73
2030	308.08	3,604.43
2031	287.54	3,364.14
2032	267.00	3,123.84
2033	246.46	2,883.55
2034	225.92	2,643.25
2035	205.38	2,402.95
2036	184.85	2,162.66
2037	164.31	1,922.36
2038	143.77	1,682.07
2039	123.23	1,441.77
2040	102.69	1,201.48
2041	82.15	961.18
2042	61.62	720.89
2043	41.08	480.59
2044	20.54	240.30
2045	0.00	0.00
	Total	**60,794.75**