Appendix J

Air Quality Emissions Report

GREENHOUSE GAS EMISSIONS ANALYSIS

Easley Renewable Energy Project

Prepared for

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Submitted by

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September 2023

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1. INTRODUCTION

This technical report provides the results of an air quality and greenhouse gas (GHG) emissions assessment for the proposed Easley Renewable Energy Project to be located near Desert Center, California. The assessment quantifies the emissions due to the project and discusses the extent of potential impacts to air quality and impacts due to GHG emissions. This report recommends mitigation measures to reduce potentially significant air quality impacts; the recommended mitigation would require the Project owner to control fugitive dust and to control off-road equipment exhaust emissions during construction of the Project.

1.1. Understanding of the Project

IP Easley, LLC (Applicant or Proponent), a subsidiary of Intersect Power, LLC, proposes to construct, operate, and decommission the Easley Renewable Energy Project (Easley or Project), a utility-scale solar photovoltaic (PV) electrical generating and storage facility, and associated infrastructure to generate and deliver renewable electricity to the statewide electricity transmission grid.

The Easley Project application area is located on approximately 3,735 acres of private and BLM-administered land in Riverside County north of Desert Center, California (see Figure 1). The Easley Project would generate up to 400 megawatts (MW) from solar resources with up to 650 MW of 4-hour duration battery energy storage system (BESS) capacity, and appurtenant facilities. The solar PV generation component of the Project would be able to provide about 840,000 megawatt-hours (MWh) of electricity each year for delivery to California's end-users. A 6.7-mile 500 kilovolt (kV) generation-tie (gen-tie) line would also be installed to interconnect the generation and storage system to California's transmission grid.

Depending on the timing of the interconnection agreement, the Easley Project could be online as early as late 2025. The Project would operate for a minimum of 35 years and up to 50 or more years. At the end of its useful life, the Project would be decommissioned, and the land returned to its pre-Project conditions. Revegetation would be conducted in accordance with an approved Decommissioning and Revegetation Plan.

1.2. Project Components

The proposed Easley Renewable Energy Project would include a solar and energy storage facility that could occupy a site of approximately 3,735 acres, on a mix of private land and BLM-administered land, with 400 MW of generation capacity and up to 650 MW of battery energy storage capacity. The site would be developed with the solar and energy storage facility with the following supporting facilities:

- Inverter-transformer stations.
- 34.5 kV interior collection power lines.
- Up to two onsite substation yards.
- Upgrades within the fence line of the nearby Oberon Substation.
- One operations and maintenance (O&M) building, approximately 3,000 square feet in size.
- Site standby power provided by backup generator (rated at 45 kilowatts).
- Battery energy storage system (BESS), requiring up to 35 acres.
- New 500 kV Gen-tie Line, approximately 6.7 miles in length.

Construction is anticipated to require 20 months. The on-site workforce would range from a peak of approximately 530 individuals with an average on-site workforce of 320 individuals. For structural foundations and pads, concrete would be brought on-site from Blythe by truck or would be produced by

a portable batch plant on site as necessary. The internal roadway network would be surfaced with gravel, compacted dirt, or another commercially available surface.

Consistent with the daily anticipated construction workflow, most equipment is assumed to operate up to a total of 8 hours per day or during most of the daily available work hours. In actuality, the level of use would be dependent on daily and seasonal variations as work may be scheduled to avoid the hottest periods of the day. Because of the variable nature of field conditions, most pieces of equipment would likely be in use for fewer than 8 hours per day.

The range of construction equipment to be used would vary over time as activities progress. Off-road equipment in the fleet could include loaders, graders, scrapers, dozers, backhoes, lifts, cranes, welders, and portable generators, with comparable equipment substituted as needed. Structures for PV modules would be supported on steel piles driven into the soil using pneumatic techniques such as a hydraulic rock hammer attachment on the boom of a rubber-tired backhoe excavator. An on-site concrete batch plant may be used to minimize the need for transporting concrete by truck to the site. The off-road equipment is not subject to local air district permitting requirements for stationary sources, as these are classified and registered as mobile or portable sources.

Helicopters would likely be used for used for wire stringing activities during installation of the 500 kV gen-tie line. Helicopters use could involve up to 200 hours of run time over approximately 40 days. The helicopter activities would reduce ground disturbance by eliminating certain on-the-ground equipment that are typically used for overhead gen-tie line construction, including cranes, backhoe, and trucks.

To provide a water supply for the Project, electricity would need to be consumed by the operation of groundwater wells, or water would be delivered by truck. During the construction phase, it is anticipated that a total of up to 1,000 acre-feet of water would be obtained from either an on-site groundwater well or purchased offsite and used for dust suppression (including truck wheel washing) and other purposes. Upon commencing operation, the solar array portion of the project would require the use of approximately 50 acre-feet of water annually for panel washing and other uses.

2. ENVIRONMENTAL SETTING

2.1. Ambient Air Quality Standards and Attainment

Criteria Air Pollutants. Air quality is determined by measuring ambient concentrations of certain criteria air pollutants. The criteria pollutants are ozone, respirable particulate matter (PM10), fine particulate matter (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. Ozone is an example of a secondary pollutant that is not emitted directly from a source (e.g., an automobile tailpipe), but it is formed in the atmosphere by chemical and photochemical reactions. Nitrogen oxides (NOx), which include NO_2, and reactive organic gases (ROG), including volatile organic compounds (VOC), are regulated as precursors to ozone formation.

The California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (U.S. EPA) have independent authority to develop and establish health-protective ambient air quality standards. The California air quality standards are set at levels to adequately protect the health of the public, including infants and children, with an adequate margin of safety (California Health and Safety Code Section 39606), and in general, the CAAQS are more stringent than the corresponding health-protective NAAQS.

Monitored levels of the pollutants are compared to the current National and California Ambient Air Quality Standards (NAAQS and CAAQS) to determine degree of existing air quality degradation. The standards currently in effect in California are shown in Table 1.

Table 1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards
Ozone	1-hour	0.09 ppm	—
	8-hour	0.070 ppm	0.070 ppm
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	150 µg/m^3
	Annual Mean	20 µg/m^3	—
Fine Particulate Matter ($PM_{2.5}$)	24-hour	—	35 µg/m^3
	Annual Mean	12 µg/m^3	12 µg/m^3
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm
	8-hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm	0.100 ppm
	Annual Mean	0.030 ppm	0.053 ppm
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm	0.075 ppm
	24-hour	0.04 ppm	0.14 ppm
	Annual Mean	—	0.030 ppm

Notes: ppm=parts per million; µg/m3= micrograms per cubic meter; "—" =no standard
Source: ARB (https://ww2.arb.ca.gov/resources/documents/ambient-air-quality-standards), May 2016.

Ambient Air Quality Attainment Status and Air Quality Plans. The U.S. EPA, ARB, and the local air district classify an area as attainment, unclassified, or nonattainment for each of the criteria air pollutants, and these designations dictate the air quality management planning activities needed to make future air pollutant reductions. The classification depends on whether the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively.

Table 2 summarizes attainment status for criteria pollutants in comparison with both the state and federal standards, for the Mojave Desert Air Basin portion of eastern Riverside County.

Table 2. Attainment Status for Mojave Desert Air Basin Portion of Riverside County

Pollutant	California Designation	Federal Designation
Ozone	Nonattainment	Attainment
PM10	Nonattainment	Attainment
PM2.5	Attainment	Attainment
NO_2	Attainment	Attainment
CO	Attainment	Attainment
SO_2	Attainment	Attainment

Source: ARB, 2023; USEPA, 2022.

Toxic Air Contaminants. Toxic air contaminants (TACs) are air pollutants that may lead to serious illness or increased mortality, or which may pose a present or potential hazard to human health (California Health and Safety Code Section 39655), even when present in relatively low concentrations.

Potential human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another's. TACs do not have ambient air quality standards but are regulated by the local air districts using a risk-based approach.

The Easley Project would not include new stationary sources that could be subject to risk assessment programs. Diesel particulate matter (DPM) is classified as a TAC, and statewide programs focus on managing this pollutant through motor vehicle fuels, engine, and tailpipe standards because many toxic compounds adhere to diesel exhaust particles. The local air districts support these programs by issuing permits and requiring controls for larger stationary sources of DPM, including diesel powered engines rated over 50 horsepower. Small diesel-powered backup generators (rated under 50 brake horsepower) would be exempt from obtaining an air permit and performing a source-specific risk assessment.

2.2. Surrounding Land Uses

Land uses that are sensitive to air pollution are: residences, schools, daycare centers, playgrounds, and medical facilities. Nearby sensitive land uses include the Lake Tamarisk community, Desert Center, and occasional rural residences along Highway 177 (Rice Road), such as near Black Binder Road. The Lake Tamarisk community and homes along Kaiser Road would be adjacent to the southwestern-most parcels of the proposed Easley Project. The nearest home on Shasta Drive would be approximately 0.05 miles (260 feet) from the parcel boundaries of the Project, although construction activity and Project infrastructure would be set back substantially (at least 200 meters [656 feet]), from this residential land use. The nearest school is the Eagle Mountain School, over 5 miles north of the Project site. For all construction activity, the distance between residences and the nearest Project site construction would be greater than 200 meters (656 feet).

2.3. Global Climate Change and GHG Emissions Trends

The global climate depends on the presence of naturally occurring GHG to provide what is commonly known as the "greenhouse effect" that allows heat radiated from the Earth's surface to warm the atmosphere. The greenhouse effect is driven mainly by water vapor, aerosols, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and other constituents. Globally, the presence of GHG affects temperatures, precipitation, sea levels, ocean currents, wind patterns, and storm activity.

Human activity directly contributes to emissions of six primary anthropogenic GHGs: CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The standard definition of anthropogenic GHG includes these six substances under the 1997 Kyoto Protocol (UNFCCC, 1998). The most important and widely occurring anthropogenic GHG is CO_2, primarily from the use of fossil fuels as a source of energy.

Effects of GHG Emissions. Changing temperatures, precipitation, sea levels, ocean currents, wind patterns, and storm activity provide indicators and evidence of the effects of climate change. Research by California's OEHHA documents climate change indicators by categorizing the effects as: changes in California's climate; impacts to physical systems including oceans, lakes, rivers, and snowpack; and impacts to biological systems including humans, vegetation, and wildlife. The primary observed changes in California's climate include increased annual average air temperatures, more-frequent extremely hot days and nights, and increased severity of drought. Impacts to physical systems affected by warming temperatures and changing precipitation patterns show decreasing snowmelt runoff, shrinking glaciers, and rising sea levels. Impacts to terrestrial, marine, and freshwater biological systems, with resulting changes in habitat, agriculture, and food supply are occurring in conjunction with the potential to impact human well-being (OEHHA, 2018).

California GHG Emissions Trends. California first formalized a strategy to achieve GHG reductions in 2008, when California produced approximately 479 million metric tons of CO_2 equivalent (MMTCO2e) according to the official Air Resources Board inventory (ARB, 2022a). The State's economy-wide emissions have been declining in recent years. California's sources of GHG emitted approximately 369 MMTCO2e in 2020 (ARB,

2022a), which is less than ten percent of the U.S. total GHG emissions. The electric power sector emissions were 59.5 MMTCO2e in 2020 from a combination of in-state generation and electricity imported to California (ARB, 2022a). California is planning for steady reductions in electricity sector GHG emissions while the demand for electricity grows as a result of increased population and the electrification of the transportation sector and buildings (ARB, 2022b).

Decarbonization of California's Electricity Sector. The electricity sector in California has achieved substantial GHG emissions reductions through renewable and zero-carbon energy deployment. Moving forward, a clean, affordable, and reliable electricity grid will serve as a backbone to support deep decarbonization across California's economy. Decarbonizing the electricity sector is a crucial pillar of achieving carbon neutrality, and ARB anticipates that the role of electricity in powering the economy will continue to grow while electric loads increase (ARB, 2022b). California continues to add zero-carbon energy resources to replace fossil-fuel generation and support growing demand. Moving to zero-carbon resources is critical to reducing GHG emissions and addressing the long-term impacts of climate change (CEC, 2022).

Renewable and zero-carbon sources of energy do not operate on-demand like traditional fossil fuel power plants. Energy storage improves California's ability to efficiently integrate renewable resources. The growth of zero-carbon resources, especially solar resources, has shifted the reliability concerns from the peak hour (hour with the highest energy demand) to net peak hours (hours when energy demand minus wind and solar generation is largest). The changing resource mix is driving a change in the characteristics of the electricity system and requires consideration of the net demand curve, total electricity demand less the wind and solar generation. The "duck curve" is characterized by more drastic increases in net demand in the evening hours as solar decreases, and a net peak that occurs later in the evening when solar generation is substantially diminished or nonexistent (CEC, 2022). Storing some midday solar generation flattens the duck's curve, and dispatching the stored solar generation in the evening shortens the duck's neck (U.S. EIA, 2023). Presently, fossil-fuel natural gas-fired power plants provide about 75 percent of the flexible capacity for grid reliability. As more renewable power enters the system, other resources such as storage and demand-side management are essential to maintain reliability with high concentrations of renewables (ARB, 2022b).

3. AIR QUALITY REGULATORY BACKGROUND

3.1. Federal

Federal Clean Air Act (CAA). The Federal Clean Air Act was enacted in 1970, and the act established the NAAQS for criteria air pollutants. With SCAQMD and ARB, the U.S. EPA shares the responsibility to establish regulations, enforce air pollution control requirements, and develop the necessary air quality management to achieve the NAAQS. The U.S. EPA implements most aspects of the CAA, and reviews local and state air quality management plans and regulations to ensure attainment with the NAAQS.

Federal General Conformity Rule. General conformity regulations (40 CFR Part 93, Subpart B, et seq.) require each lead agency (BLM) to make a determination of whether approval of a project (i.e., a federal action) would cause or contribute to a violation of the NAAQS or interfere with attainment planning. Federal nonattainment designations are in place for portions of the Mojave Desert Air Basin in San Bernardino County and for portions of the SCAQMD including the Salton Sea Air Basin west of the Mojave Desert Air Basin, where the primary pollutants of concern are ozone and PM10. However, there are no federal nonattainment or maintenance designations at the Easley Project site in the Mojave Desert Air Basin portion of Riverside County. Federal agency actions in the Mojave Desert Air Basin portion of Riverside County are not subject to CAA general conformity review requirements.

Federal Class I Areas. Section 162(a) of the federal Clean Air Act grants special air quality protections to designated federal Class I areas. To protect Class I areas under U.S. EPA delegation the SCAQMD implements the Prevention of Significant Deterioration permitting program, which addresses visibility impairment from new or modified stationary sources in the region, such as power plants, mines or other industrial sources.

The boundary of the Joshua Tree National Park (JTNP) Class I area is 3 miles (4.8 kilometers) away from the nearest boundary of the Easley Project site. Visibility is considered an important air quality value to be protected within JTNP. There are no other Class I areas within 62 miles (100 km) of the project. Data from the Federal Land Manager Environmental Database indicate that visibility in the JTNP Class I area improved between 2001 and 2010 then remained steady through 2020 for both the clearest days and the most impaired days (CIRA 2022a; CIRA 2022b). Visibility on both the clearest days and on the haziest days has improved from 2001 and has stayed relatively constant for a decade. For JTNP and other Class I areas in southern California, the Western Regional Air Partnership shows that the visual range has improved more than 20 percent (2010-2014) when compared to the baseline (2000-2004), and that this improvement is largely due to the local authorities having the ability to control anthropogenic emissions (WRAP 2016).

3.2. State of California

California Clean Air Act. The California Clean Air Act is implemented by the ARB. This act established broad authority for California to regulate emissions from mobile sources and requires regions to develop and enforce strategies to attain CAAQS. Each regional air district is responsible for demonstrating how these standards are met.

U.S. EPA/ARB Off-Road Mobile Sources Emission Reduction Program. The California Clean Air Act mandates that ARB achieve the maximum degree of emission reductions from all off-road mobile sources to attain the state ambient air quality standards. Off-road mobile sources include construction equipment. The earliest (Tier 1) standards for large compression-ignition engines used in off-road mobile sources became effective in California in 1996. Since then, the Tier 3 standards for large compression-ignition engines used in off-road mobile sources went into effect in California for most engine classes in 2006, and Tier 4 or Tier 4 Interim (4i) standards apply to all off-road diesel engines model year 2012 or newer. These standards and standards applicable to fleets that are already in-use provide comprehensive regulation and control to reduce NOx and toxic particulate matter emissions from diesel use throughout the State.

California ARB In-Use Off-Road Diesel Fueled Fleets Regulation. The regulations for in-use off-road diesel equipment are designed to reduce NOx and toxic diesel particulate matter (DPM). Depending on the size of the fleet of equipment, the owner would need to ensure that the average emissions performance of the fleet meets certain state-wide standards. In lieu of improving the emissions performance of the fleet, electric systems can be installed to replace diesel equipment in the fleet average calculations. Presently, all equipment owners are subject to a five-minute idling restriction in the rule (13 California Code of Regulations, Chapter 10, Section 2449).

California ARB Portable Equipment Registration Program (PERP). This program allows owners or operators of portable engines and associated equipment commonly used for construction or farming to register their units under a statewide portable program. This program allows them to operate their equipment throughout California without having to obtain individual permits from local air districts.

California ARB Airborne Toxic Control Measures (ATCM). Diesel engines on portable equipment and vehicles are subject to various ATCM that dictate how diesel sources must be controlled statewide to protect public health. For example, the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling

generally limits idling of commercial motor vehicles (including buses and trucks) within 100 feet of a school or residential area for more than five consecutive minutes or periods aggregating more than five minutes in any one hour (13 California Code of Regulations, Chapter 10, Section 2485). Diesel engines used in portable equipment fleets are subject to stringent DPM emissions standards, generally requiring use of only newer engines or verified add-on particulate filters (17 California Code of Regulations, Section 93116).

3.3. Riverside County General Plan

Riverside County adopted the Air Quality Element of the County General Plan in 2015. The air quality element includes policies supporting regional cooperation with other jurisdictions to improve air quality; requiring compliance with federal, state, and regional air quality regulations; encouraging programs to reduce vehicle miles traveled; encouraging energy conservation in urban land uses; and encouraging development patterns that improve the County's jobs/housing balance.

The Air Quality Element of the General Plan includes one policy directly relevant to the Project, to facilitate development and siting of renewable energy facilities and transmission lines in appropriate locations (Policy AQ 20.19).

3.4. South Coast Air Quality Management District

The Project site and activities are under local jurisdiction of the SCAQMD in the Mojave Desert Air Basin (MDAB); the MDAB includes portions of Kern, Los Angeles, San Bernardino, and Riverside Counties.

Most equipment used for construction is classified as mobile sources and is thus exempt from stationary source permit requirements. According to SCAQMD Rule 219, some other equipment used may be subject to permit requirements, such as generators, compressors, pumps, and concrete batch plants.

Table 3 summarizes the SCAQMD rules relevant to controlling project emissions.

Table 3. SCAQMD Rules and Regulations

Applicable Rules	Description
Rules 201, 203, and 212 – Permit to Construct; Permit to Operate; and Standards for Approving Permits and Issuing Public Notice	Establishes the requirements to obtain a Permit to Construct and Permit to Operate for stationary sources of emissions. For exemption categories, see Rule 219: Equipment Not Requiring a Written Permit Pursuant to Regulation II.
Rule 401 – Visible Emissions	Limits visible emissions.
Rule 402 – Nuisance	Prohibits the discharge of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to the public or which endanger the comfort, response, health, or safety of the public or which cause injury or damage to business or property.
Rule 403 – Fugitive Dust	Requires submitting a Large Operation Notification form to the SCAQMD and requires compliance with best available control measures listed in the rule. Limits fugitive emissions from certain bulk storage, earthmoving, construction and demolition, and manmade conditions that may cause wind erosion.
Rule 404 – Particulate Matter Concentration	The rule limits particulate matter emissions as a function of the exhaust flow rate from the regulated device.

Applicable Rules	Description
Rule 463 – Organic Liquids Storage	Sets standards for storage of organic liquids with a true vapor pressure of 0.5 pounds per square inch or greater and standards for above-ground tanks used for gasoline storage with a capacity over 250 gallons.
Rule 1110.2 – Emissions from Gaseous and Liquid-Fueled Internal Combustion Engines	The purpose of this rule is to reduce NOx, VOCs, and CO from engines.
Regulation XIII – New Source Review	Establishes the pre-construction review requirements, including Best Available Control Technology and emission offset requirements for new, modified or relocated facilities to ensure that these facilities do not interfere with progress in attainment of the national ambient air quality standards.

Notification Requirements under SCAQMD Rule 403. Rule 403 (Fugitive Dust) prohibits creation of dust plumes that are visible beyond the property line of the emission source and requires all active operations to implement applicable best available control measures. Enhanced dust control and notification requirements apply if the project is considered a "large operation" under this rule, which is any active operations on property that contains 50 or more acres of disturbed surface area.

4. GHG EMISSIONS REGULATORY BACKGROUND

4.1. Federal

U.S. EPA GHG Mandatory Reporting Program (40 CFR Part 98). This rule requires mandatory reporting of GHG emissions for industrial facilities and power plants that emit more than 25,000 MTCO2e per year. The reporting program (40 CFR Part 98.300, Subpart DD) applies to electric and transmission distribution equipment that use high GWP gases, including SF_6, for insulation. Currently, there are no federal regulations limiting GHG emissions from the types of sources that would occur with the proposed Project. The circuit breakers and gas switches related to electric power transmission and distribution may be sources of GHG subject to reporting due to the leakage of SF_6.

4.2. State of California

California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)]. The California Global Warming Solutions Act of 2006 (AB 32) required that California's GHG emissions be reduced to 1990 levels by 2020. The reduction is being accomplished through an enforceable statewide cap on global warming emissions beginning in 2012. AB 32 directs the California Air Resources Board (ARB) to develop regulations and a mandatory reporting system to track and monitor global warming emissions levels (AB 32, Chapter 488, Statutes of 2006). AB 32 requires ARB to update the Scoping Plan at least every 5 years. Most recently, ARB released a 2022 Scoping Plan Update in November 2022 (ARB, 2022b), which outlines a roadmap to achieve carbon neutrality by 2045.

In passing AB 32, the California Legislature found that:

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

environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

Other major Executive Orders, legislation, and regulations adopted for the purpose of reducing GHG emissions support the implementation of AB 32 and California's climate goals, as described below.

California Governor's Executive Orders on GHG Emissions. In September 2018, Executive Order B-55-18 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. CARB was directed to develop the framework for implementing the goal of carbon neutrality. Executive Order B-30-15 (April 2015) established a California GHG reduction target of 40 percent below 1990 levels by 2030. One purpose of this interim target is to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 (Executive Order S-3-05, June 2005). This executive order also specifically addresses the need for climate adaptation and directs State agencies to update the California Climate Adaptation Strategy to identify how climate change will affect California infrastructure and industry and what actions the State can take to reduce the risks posed by climate change. Senate Bill 32 (SB 32) of 2016 codified this GHG emissions target to 40 percent below the 1990 level by 2030.

California Renewables Portfolio Standard (RPS) Program. Electric utilities in California must procure a minimum quantity of the sales from eligible renewable energy resources as specified by RPS requirements. To integrate renewable generators on the grid, optimize the delivery of growing amounts of renewable energy production, and facilitate achieving the targeted GHG reductions, the California legislature has also authorized energy agencies to establish energy storage procurement targets.

The Clean Energy and Pollution Reduction Act of 2015 [Senate Bill 350 (SB 350)] established California's state policy objectives on long-term energy planning and procurement as signed into law on October 7, 2015. The 100 Percent Clean Energy Act of 2018 [Senate Bill 100 (SB 100)] revised the RPS targets to establish the policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

With SB 350 and SB 100, California's objectives include:

- To set the RPS for the procurement of California's electricity from renewable sources at 33 percent by 2020, 50 percent by 2026, and 60 percent by 2030;
- To plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045; and
- To double the energy efficiency savings in electricity and natural gas end uses by retail customers by 2030.

The Clean Energy, Jobs, and Affordability Act of 2022 (SB 1020) added interim targets for renewable energy targets for electricity sales and procurement. The renewable energy and zero-carbon energy retail sales of electricity targets to California end-use customers were set at 90 percent by 2035 and 95 percent by 2040 (ARB, 2022b).

California Climate Crisis Act of 2022 (AB 1279). AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The ARB 2022 Climate Change Scoping Plan outlines how carbon neutrality can be achieved by reducing anthropogenic GHG emissions while expanding actions to capture and store carbon through California's natural and working lands and using a variety of mechanical approaches (ARB, 2022b).

Cap-and-Trade Program (17 CCR 95801 to 96022). The California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Program) was initially approved by CARB in 2011. The Cap-and-Trade Program applies to covered entities that fall within certain source categories, including suppliers of transportation fuels, retail providers of electricity, and operators of electricity generating facilities. The program is triggered when facility emissions exceed 25,000 metric tons of CO_2 equivalent (MTCO2e) in a year. The covered entities must hold compliance instruments sufficient to cover the actual GHG emissions, as evidenced through CARB's Mandatory Reporting Regulation requirements. This means that transportation fuel suppliers bear the GHG compliance obligation in the Cap-and-Trade Program for the GHG emissions from motor vehicle and off-road equipment fuels used by construction workforces and crews. No specific reporting requirements apply to electric power generation from solar resources.

Emission Reductions of SF_6 from Gas Insulated Equipment (17 CCR 95350 to 95359). Electric power gas insulated equipment and switchgear used in transmission and distribution systems are subject to this regulation for reducing or phasing-out SF_6 emissions and leaks. The regulation, initially adopted by CARB in 2010 and amended in 2022, requires owners of such gas-insulated equipment or switchgear to phase out use of SF_6, maintain records and inventories of their gas-insulated equipment and capacities, and report CO2e emissions to demonstrate compliance with annual limits set by the rule.

California Governor's Office of Planning and Research, Guidelines on GHG (SB 97). The California Natural Resources Agency originally adopted amendments to the State CEQA Guidelines for reviewing the topic of GHG emissions to implement the California Legislature's directive in Public Resources Code Section 21083.05 [enacted as part of Senate Bill 97 (Chapter 185, Statutes, 2007)]. With the amendments that became effective in March 2010, the Natural Resources Agency developed a Final Statement of Reasons that guides the scope of GHG analyses for CEQA documents and addresses the subject of life-cycle analysis.

Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in developing a given project and infrastructure) depends on emission factors or econometric factors that are not well established for all processes. The basis of State CEQA Guidelines set forth by the Natural Resources Agency indicate that a full life-cycle analysis would be beyond the scope of a given CEQA document because of a lack of consensus guidance on life-cycle analysis methodologies.

5. METHODOLOGY AND THRESHOLDS

5.1. Methodology

All construction- and operations-related emissions are quantified based on the best available forecast of activities. This analysis uses the California Emissions Estimator Model (CalEEMod; version 2020.4.0) software developed by the California Air Pollution Control Officers Association (CAPCOA). This is the most recent desktop version of the CalEEMod software, and it relies upon mobile source emission factors from the Air Resources Board (ARB) OFFROAD2011 inventory and EMFAC2017 models. Where project-specific design features are not yet defined, default and typical settings from CalEEMod are used, as published in the CalEEMod User's Guide and supporting appendices (CAPCOA 2021).

5.2. NEPA Thresholds

General conformity regulations (40 CFR Part 93, Subpart B, et seq.) include de minimis thresholds that may be used in the characterization of an air quality impact for NEPA purposes. The discussion of air quality impacts under NEPA differs from an analysis of general conformity under the CAA in that the

general conformity review considers the emissions of pollutants for which the project area has been designated as a nonattainment or maintenance area. Because the Riverside County portion of the Mojave Desert Air Basin has federal designations of unclassifiable/attainment for all pollutants, including ozone (with NOx and VOC as precursors) and PM10, federal agency actions are not subject to CAA general conformity review requirements. Without applicable thresholds under the federal CAA general conformity rule, this analysis conservatively assumes that the protective de minimis thresholds for NOx, VOC, and PM10 from the nearby Salton Sea Air Basin portion of the SCAQMD jurisdiction may be used in the characterization of project-specific emissions for NEPA purposes. These criteria air pollutant rate thresholds are: 25 tons per year of NOx or VOC; 70 tons per year of PM10 or PM2.5; and 100 tons per year for CO and SOx.

5.3. CEQA Thresholds of Significance

To characterize the potential impact of criteria air pollutant emissions in the CEQA process, SCAQMD recommends use of regional significance thresholds for construction and for project-related operation emissions that are subject to CEQA review. The emissions from the activities of construction and operation of the project are compared to these SCAQMD regional significance thresholds to determine whether the project would result in adverse air quality impacts.

The project-level SCAQMD regional significance emissions thresholds for CEQA review are shown in Table 4.

Table 4. SCAQMD Regional Significance Emissions Thresholds

Pollutant	Construction (lb/day)	Operation (lb/day)
Nitrogen Oxides (NOx)	100	55
Volatile Organic Compounds (VOC)	75	55
PM10	150	150
PM2.5	55	55
Carbon Monoxide (CO)	550	550
Sulfur Oxides (SOx)	150	150

Source: SCAQMD 2023.

For emissions exceeding the regional significance thresholds, the SCAQMD also provides air quality significance thresholds for ambient air quality impact assessments, which may be used to calculate the downwind concentrations caused by the on-site portions of project emissions.

For emissions from sites that are near sensitive receptors and are five acres or less, SCAQMD developed the Localized Significance Thresholds (LSTs) to evaluate whether a mass emission rate from a project may generate significant adverse localized air quality impacts. The LSTs may be used by lead agencies as a way of indicating whether a project could locally exceed the ambient air quality standards at a given distance from the site boundary (SCAQMD 2009). The LSTs vary depending on the meteorological conditions for each Source Receptor Area within the SCAQMD jurisdiction.

Table 5 shows the LSTs recommended by SCAQMD for the Desert Center area (East Riverside County).

Table 5. SCAQMD Localized Significance Emissions Thresholds

Pollutant	Construction (lb/day)			Operation (lb/day)		
Distance from Sources (meters):	100	200	500	100	200	500
Nitrogen Oxides (NOx)	425	547	875	425	547	875

Pollutant	Construction (lb/day)			Operation (lb/day)		
PM10	67	112	248	16	27	60
PM2.5	19	37	128	5	9	31
Carbon Monoxide (CO)	5,331	10,178	31,115	5,331	10,178	31,115

Note: These LSTs are for sites of 5 acres. East Riverside County is SCAQMD "Source Receptor Area" zone 31.
Source: SCAQMD 2009.

For determining whether the quantity of GHG emissions generated by the project could have a significant impact on the environment, Riverside County as CEQA lead agency has previously relied upon criteria established by SCAQMD. The threshold of significance for GHG emissions from industrial facilities in the SCAQMD is 10,000 MTCO2e per year (SCAQMD 2023). Project-related GHG emissions would be considered to have a significant impact on the environment if total project emissions (direct and indirect effects) would exceed this threshold. Construction-phase GHG emissions arising from short-term activities may be amortized over the longer-term life of the project, defined as 30 years, and added to the operational emissions for comparison with the threshold (SCAQMD 2008).

6. AIR QUALITY IMPACTS

Impact AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant. For the project area, the SCAQMD and ARB ensure implementation of California's air quality management plans, known collectively as the State Implementation Plan. State-level air quality planning strategies to attain CAAQS are implemented through rules, regulations, and programs adopted by SCAQMD and ARB to control ozone precursors, PM10, and PM2.5. All construction and project development-related activities, including operation and maintenance and eventual decommissioning, would comply with the applicable rules, regulations, and programs. Strategies and control measures identified within the SCAQMD 2016 Air Quality Management Plan (AQMP), and the updated 2022 AQMP, apply directly to project activities as promulgated through SCAQMD's rules and regulations.

All construction and operational activities and eventual decommissioning would comply with SCAQMD's Rule 402 and 403, which prevent nuisances and regulate fugitive dust emissions. The Project would also conform to the federal and state Clean Air Act requirements by complying with the rules and regulations that are contained in the air quality plan.

A project could be inconsistent with the applicable air quality management plan or attainment plan if it causes population and/or employment growth or growth in vehicle-miles traveled in excess of the growth forecasts included in the attainment plan. The Project would employ up to 10 permanent staff on site for regularly providing ongoing maintenance and repairs, including panel washing and security.

The construction workforce would involve short-term employment. Upon commencing routine operation, the construction workforce would no longer be employed, and only the limited workforce of permanent employees would remain in the area. Accordingly, project construction and operation would not result in activities that could conflict with or obstruct implementation of the applicable air quality plan, and this impact would not be significant.

Impact AQ-2: Would the 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?

During Construction, Less than Significant with Mitigation. The Project site is in an area designated as non-attainment for State-level ozone and PM10 standards. Emissions during the temporary 20-month duration of construction would include criteria air pollutants that could exceed quantitative thresholds for regional ozone precursors or PM10 would represent a cumulatively considerable net increase of nonattainment pollutant. Emissions exceeding the quantitative thresholds could contribute to existing or projected violations of the ambient air quality standards.

Construction and the eventual decommissioning would generate emissions at the project site and off-site along the roadways traveled by construction traffic. Construction emissions would be caused by exhaust from vehicles and equipment. Exhaust emissions include ozone precursors (VOC or ROG and NOx), CO, and particulate matter (including PM10 and PM2.5). Fugitive dust includes particulate matter from soil eroded by ground-disturbing activities and by travel on unpaved surfaces and on paved road surfaces. Decommissioning activities would create a temporary phase of similar emissions after the end of the Project's useful life of 30 to 50 years.

To minimize the amount of fugitive dust from unpaved surfaces and emissions from other ground-disturbing activities during the site preparation period, all construction activity would be required to

comply with local air district rules regarding dust control (including SCAQMD Rule 403). Diesel and gasoline-powered construction equipment would be classified as portable or as mobile sources (off-road equipment, trucks, and helicopters during installation of the gen-tie). These sources are subject to statewide registration and fleet requirements. On-road motor vehicle emissions would occur primarily off-site. The on-road sources include the heavy-duty trucks to deliver equipment, concrete, water, and other materials, and light-duty vehicles carrying crews and medium-duty deliveries. Motor vehicle exhaust emissions would occur outside of the proposed work sites as the traffic would occur primarily over the region-serving transportation network.

The nature of construction-phase emissions is to be intermittent and variable due to the need for construction tasks to occur in sequences and adapt to changing site conditions. Additionally, emission sources would be dispersed across the site and not always used continuously or at the same time. Substantial or adverse levels of localized ground-level concentrations would be unlikely during construction because pollutants would be emitted from several pieces of equipment dispersed over large areas. Dust control and engine exhaust would be subject to SCAQMD rules and regulations to avoid adverse levels of air pollutant concentrations.

The exact timing of development activities would be determined after project approval. Construction would occur over 20 months and may be phased.

This analysis considers construction across the parcels of the Project site would follow a sequence of four types of activities that could potentially overlap, as follows:

- Site preparation, including grading and vegetation management.
- Solar PV panel system installation.
- Inverters, transformers, substation and electrical collector system, and BESS installation.
- Construction of 500 kV gen-tie.

Table 6 summarizes the annual emissions, without potential mitigation over each of two calendar years, assuming a 20-month development schedule.

Table 6. Easley Project: Construction, Annual Emissions without Mitigation (ton/year)

Construction Year	VOC	NOx	CO	SOx	PM10	PM2.5
Year 1, Vehicles, Equipment, Fugitive Dust	1.51	10.53	15.12	0.04	13.90	2.74
Year 2, Vehicles, Equipment, Fugitive Dust	2.50	17.71	26.72	0.08	25.14	3.94
Year 2, Helicopter Activity	0.37	0.13	0.47	N/A	< 0.01	< 0.01
Maximum Annual Emissions, without Mitigation	**2.87**	**17.84**	**27.19**	**0.08**	**25.15**	**3.95**
Annual Emissions Thresholds for NEPA Purposes	**25**	**25**	**100**	**100**	**70**	**70**

Source: Attachment A, AQ/GHG Emissions Inventory; Attachment B, CalEEMod Output.

This technical report recommends implementing mitigation to reduce construction-related NOx and PM10 due to the designation of the area as non-attainment for the State-level ozone and PM10 standards. Available mitigation includes specific dust control practices (Mitigation Measure AQ-1) and standards to require controls for off-road equipment engines (Mitigation Measure AQ-2); the measures appear under the heading “Recommended Mitigation.”

Including dust control (MM AQ-1) and off-road equipment emissions controls (MM AQ-2) as mitigation would substantially reduce the construction emissions of NOx and PM10. To conserve water while controlling dust, mitigation (MM AQ-1) would allow use of soil stabilizers or soil weighting agents on

unpaved roads and disturbed areas. Because some commercially available chemical dust suppression products may cause odors or may contain compounds that are air pollutants, the mitigation (MM AQ-1) specifies using non-toxic soil stabilizers that avoid increasing another impact such as adverse odors or additional emissions of ozone precursors ROG or VOC. In the effort to mitigate construction off-road equipment emissions of NOx, emissions of CO would increase somewhat. However, CO is a pollutant that causes no existing violations of ambient air quality standards in the project area, and project-related CO emissions would not be likely to cause a new violation of standards.

Table 7 summarizes the annual emissions within each of the calendar years of anticipated construction, including mitigation for dust control practices (MM AQ-1) and off-road equipment engine standards (MM AQ-2).

Table 7. Easley Project: Construction, Mitigated Annual Emissions (ton/year)

Construction Year	VOC	NOx	CO	SOx	PM10	PM2.5
Year 1, Vehicles, Equipment, Fugitive Dust	0.81	4.37	16.21	0.04	4.47	1.22
Year 2, Vehicles, Equipment, Fugitive Dust	1.36	9.12	27.96	0.08	6.98	1.65
Year 2, Helicopter Activity	0.37	0.13	0.47	N/A	< 0.01	< 0.01
Maximum Annual Emissions, with Mitigation	**1.73**	**9.25**	**28.43**	**0.08**	**6.99**	**1.65**
Annual Emissions Thresholds for NEPA Purposes	**25**	**25**	**100**	**100**	**70**	**70**

Source: Attachment A, AQ/GHG Emissions Inventory; Attachment B, CalEEMod Output.

Table 7 shows that the anticipated construction emissions in each calendar year, with mitigation, would not represent a significant impact to air quality resources. The highest rate of emissions would occur during the first anticipated calendar year of construction.

Because construction activity can vary from day to day within a given calendar year, SCAQMD recommends quantifying daily peak rates of construction emissions. Prior to considering mitigation, Table 8 summarizes the maximum daily emissions rates anticipated within the different calendar years of construction.

Table 8. Easley Project: Construction, Daily Emissions without Mitigation (lb/day)

Construction Year	VOC	NOx	CO	SOx	PM10	PM2.5
Year 1, Vehicles, Equipment, Fugitive Dust	27.33	175.40	303.85	0.85	279.60	43.14
Year 2, Vehicles, Equipment, Fugitive Dust	26.67	174.25	294.55	0.83	279.59	43.13
Year 2, Helicopter Activity	24.29	7.92	30.98	N/A	0.27	0.27
Maximum Daily Emissions, without Mitigation	**50.96**	**182.17**	**325.53**	**0.85**	**279.86**	**43.40**
SCAQMD Daily Thresholds (Construction) for CEQA Purposes	**75**	**100**	**550**	**150**	**150**	**55**

Source: Attachment A, AQ/GHG Emissions Inventory; Attachment B, CalEEMod Output.

As seen in Table 8 maximum daily construction emissions without controls could exceed the SCAQMD significance thresholds for NOx and PM10. This analysis identifies two feasible mitigation measures that could be implemented to substantially reduce these emissions.

Table 9 summarizes the daily emissions including mitigation for dust control practices (MM AQ-1) and off-road equipment engine standards (MM AQ-2) to reduce the total emissions of NOx and PM10.

Table 9. Easley Project: Construction, Mitigated Daily Emissions (lb/day)

Construction Year	VOC	NOx	CO	SOx	PM10	PM2.5
Year 1, Vehicles, Equipment, Fugitive Dust	16.19	92.65	315.29	0.85	77.80	18.25
Year 2, Vehicles, Equipment, Fugitive Dust	15.53	91.49	306.00	0.83	77.79	18.24
Year 2, Helicopter Activity	24.29	7.92	30.98	N/A	0.27	0.27
Maximum Daily Emissions, with Mitigation	**39.82**	**99.42**	**336.98**	**0.85**	**78.06**	**18.51**
SCAQMD Daily Thresholds (Construction) for CEQA Purposes	**75**	**100**	**550**	**150**	**150**	**55**

Source: Attachment A, AQ/GHG Emissions Inventory; Attachment B, CalEEMod Output.

Table 9 shows that with implementation of mitigation for dust control practices (MM AQ-1) and off-road equipment engine standards (MM AQ-2) the maximum daily emissions of all pollutants during construction would be reduced to levels below the SCAQMD thresholds. The impact of increased criteria air pollutant emissions during construction would not be significant with mitigation.

During Operation, Less than Significant. Operations-related emissions would be caused by upkeep, maintenance, inspections, security, and panel washing. These activities, necessary for routine upkeep of the solar facility and gen-tie lines, would involve up to 10 permanent staff on the site. The Project would be required by general air district provisions to implement controls such as the use of water or chemical dust suppressants to minimize particulate matter emissions, to prevent visible emissions, and to avoid nuisances. Table 10 summarizes the emissions estimated during routine O&M of the project.

Table 10. Easley Project: Operation, Daily Emissions (lb/day)

Source Type	VOC	NOx	CO	SOx	PM10	PM2.5
Area Sources	1.52	0.15	16.53	0.00	0.06	0.06
Mobile Sources	0.89	1.87	13.30	0.03	56.66	6.23
Stationary, Backup Generator Testing	0.05	0.16	0.18	0.00	0.01	0.01
Maximum Daily Emissions	**2.47**	**2.19**	**30.02**	**0.03**	**56.72**	**6.30**
SCAQMD Daily Thresholds (Operation) for CEQA Purposes	**55**	**55**	**550**	**150**	**150**	**55**

Source: Attachment A, AQ/GHG Emissions Inventory; Attachment B, CalEEMod Output.

Emissions during O&M would be minor due to the limited number of crews and workers using equipment and vehicles around the site. (See Attachment A, AQ/GHG Emissions Inventory for quantification.) The routine O&M emissions would not exceed the SCAQMD thresholds. With minimal direct emissions during operation, operation of the Project would not result in a cumulatively considerable net increase of any criteria pollutant, and this impact of criteria air pollutant emissions would be less than significant with mitigation. No operational-phase mitigation would be required.

Recommended Mitigation for Construction-Phase Emissions

MM AQ-1 **Fugitive Dust Control Plan.** The project owner would prepare and implement a Fugitive Dust Control Plan to address fugitive dust emissions during project construction, operation, maintenance, and decommissioning. The plan would include measures to minimize fugitive dust emissions from development of laydown and staging areas, site grading, vegetation management, and installing all project facilities through post-construction cleanup. The Project owner would take every reasonable precaution to

prevent all airborne fugitive dust plumes from leaving the project site and to prevent visible particulate matter from being deposited upon public roadways. The plan would be subject to review and approval by the SCAQMD (Rule 403).

The following measures would be included within the plan:

- During construction, all unpaved roads, disturbed areas (e.g., areas of scraping, excavation, backfilling, grading, and compacting), and loose materials generated during construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent or watered two times daily or as frequently as necessary to minimize fugitive dust generation. Non-water-based soil stabilizers shall be as efficient as or more efficient for fugitive dust control than ARB-approved soil stabilizers and shall not increase any other environmental impacts, including loss of vegetation, adverse odors, or emissions of ozone precursor reactive organic gases (ROG) or volatile organic compounds (VOC).
- The main access roads through the site shall be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction. Delivery, laydown, and staging areas for construction or O&M supplies shall be paved or treated prior to taking initial deliveries.
- Grading and earthwork activities, including vegetation removal, cut and fill movement, and soil compacting, shall be phased across the site to minimize the amount of exposed or disturbed area on any single day.
- No vehicle shall exceed 15 miles per hour on unpaved areas within the site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
- Visible speed limit signs shall be posted at the construction site entrances.
- All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.
- All unpaved exits from the construction site shall be graveled or treated to prevent track-out onto public roadways.
- All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
- At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads to access the construction site or staging areas shall be swept as needed when dirt or runoff resulting from the construction activities is visible on the paved public roadway.

MM AQ-2 **Control On-Site Off-Road Equipment Emissions.** The project owner, when entering into construction contracts or when procuring off-road equipment or vehicles for on-site construction or O&M activities, shall ensure that only new model year equipment or vehicles are obtained. The following measures would be included with contract or procurement specifications:

- All construction diesel engines not registered under California Air Resources Board's Statewide Portable Equipment Registration Program, with a rating of 50 hp or higher shall meet the Tier 4 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort demonstrates that such engine is not available for a particular item of equipment. In the event that a Tier 4 engine is not available for any off-road equipment larger than 50 hp, a Tier 3 engine shall be used or that equipment shall be equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 3 levels unless certified by the engine manufacturers that the use of such devices is not practical for specific engine types.
- All diesel-fueled engines used in the construction of the facility shall have clearly visible tags showing that the engine meets the standards of this measure.
- All equipment and trucks used in the construction or O&M of the facility shall be properly maintained and the engines tuned to the engine manufacturer's specifications.
- All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.

Impact AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

During Construction, Less than Significant with Mitigation. This criterion assesses whether the Project would expose sensitive receptors to substantial pollutant concentrations. Construction activities would result in locally increased concentrations of construction-related emissions, including criteria air pollutants, diesel particulate matter (DPM) and other toxic air contaminants. During the temporary 20-month duration of construction, construction activities would cause increased health risk and hazards near the site. Decommissioning activities would create similar emissions that could also result in temporary, locally increased concentrations of these pollutants after the end of the Project's useful life.

Criteria Air Pollutants. The SCAQMD recommends using Localized Significance Thresholds for determining near-field impacts resulting from criteria air pollutant emissions from a small development site (up to 5 acres). In contrast, the Easley Project would cover approximately 3,735 acres of private and BLM land. Because of the large site, the LSTs do not directly apply; however, this discussion uses the LSTs as a proxy for describing near-field impacts.

Construction-related emissions sources would be spread across the site and off-site. This analysis identifies mitigation to reduce construction-related emissions under Impact AQ-2. The mitigation focuses on implementing dust control practices (MM AQ-1) and off-road equipment engine standards (MM AQ-2) to reduce the overall emissions, which also reduces the potential near-field impacts of on-site construction emissions. Particles of airborne fugitive dust may pose a health risk if inhaled because minerals such as silica or organic components present in the soils. Controlling fugitive dust during construction reduces the potential for wind erosion of soils and limits the ability for soils to become airborne and inhaled. Emissions from off-site sources, including on-road vehicles and vehicles on regional roadways, are included in the emissions inventories for construction and operation although the effects of off-site sources would be diminished by distance when compared with the on-site sources that predominately contribute to near-field effects.

Sensitive receptors include the residences in and around the Lake Tamarisk and Desert Center communities. All nearby residences would be more than 200 meters (656 feet) away from the nearest construction on the site. Most sources of construction emissions on the site and virtually all off-site sources would be more than 500 meters (1,641 feet) from residential land uses.

Maximum daily construction emissions with mitigation (shown in Table 9) would not exceed the recommended LSTs for any pollutant for receptors that are located 200 meters or more from sources of construction air pollutants. The mitigation focuses on the types of sources that occur on-site, and dust control requirements ensure that the mitigated PM10 and PM2.5 emissions would not exceed their respective LSTs. (See Attachment A for emissions inventory results and Attachment B for CalEEMod Output.) Because on-site construction emissions of criteria air pollutants would be below all applicable LSTs, project construction would not be likely to locally exceed the ambient air quality standards. Daily emissions during operations would mostly be caused by mobile source activity occurring off-site and less likely than construction to contribute to substantial pollutant concentrations.

With mitigation to reduce construction dust (MM AQ-1) and reduce engine exhaust emissions (MM AQ-2), construction and operation emissions would not expose sensitive receptors to substantial pollutant concentrations of criteria air pollutants, and the incremental health effects of criteria pollutants would be less than significant.

Toxic Air Contaminants. The primary health risks to nearby sensitive receptors would be driven by carcinogenic DPM emissions from on-site equipment and vehicles during construction. Noncancer effects of DPM are normally less of a concern than cancer risks. The construction duration creates the potential to deliver a dose over a short time period, spanning twenty months in this case. However, the recommended exposure duration for estimating cancer risk to residents or off-site workers would be 30 years or 25 years, respectively, according to the Office of Environmental Health Hazard Assessment (OEHHA), Guidance Manual for the Preparation of Health Risk Assessments (OEHHA 2015).

Health effects from carcinogenic TACs are usually described in terms of individual cancer risk over a 30-year exposure duration. This introduces uncertainty in the quantification of cancer risk, because the risk from construction emissions would occur only during a small fraction of a lifetime, and construction would cease following completion of the project. Therefore, the total exposure period for construction activities would be approximately six percent of the total exposure period used for typical residential health risk evaluation (30 years). Further, construction emissions would occur at variable rates during the short term and across a site of approximately 3,735 acres, rather than as a steady rate of emissions in a single location. Concentrations of mobile source DPM emissions are greatly reduced by distance, such that a separation of 1,000 feet (305 meters) normally allows sensitive land uses to avoid high levels of DPM concentrations (ARB 2005).

Proposed construction sources of DPM would be set back from the nearest occupied residences by more than 200 meters (656 feet), and most construction emissions would occur much more than 1,000 feet away from all sensitive receptors. Accordingly, there would be little potential to expose sensitive receptors to substantial pollutant concentrations of carcinogenic DPM. The impact of localized ground level concentrations and incremental health effects of toxic air contaminants would not be significant with mitigation to reduce construction dust (MM AQ-1) and reduce engine exhaust emissions (MM AQ-2).

Valley Fever. Soils in some areas of California host the microscopic fungus that causes Valley Fever, known as *Coccidioides immitis*, which lives in the top two to 12 inches of soil in many parts of the state. When soil is disturbed by activities such as digging, driving, or high winds, fungal spores can become airborne and potentially be inhaled. Workers in Riverside County are at a relatively lower risk than in other areas of California. In addition, employers have a legal responsibility to provide workers with protection from health risks, including any risks due to valley fever (DIR 2022). The primary ways to reduce the risk of valley

fever are to avoid exposure to dusty air or dust storms, prevent dirt or dust from becoming airborne, and, if working at a dusty site is unavoidable, wear respiratory protection with particulate filters rated as N95 or higher (DIR 2022). Project construction activities would be subject to stringent dust control requirements (including SCAQMD Rule 403). These mandatory controls would avoid exposing construction workers and the off-site population to substantial concentrations of dust, to ensure that the impact of potential exposure to Valley Fever would be less than significant.

Visibility and Federal Class I Areas. Under the federal CAA, Class I areas are provided the greatest protections. The nearest boundary of the JTNP Class I area is located 3 miles (4.8 kilometers) from the Project boundary. Ambient air quality impacts of the Project including increased concentrations of airborne dust, including PM10 and PM2.5, and NOx emissions could impact visibility. However, the sources of emissions during construction would occur near the ground level, where dust would have a limited ability to notably affect distant vistas, and emissions would be widely dispersed across the 3,735 acre project site. The near-ground release and intermittent nature of construction sources ensures that the concentration near the JTNP would be much lower than the localized effects near Project activities. Additionally, all cumulative projects are anticipated to avoid visible plumes and control dust as required by SCAQMD Rule 401 and Rule 403. Projects subject to the CEQA process would also implement additional mitigation measures where needed to control dust. Controlling construction emissions as required by local rules and regulations and through mitigation measures identified above ensures that users of the JTNP would not experience substantial concentrations of pollutants, and the impact to visibility would be less than significant.

During Operation, Less than Significant. Site activities and the operations-related emissions from upkeep, maintenance, inspections, security, and panel washing would occur more than 200 meters (656 feet) away from the closest residence or inhabitable dwellings. Therefore, there would be no potential to expose sensitive receptors to substantial pollutant concentrations, and this impact would not be significant.

Recommended Mitigation for Construction-Phase Emissions

MM AQ-1 Fugitive Dust Control Plan.

MM AQ-2 Control On-Site Off-Road Equipment Emissions.

Impact AQ-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant. During construction, there would be no other emissions or odors that would adversely affect a substantial number of people. The closest residential use to the Project site would be more than 200 meters (656 feet) away from all onsite activity. The Project site is also relatively remote, and there is not a substantial number of people near the site.

Operation of the Project would involve no potential sources of emissions that could lead to odors, that would adversely affect a substantial number of people. The closest residence or inhabitable dwelling to the Project site would be more than 200 meters (656 feet) away from on-site activities. Therefore, the potential impact related to odors or other adverse emissions would be less than significant.

7. GREENHOUSE GAS (GHG) EMISSIONS IMPACTS

Impact GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant. The Project would cause GHG emissions due to construction activities and during operation. Operation of the solar generating station and battery energy storage system would produce electricity from renewable energy resources that would displace the need to produce electricity from conventional (fossil-fueled) resources. Separate discussions appear for the different effects on GHG emissions: those caused by development activities including construction and operations with maintenance and inspection; the effects of land use conversion; and indirect GHG emissions reductions due to the electricity produced from renewable energy.

Emissions from Development Activities: Construction and Operations. Construction, operations, and eventual decommissioning activities would cause GHG emissions resulting from fossil-fuel combustion in the engines of construction equipment and the vehicles carrying construction materials and workers to and from the site. Diesel fuel or gasoline is used in mobilizing the heavy-duty construction equipment, site development and preparation, facility construction, and roadway construction, and eventual decommissioning. Equipment and vehicle use, including helicopters, over the duration of construction would amount to approximately 11,222 MTCO2e of GHG emissions. Energy consumed during the extraction and delivery of the construction water supply would add 756 MTCO2e to the one-time construction emissions. The sum of emissions from these one-time construction activities would be 11,978 MTCO2e. (See Attachment A for emissions inventory results, and Attachment B for CalEEMod Output.)

For assessing the overall rate of project GHG emissions, Riverside County as CEQA lead agency allows short-term construction GHG emissions to be included with operational emissions by averaging construction effects over a 30-year life of the project, as recommended by SCAQMD (SCAQMD 2008). The overall construction GHG emissions amortized over 30 years would be equivalent to an annualized rate of 399 MTCO2e/year. During the operational life of the project, direct on-site O&M activities would contribute an additional 559 MTCO2e/year. The emissions of O&M activities are shown with the one-time and annualized GHG emissions rates of construction in Table 11.

Table 11. Easley Project: GHG Emissions

Activity	One-Time During Construction (MTCO2e)	30-year Amortized Emissions (MTCO2e per year)	Easley Project GHG Emissions (MTCO2e per year)
Construction Equipment and Vehicles, Year 1: One-Time and 30-year Amortized	4,072	136	—
Construction Equipment and Vehicles, Year 2: One-Time and 30-year Amortized	7,069	236	—
Construction Helicopter Activity, Year 2: One-Time and 30-year Amortized	81	3	—
Construction Water Use, Year 1-2: One-Time and 30-year Amortized	756	25	—
Total, Construction: One-Time and 30-year Amortized	**11,978**	**399**	**399**
Operation and Maintenance	—	—	559
Effects of Land Use Conversion	—	—	16,098
Emissions Avoided by Producing Electricity	—	—	-333,686
Total GHG Emissions, Construction and Operations			**-316,630**

Source: Attachment A, AQ/GHG Emissions Inventory; Attachment B, CalEEMod Output; Attachment C, Avoided GHG Emissions.

Effects of Land Use Conversion. Installation of the Project would result in ground disturbance that would disturb soils and remove some vegetation that naturally provide carbon uptake. Converting a portion of the existing land would eliminate the natural sequestration of carbon because the existing soil and vegetation acts as a sink by removing CO_2 from the atmosphere. Ground disturbance and vegetation removal during construction accordingly adds to the GHG impact because a portion of the soils and vegetation onsite would no longer be present to sequester CO_2. The loss of carbon uptake depends on what fraction of natural vegetation on the site would be cleared for permanent installation of foundations, roads, or other onsite facilities, and on efforts to minimize soil erosion or protect existing ground cover to minimize the loss of carbon uptake. The actual amount of this loss is uncertain because it would depend on the particular characteristics of the site, and the available data on rates of sequestration by vegetation and soils are approximations. The loss of natural carbon uptake would not be expected to exceed 4.31 MTCO2e per year per acre; absent a reliable factor for the site setting, this factor is a proxy based on removing the natural sequestration capability of grassland (published in Appendix A of the CalEEMod User's Guide; CAPCOA 2021). At this rate, the permanent conversion of up to 3,735 acres, due to vegetation removal, compacted soils for access roads, and impervious areas for equipment at the site, would result in 16,098 MTCO2e per year of sequestration capability being lost. This estimate is conservatively high because a portion of the site would retain natural conditions, and some carbon sequestration capabilities would be restored through revegetation efforts.

Emissions Avoided by Producing Electricity. Some of the renewable power generated by the Easley Project would displace power produced by carbon-based fuels that would otherwise be used to meet electricity demand. The power displaced is incremental power provided by generators elsewhere on the grid, typically from natural gas power plants.

The solar PV generating station of the Project would be able to produce up to about 840,000 megawatt-hours (MWh) of electricity each year for delivery to California's end-users. Some of the electricity produced would displace fuel-burning by California's flexible natural gas-fired resources or electricity otherwise imported to California. This would avoid GHG that could otherwise be emitted by fuel-burning

generators. The rate of GHG emissions avoided would vary with the mix of generators and imported electricity displaced, with the least efficient and highest-emitting generators normally being turned down to accommodate the additional renewable generation; in California, there is a single dominant dispatchable fuel (natural gas) (CEC 2019; CPUC 2022). To estimate the emissions avoided by solar production, this analysis assumes that the BESS component would dispatch its stored energy after the solar output decreases for the day. Because natural gas provides most of the flexible capacity, this analysis uses an avoided emissions displacement factor of approximately 0.373 MT of CO_2 per MWh (822.5 lb per MWh), which is a conservatively low emission factor for efficient, conventional generation using natural gas, combined cycle generators (CEC 2019).

While the precise quantity of GHG emissions avoided by the Project would depend on the operations and dispatch strategy for both the solar PV and BESS components, there are two ways in which the Project could offset avoid from conventional power sources: (1) production of solar power during daylight hours that displaces the production from conventional, fossil fuel powered generators, and (2) discharge of stored energy from the BESS during evening or nighttime hours when the demand for conventional, fossil fuel powered generators is highest. This analysis focuses on the benefits provided by the BESS.

While the solar PV component of the Project would provide power to the grid during daylight hours, the BESS component allows that power to be stored and discharged during high demand periods. The Easley Project BESS component and energy storage in general helps to reduce the swing in demand for electricity from conventional, fossil fuel powered generators that is depicted by California's "duck curve." The "duck curve" is defined by the shape of net electricity demand over a typical day, where net demand, also referred to as net load, is the demand for electricity remaining after all electricity from variable sources of renewable electricity (e.g., solar, wind) have been dispatched. The pattern is characterized by drastic increases in net demand during the evening hours as solar generation decreases, and a net peak that occurs later in the evening when solar generation fully drops off (U.S. EIA 2023).

Energy storage provides an economic opportunity to shift the production of the Easley Project to the hours of highest demand for electricity from dispatchable resources. The Easley Project's dispatch strategy will use the BESS to respond to power price differentials. The battery system would be charged fully during the cheapest CAISO generation hours (i.e., during middle of the day when solar generation is highest and power prices are lowest across the grid, commonly referred to as the belly of the duck). Energy from the BESS would then be dispatched during the evening ramp after the sun goes down and power prices peak as natural gas-fired power plants must be dispatched rapidly to meet evening demand. The BESS is expected be both charged and discharged fully each day.

The ultimate size of the Easley Project solar PV and BESS components depend on final environmental constraints as well as the final transmission deliverability allocation. Assuming the full 400 MW of PV generating capacity and 650-MW BESS, as proposed, the battery is expected to charge from the full capacity of Easley Project's solar PV output and would supplement this charging with low-cost energy from the grid during the midday belly of the duck. The stored energy would then all be discharged over the course of 4 hours during the evening ramp. Over the course of a year, the energy discharged from the 650-MW BESS would total to an annual output of approximately 894,400 MWh. For a 200-MW BESS system, the full BESS capacity would be charged from Easley's solar PV output project during the sunniest midday hours. The 200-MW BESS would then be discharged during the evening ramp, resulting in 275,200 MWh of energy discharged over the course of a year.

The most common form of generation used to meet CAISO's evening demand peak is conventional combined cycle natural gas. Applying the factor of 0.373 MTCO2/MWh for displacement of efficient, conventional generation using natural gas, as published by the California Energy Commission (CEC 2019), operation of the BESS as articulated above would result in the avoidance of 333,686 MTCO2/year for the

650 MW BESS or 102,673 MTCO2/year for a 200 MW BESS. (See Attachment C for details on the avoided GHG emissions results.)

Given Easley Project construction emissions of 11,978 MTCO2e, it would take less than one month of Project operation for a 650 MW BESS to fully offset construction phase emissions or less than two months for a 200 MW BESS. Assuming a 30-year operational life for the Project, total project lifetime lost carbon sequestration potential due to development of the site would be 482,936 MTCO2e (16,098 MTCO2e per year). It would take less than two years of operation for a 650 MW BESS or less than five years for a 200 MW BESS to fully offset the project lifetime lost carbon sequestration. (See Attachment C for details on the avoided GHG emissions results.)

This analysis demonstrates that the Easley Project would not result in any net additional GHG emissions. The combined direct and indirect effects of the emissions quantified in Table 11 indicates that a net GHG reduction would occur as a result of implementing the Project, by avoiding around 316,630 MTCO2e annually. This impact would be less than significant, and no mitigation is required.

Impact GHG-2: Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant. The Project would produce electricity in a manner that improves California's ability to supply renewable energy to end-use customers and to achieve statewide renewable energy goals. Electricity from the solar generating station would be used to serve the needs of California's customers and would facilitate compliance with California's Renewables Portfolio Standard (RPS).

Achieving the renewable energy targets mandated by the RPS is critical to California achieving its GHG targets and statewide carbon neutrality as established by the California Climate Crisis Act of 2022 (AB 1279). The ARB 2022 Climate Change Scoping Plan identifies decarbonizing the electricity sector as a crucial pillar of achieving carbon neutrality, and ARB recognizes that energy storage is an essential component for the electricity grid to maintain reliability with high concentrations of renewables (ARB, 2022b). The California Global Warming Solutions Act of 2006 (AB 32) and Senate Bill 32 (SB 32) of 2016 codified the GHG emissions target to 40 percent below the 1990 level by 2030. Subsequently, California's Clean Energy and Pollution Reduction Act of 2015 [Senate Bill 350 (SB 350)], SB 350 set ambitious 2030 targets for energy efficiency and renewable electricity, among other actions aimed at reducing GHG emissions across the energy and transportation sectors. SB 350 also connects long-term planning for electricity needs with the state's climate targets, with ARB establishing 2030 GHG emissions targets for the electricity sector in general (ARB 2022b). The current RPS was signed into law in September 2018 with Senate Bill 100 (SB 100), which established the goals of 50 percent renewable energy resources by 2026 and 60 percent renewable energy resources by 2030. SB 100 also sets a target for California to achieve a GHG-free energy supply by December 31, 2045.

The strategy for achieving the GHG reductions is set forth by the ARB Climate Change Scoping Plan. Overall, the electricity produced by the Project would contribute to continuing GHG reductions in California's power supply. Because the Project would use renewable energy resources to produce electricity, the avoided GHG emissions would be consistent with and would not conflict with the California's GHG emissions reduction targets and the Climate Change Scoping Plan that relies on achieving the RPS targets.

Other activities related to construction and operation of the Project would either be exempt from or would be required to comply with ARB rules and regulations to reduce GHG emissions and would cause no other potential conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

As the total GHG emissions generated during construction and operation of the Project would be considerably less than the GHG emissions avoided, the solar power plant would lead to a net reduction in GHG emissions across the State's electricity system, which would contribute to meeting the State's GHG reduction goals under AB 32 and subsequent targets for 2030 and beyond. The Project would not conflict with any applicable GHG management plan, policy, or regulation. This impact would be less than significant, and no mitigation is required.

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Attachment A

AQ/GHG EMISSIONS INVENTORY

Easley Renewable Energy Project - Summary of Emissions Estimates

Construction, CalEEMod Results of Emissions Estimates

Construction Phase - Emissions Summary from CalEEMod Results

Construction Phase - Activity by Year

Construction: Annual Emissions. Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total	CO2e
Year	tons/yr										MT/yr
2025	1.51	10.53	15.12	0.04	13.48	0.42	13.90	2.35	0.39	2.74	4,072
2026	2.50	17.71	26.72	0.08	24.42	0.72	25.14	3.27	0.68	3.94	7,069

Construction: Annual Emissions. Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total	CO2e
Year	tons/yr										MT/yr
2025	0.81	4.37	16.21	0.04	4.39	0.07	4.47	1.15	0.07	1.22	4,072
2026	1.36	9.12	27.96	0.08	6.84	0.14	6.98	1.52	0.13	1.65	7,069

Helicopter Activity during Construction: Add to CalEEMod Results

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total	CO2e
	tons/yr										MT/yr
Helicopter Activity, Year 2	0.37	0.13	0.47			0.004	0.004		0.004	0.004	81

Water Use during Construction: Add to CalEEMod Results

											CO2e
											MT/yr
Water Use, Year 1-2											756

Construction Phase - Overall Total, Duration of Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total	CO2e
	tons/yr										MT/yr
Maximum Annual without Mitigation	**2.87**	**17.84**	**27.19**	**0.08**	**24.42**	**0.73**	**25.15**	**3.27**	**0.68**	**3.95**	
Maximum Annual with Mitigation	**1.73**	**9.25**	**28.43**	**0.08**	**6.84**	**0.14**	**6.99**	**1.52**	**0.14**	**1.65**	

Total GHG, Duration of Construction **11,978**

Easley Renewable Energy Project - Summary of Emissions Estimates

Construction Phase - Peak Daily Activity

Construction: Summer (Maximum Daily Emissions). Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Year	lb/day									
2025	27.05	173.94	303.85	0.85	272.41	7.19	279.60	36.44	6.70	43.14
2026	26.36	172.84	294.55	0.83	272.41	7.17	279.59	36.44	6.69	43.13
Maximum	**27.05**	**173.94**	**303.85**	**0.85**	**272.41**	**7.19**	**279.60**	**36.44**	**6.70**	**43.14**

Construction: Summer (Maximum Daily Emissions). Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Year	lb/day									
2025	15.91	91.19	315.29	0.85	76.35	1.45	77.80	16.87	1.38	18.25
2026	15.22	90.08	306.00	0.83	76.35	1.44	77.79	16.87	1.37	18.24
Maximum	**15.91**	**91.19**	**315.29**	**0.85**	**76.35**	**1.45**	**77.80**	**16.87**	**1.38**	**18.25**

Construction: Winter (Maximum Daily Emissions). Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Year	lb/day									
2025	27.33	175.40	272.25	0.80	272.41	7.19	279.60	36.44	6.70	43.14
2026	26.67	174.25	265.19	0.79	272.41	7.17	279.59	36.44	6.69	43.13
Maximum	**27.33**	**175.40**	**272.25**	**0.80**	**272.41**	**7.19**	**279.60**	**36.44**	**6.70**	**43.14**

Construction: Winter (Maximum Daily Emissions). Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Year	lb/day									
2025	16.19	92.65	283.70	0.80	76.35	1.45	77.80	16.87	1.38	18.25
2026	15.53	91.49	276.64	0.79	76.35	1.44	77.79	16.87	1.37	18.24
Maximum	**16.19**	**92.65**	**283.70**	**0.80**	**76.35**	**1.45**	**77.80**	**16.87**	**1.38**	**18.25**

Easley Renewable Energy Project - Summary of Emissions Estimates

Construction: Maximum Daily without Mitigation

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Year	lb/day									
Year 1	27.33	175.40	303.85	0.85	272.41	7.19	279.60	36.44	6.70	43.14
Year 2	26.67	174.25	294.55	0.83	272.41	7.17	279.59	36.44	6.69	43.13

Helicopter Activity during Construction: Add to CalEEMod Results

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
	lb/day									
Helicopter Activity, Year 2	24.29	7.92	30.98			0.27	0.27		0.27	0.27

Daily without Mitigation	**50.96**	**182.17**	**325.53**	**0.85**	**272.41**	**7.45**	**279.86**	**36.44**	**6.96**	**43.40**

Construction: Maximum Daily with Mitigation

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Year	lb/day									
Year 1	16.19	92.65	315.29	0.85	76.35	1.45	77.80	16.87	1.38	18.25
Year 2	15.53	91.49	306.00	0.83	76.35	1.44	77.79	16.87	1.37	18.24

Helicopter Activity during Construction: Add to CalEEMod Results

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
	lb/day									
Helicopter Activity, Year 2	24.29	7.92	30.98			0.27	0.27		0.27	0.27

Daily with Mitigation	**39.82**	**99.42**	**336.98**	**0.85**	**76.35**	**1.71**	**78.06**	**16.87**	**1.64**	**18.51**

Easley Renewable Energy Project - Summary of Emissions Estimates

Operational, CalEEMod Results of Emissions Estimates

Operation Phase - Emissions Summary from CalEEMod Results

Operation includes:
- O&M building at 3,000 sf.
- Water supply of 50 acre-feet annually for panel washing and other uses.
- Standby generator (rated at 45 kW or ~ 61 hp).

Operation Phase - Annual Typical O&M

Operational. Annual Emissions

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total	CO2e
Category	tons/yr										MT/yr
Area	0.14	0.01	1.49	0.00		0.01	0.01		0.01	0.01	3
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0
Mobile	0.15	0.35	2.17	0.01	10.30	0.00	10.30	1.13	0.00	1.13	520
Stationary	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	1
Waste						0.00	0.00		0.00	0.00	2
Water						0.00	0.00		0.00	0.00	33
Total	**0.29**	**0.37**	**3.66**	**0.01**	**10.30**	**0.01**	**10.31**	**1.13**	**0.01**	**1.14**	**559**

Easley Renewable Energy Project - Summary of Emissions Estimates

Operational: Summer (Maximum Daily Emissions)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Category	lb/day									
Area	1.52	0.15	16.53	0.00		0.06	0.06		0.06	0.06
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Mobile	0.89	1.77	13.30	0.03	56.63	0.03	56.66	6.21	0.02	6.23
Stationary	0.05	0.16	0.18	0.00		0.01	0.01		0.01	0.01
Total	**2.46**	**2.08**	**30.02**	**0.03**	**56.63**	**0.09**	**56.72**	**6.21**	**0.09**	**6.30**

Operational: Winter (Maximum Daily Emissions)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Category	lb/day									
Area	1.52	0.15	16.53	0.00		0.06	0.06		0.06	0.06
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Mobile	0.83	1.87	11.22	0.03	56.63	0.03	56.66	6.21	0.02	6.23
Stationary	0.05	0.16	0.18	0.00		0.01	0.01		0.01	0.01
Total	**2.40**	**2.19**	**27.93**	**0.03**	**56.63**	**0.09**	**56.72**	**6.21**	**0.09**	**6.30**

Operational: Maximum Daily Emissions - any season

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5Total
Category	lb/day									
Area	1.52	0.15	16.53	0.00		0.06	0.06		0.06	0.06
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Mobile	0.89	1.87	13.30	0.03	56.63	0.03	56.66	6.21	0.02	6.23
Stationary	0.05	0.16	0.18	0.00		0.01	0.01		0.01	0.01
Total, any season	**2.47**	**2.19**	**30.02**	**0.03**	**56.63**	**0.09**	**56.72**	**6.21**	**0.09**	**6.30**

Easley Renewable Energy Project - Summary of Emissions Estimates

GHG Summary, Duration of Construction (one-time and Annualized) plus Operation

Includes Sources External to CalEEMod

	Construction One-Time (MTCO2e)	Construction, Total divided by 30 years (MTCO2e per year)
Equipment and Vehicles, Year 1	4,072	136
Equipment and Vehicles, Year 2	7,069	236
Helicopter Activity, Year 2	81	3
Water Use, Year 1-2	756	25
GHG Emissions, Construction Total (one-time)	**11,978**	
GHG Emissions, Construction Amortized (per year, 30-year life)		**399**

	Operation, Annual Emissions (MTCO2e per year)
Operation and Maintenance	559
Effects of Land Use Conversion	16,098
Emissions Avoided by Producing Electricity	-333,686
GHG Emissions, Operation (per year)	**-317,030**
Total GHG Emissions, Construction Amortized and Operations (per year)	**-316,630**

Easley - Construction, Emissions Estimates

Construction - Sequence and On-road Activity Assumptions, input to CalEEMod

Normal working schedule : 5

Target commence construction : 3/31/2025

Assumptions:

Project Description: circa 6/22/2023, up to 400 MW, 20-mo construction

- Work occurs avgerage 5 days a week, typ runtimes 8 hr/day; approximately ~ 3,735 ac site.
- On-road motor vehicle trips are counted as one-way for emissions (except RTs where noted). Average trip length to Blythe or Indio = 60 mi.
- HDT Mix or HHDT for all vendor, material haul and equipment delivery trucks.
- utility ATVs (OHRV) may also include rovers [e.g., 82 hp Polaris RANGER XP 1000].
- OHRV are subject to 13 CCR 2412 Exhaust Standards and 13 CCR 2416 Evaporative Emissions Standards [range 0.91 to 1.99 g/hp-hr in ARB's RV2018 model (4-stroke fuel-injected) specialty veh].

Construction Schedule, and On-Road Vehicle Use

	Phase	Seq. (mo)	Duration (months)	Duration (work days)	Phase Start (estd.)	Phase End (estd.)	Peak Workers (daily roundtrips)	Worker Trip Count (1-way, daily)	Vendor/Hauling Trip Count (1-way, avg daily)
0									
1	1a Site Preparation	0	2	43	3/31/2025	5/30/2025	55	110	10
2	1b Grading	0	4	87	3/31/2025	7/30/2025	55	110	10
3	2 PV System	4	12	260	8/1/2025	7/31/2026	430	860	80
4	3 Electrical (Inverters, BESS, Substation)	8	12	260	11/29/2025	11/28/2026	100	200	30
5	4a Gen-tie	16	4	87	8/1/2026	11/30/2026	55	110	15
6	4b Cleanup	18	2	43	9/29/2026	11/29/2026	55	110	10

Easley - Construction, Emissions Estimates

Construction - Offroad Equipment Fleet, input to CalEEMod

Offroad Equipment Use

		Count	Type	Avg Use (hr/d)	Rating (hp)	Load Factor	Total Count/Phase	
	1a Site Preparation	5	Rollers	8	80	0.38		
	1a Site Preparation	5	Rubber Tired Dozers	8	247	0.4		
	1a Site Preparation	5	Tractors/Loaders/Backhoes	8	97	0.37		
							15	1a Site Preparation
	1b Grading	2	Excavators	8	158	0.38		
	1b Grading	2	Forklifts	8	89	0.2		
	1b Grading	4	Graders	8	187	0.41		
	1b Grading	2	Rubber Tired Dozers	8	247	0.4		
	1b Grading	2	Scrapers	8	367	0.48		
	1b Grading	4	Tractors/Loaders/Backhoes	8	97	0.37		
	1b Grading	2	Trenchers	8	78	0.5		
							18	1b Grading
	2 PV System	4	Aerial Lifts	8	63	0.31		
	2 PV System	8	Bore/Drill Rigs [PD10]	8	49	0.4		
	2 PV System	2	Concrete/Industrial Saws	8	81	0.73		
	2 PV System	4	Cranes	7	231	0.29		
	2 PV System	2	Excavators	8	158	0.38		
	2 PV System	10	Forklifts	8	89	0.2		
	2 PV System	1	Generator Sets	8	84	0.74		
	2 PV System	8	Off-Highway Tractors	4	82	0.44		
	2 PV System	2	Other Construction Equipment	8	82	0.42		
	2 PV System	2	Other General Industrial Equipment	8	88	0.34		
	2 PV System	2	Rollers	8	80	0.38		
	2 PV System	1	Rubber Tired Dozers	8	247	0.4		
	2 PV System	8	Skid Steer Loaders	8	65	0.37		
	2 PV System	2	Tractors/Loaders/Backhoes	8	97	0.37		
	2 PV System	2	Trenchers	8	78	0.5		
	2 PV System	8	Welders	8	46	0.45		
							66	2 PV System

Offroad Equipment Use

		Count	Type	Avg Use (hr/d)	Rating (hp)	Load Factor	Total Count/Phase
	3 Electrical	4	Aerial Lifts	8	63	0.31	
	3 Electrical	2	Cranes	7	231	0.29	
	3 Electrical	4	Forklifts	8	89	0.2	
	3 Electrical	2	Generator Sets	8	84	0.74	
	3 Electrical	4	Off-Highway Tractors	4	82	0.44	
	3 Electrical	4	Other Construction Equipment	8	82	0.42	
	3 Electrical	2	Rollers	8	80	0.38	
	3 Electrical	4	Skid Steer Loaders	8	65	0.37	
	3 Electrical	2	Tractors/Loaders/Backhoes	7	97	0.37	
	3 Electrical	4	Trenchers	8	78	0.5	
	3 Electrical	4	Welders	8	46	0.45	
							36 3 Electrical
	4a Gen-tie	5	Aerial Lifts	7	63	0.31	
	4a Gen-tie	2	Cranes	7	231	0.29	
	4a Gen-tie	4	Forklifts	8	89	0.2	
	4a Gen-tie	2	Generator Sets	8	84	0.74	
	4a Gen-tie	2	Tractors/Loaders/Backhoes	8	97	0.37	
	4a Gen-tie	5	Welders	8	46	0.45	
							20 4a Gen-tie
	4b Cleanup	5	Air Compressors	6	78	0.48	
	4b Cleanup	5	Forklifts	8	89	0.2	
	4b Cleanup	2	Graders	8	187	0.41	
	4b Cleanup	5	Skid Steer Loaders	8	65	0.37	
	4b Cleanup	1	Welders	6	46	0.45	18 4b Cleanup

Easley - Construction, Helicopter Emission Factors and Activity Estimates

Construction Phase - Helicopter Activity during Construction: Add to CalEEMod Results

Basis: Swiss Confederation, FOCA, 2015 (Guidance on the Determination of Helicopter Emissions, Edition 2, Dec 2015, FOCA, CH-3003 Bern)

Criteria Air Pollutant Emission Factors

		Rating (shp/engine)	# engines		LTO Fuel (kg)	LTO NOx (g)	LTO HC (g)	LTO CO (g)	LTO PM (g)		One-hour Fuel (kg)	One-hour NOx (kg)	One-hour HC (kg)	One-hour CO (kg)	One-hour PM (kg)
H500 - Hughes 500 (DDA250-C18)		317	1		16.4	59.5	438.2	571.2	2.3		98.8	0.48	0.96	1.2	0.016
single engine, turboshaft (typ ops)	10	min per LTO (ground idle plus TO or App)													
					0.0273	LTO avg rate Fuel Use (kg/sec)					0.0274	One-hour Fuel Use (kg/sec)			
					5.39	LTO Fuel Use (gal)					32.46	One-hour Fuel Use (gal/hr)			

Jet fuel A, density std conditions (appx)			NOx (lb/LTO)	ROG (lb/LTO)	CO (lb/LTO)	PM (lb/LTO)	NOx (lb/hr)	ROG (lb/hr)	CO (lb/hr)	PM (lb/hr)
804	kg/m3		0.13	0.97	1.26	0.01	1.06	2.12	2.65	0.04
3.04	kg/gal									
0.135	MMBtu/gal									

GHG Emission Factors

	CO2	CH4	N2O
Factors for: Kerosene-Type Jet Fuel	(kg/MMBtu)	(kg/MMBtu)	(kg/MMBtu)
US EPA, 40 CFR 98, Subchapter C Table C-1:	72.22	0.003	0.0006

CO2 (g/gal)	CH4 (g/gal)	N2O (g/gal)	CO2e (lb/LTO)	CO2 (lb/LTO)	CH4 (lb/LTO)	N2O (lb/LTO)	CO2e (lb/hr)	CO2 (lb/hr)	CH4 (lb/hr)	N2O (lb/hr)
9749.7	0.405	0.081	116.23	115.82	0.005	0.001	700.21	697.76	0.029	0.006

Helicopter Activity Estimates

Medium Voltage (34.5 kV) & 500 kV Gen-tie

			NOx (lb/day)	ROG (lb/day)	CO (lb/day)	PM (lb/day)
Peak Cycles (LTO/day)	12		1.57	11.59	15.11	0.06
Peak Day (hr/day)	6		6.35	12.70	15.87	0.21
		Peak Daily Sum:	7.92	24.29	30.98	0.27

Overall Helicopter Activity >>>>>>>>>>

			NOx (ton)	ROG (ton)	CO (ton)	PM (ton)		CO2e (MT)
Overall LTO	330		0.02	0.16	0.21	0.001		17.4
Overall Hours	200		0.11	0.21	0.26	0.004		63.5
		Overall Sum:	0.13	0.37	0.47	0.004		80.9

Easley - Construction, GHG related to Water Supply

Construction Phase - Water Use during Construction: Add to CalEEMod Results

Water Use Electricity Intensity Factors: CalEEMod, v. 2020.4.0, User's Guide Appendix D, Table 9.2 (CAPCOA 2021)

Construction Water Use : 1,000 acre-feet per entire construction
325.85 million gallons

Air Basin	Supply Water (kWh/million gallons)	Treat Water (kWh/million gallons)	Distribute Water (kWh/million gallons)	Wastewater Treatment (kWh/million gallons)	Sum (kWh/million gallons)
Mojave Desert	9727	111	1272	1911	13,021

CalEEMod (v.2020.4.0): GHG Intensity of SCE Electricity

CO2 (lb/MWh)	CH4 (lb/MWh)	N2O (lb/MWh)
390.98	0.033	0.004

	MWh	CO2e Factor (MT/MWh)
Construction Water Supply, Electricity Use :	4,243	0.178

Attachment B

CALEEMOD OUTPUT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Easley Renewable Energy 400 MW

Mojave Desert Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	162,350.00	1000sqft	3,727.04	162,350,000.00	0
Industrial Park	3.00	1000sqft	0.07	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Solar electric generating facility and energy storage

Land Use - Approx 3735 acre site w 3000 sf office

Construction Phase - Overall 20 months w overlapping activities

Off-road Equipment - Ph 1a Initial site prep up to 15 pc equipment

Off-road Equipment - Ph 1b Grading appx 18 pc equipment

Off-road Equipment - Ph 2 PV arrays appx 66 pc off-road

Off-road Equipment - Ph 3 Electrical and BESS appx 36 pcs equipment

Off-road Equipment - Ph 4a Gen-tie up to 20 pc equipment

Off-road Equipment - Ph 4b Cleanup 18 pc equipment

Trips and VMT - peak appx 60 truck roundtrips daily in HDT Mix

On-road Fugitive Dust - Final mile of truck trips unpaved

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Material cut fill balanced on site, target grading access roads

Architectural Coating - Architectural coatings not applicable

Vehicle Trips - Operational trip generation rate for office

Road Dust - Final mile on unpaved surface at 25 mph onsite speed limit

Consumer Products - Consumer products not applicable

Area Coating - Architectural coating reapplication not applicable

Energy Use - Operational electricity and natural gas use not appllicable

Water And Wastewater - Operational water use up to 50 acre feet is 16.3 million gal per year

Solid Waste - Minimal solid waste generation

Land Use Change - Land use change approx 3735 acres

Construction Off-road Equipment Mitigation - Tier 4 engines except OHRVs; water 2x daily is 55% effective PM10 control per Rule 403; suppressant is 84% effective per Table XI-D

Stationary Sources - Emergency Generators and Fire Pumps - Backup generator if necessary

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	81,176,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	243,529,500.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	25.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	6,000.00	43.00
tblConstructionPhase	NumDays	15,500.00	87.00
tblConstructionPhase	NumDays	155,000.00	260.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	155,000.00	260.00
tblConstructionPhase	NumDays	155,000.00	87.00
tblConstructionPhase	NumDays	11,000.00	43.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24E	2.74	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	3.43	0.00
tblGrading	AcresOfGrading	435.00	300.00
tblGrading	AcresOfGrading	107.50	300.00
tblOffRoadEquipment	HorsePower	221.00	49.00
tblOffRoadEquipment	HorsePower	124.00	82.00
tblOffRoadEquipment	HorsePower	124.00	82.00
tblOffRoadEquipment	HorsePower	172.00	82.00
tblOffRoadEquipment	HorsePower	172.00	82.00
tblOffRoadEquipment	LoadFactor	0.50	0.40
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	MeanVehicleSpeed	40	25
tblRoadDust	RoadPercentPave	100	98

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblSolidWaste	SolidWasteGenerationRate	201,314.00	0.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	61.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripNumber	0.00	100.00
tblTripsAndVMT	HaulingTripNumber	0.00	100.00
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	26,610.00	80.00
tblTripsAndVMT	VendorTripNumber	26,610.00	40.00
tblTripsAndVMT	VendorTripNumber	26,610.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripNumber	38.00	110.00
tblTripsAndVMT	WorkerTripNumber	45.00	110.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	860.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	200.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	110.00
tblTripsAndVMT	WorkerTripNumber	13,638.00	110.00
tblVehicleTrips	CC_TL	6.60	60.00
tblVehicleTrips	CNW_TL	6.60	60.00
tblVehicleTrips	CW_TL	14.70	60.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	2.54	30.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.24	30.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	3.37	30.00
tblWater	IndoorWaterUseRate	37,543,437,500.00	0.00
tblWater	IndoorWaterUseRate	693,750.00	300,000.00
tblWater	OutdoorWaterUseRate	0.00	16,000,000.00

2.0 Emissions Summary

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	1.5109	10.5332	15.1237	0.0444	13.4804	0.4238	13.9043	2.3500	0.3935	2.7434	0.0000	4,017.9783	4,017.9783	0.4468	0.1444	4,072.1728
2026	2.5032	17.7130	26.7223	0.0771	24.4180	0.7232	25.1411	3.2693	0.6754	3.9447	0.0000	6,968.6360	6,968.6360	0.6699	0.2806	7,068.9893
Maximum	**2.5032**	**17.7130**	**26.7223**	**0.0771**	**24.4180**	**0.7232**	**25.1411**	**3.2693**	**0.6754**	**3.9447**	**0.0000**	**6,968.6360**	**6,968.6360**	**0.6699**	**0.2806**	**7,068.9893**

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					
2025	0.8095	4.3741	16.2113	0.0444	4.3937	0.0725	4.4662	1.1518	0.0692	1.2211	0.0000	4,017.9766	4,017.9766	0.4468	0.1444	4,072.1710
2026	1.3633	9.1196	27.9554	0.0771	6.8438	0.1377	6.9815	1.5153	0.1311	1.6464	0.0000	6,968.6331	6,968.6331	0.6699	0.2806	7,068.9864
Maximum	**1.3633**	**9.1196**	**27.9554**	**0.0771**	**6.8438**	**0.1377**	**6.9815**	**1.5153**	**0.1311**	**1.6464**	**0.0000**	**6,968.6331**	**6,968.6331**	**0.6699**	**0.2806**	**7,068.9864**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**45.87**	**52.23**	**-5.55**	**0.00**	**70.35**	**81.67**	**70.68**	**52.53**	**81.26**	**57.13**	**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	**3-31-2025**	**6-29-2025**	3.2874	0.5516
2	**6-30-2025**	**9-29-2025**	3.5054	1.7169
3	**9-30-2025**	**12-30-2025**	5.1540	2.8680
4	**12-31-2025**	**3-30-2026**	6.4588	3.4408
5	**3-31-2026**	**6-29-2026**	6.4745	3.4231
6	**6-30-2026**	**9-29-2026**	4.4434	2.2328
		Highest	6.4745	3.4408

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1370	0.0135	1.4880	1.1000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003	0.0000	2.9010	2.9010	7.5500e-003	0.0000	3.0897
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	0.1534	0.3505	2.1665	5.5400e-003	10.2955	4.7800e-003	10.3002	1.1266	4.5000e-003	1.1311	0.0000	511.9965	511.9965	0.0215	0.0237	519.5954
Stationary	2.5000e-003	8.1600e-003	9.0800e-003	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	1.1614	1.1614	1.6000e-004	0.0000	1.1655
Waste						0.0000	0.0000		0.0000	0.0000	0.7551	0.0000	0.7551	0.0446	0.0000	1.8708
Water						0.0000	0.0000		0.0000	0.0000	0.0952	32.2177	32.3129	0.0125	5.6000e-004	32.7923
Total	**0.2929**	**0.3721**	**3.6636**	**5.6600e-003**	**10.2955**	**0.0104**	**10.3059**	**1.1266**	**0.0102**	**1.1368**	**0.8503**	**548.2767**	**549.1270**	**0.0863**	**0.0243**	**558.5136**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1370	0.0135	1.4880	1.1000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003	0.0000	2.9010	2.9010	7.5500e-003	0.0000	3.0897
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	0.1534	0.3505	2.1665	5.5400e-003	10.2955	4.7800e-003	10.3002	1.1266	4.5000e-003	1.1311	0.0000	511.9965	511.9965	0.0215	0.0237	519.5954
Stationary	2.5000e-003	8.1600e-003	9.0800e-003	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	1.1614	1.1614	1.6000e-004	0.0000	1.1655
Waste						0.0000	0.0000		0.0000	0.0000	0.7551	0.0000	0.7551	0.0446	0.0000	1.8708
Water						0.0000	0.0000		0.0000	0.0000	0.0952	32.2177	32.3129	0.0125	5.6000e-004	32.7923
Total	**0.2929**	**0.3721**	**3.6636**	**5.6600e-003**	**10.2955**	**0.0104**	**10.3059**	**1.1266**	**0.0102**	**1.1368**	**0.8503**	**548.2767**	**549.1270**	**0.0863**	**0.0243**	**558.5136**

	ROG	NOx	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-16,097.8500
Total	**-16,097.8500**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1a Site Preparation	Site Preparation	3/31/2025	5/28/2025	5	43	Ph 1a - Site Prep
2	1b Grading	Grading	3/31/2025	7/29/2025	5	87	Ph 1b - Grading
3	2 PV System	Building Construction	8/1/2025	7/30/2026	5	260	Ph 2 - PV System
4	3 Electrical	Building Construction	11/29/2025	11/27/2026	5	260	Ph 3 - Electrical BESS
5	4a Gen-tie	Building Construction	8/1/2026	12/1/2026	5	87	Ph 4a - Gen-tie
6	4b Cleanup	Architectural Coating	9/29/2026	11/26/2026	5	43	Ph 4b - Cleanup

Acres of Grading (Site Preparation Phase): 300

Acres of Grading (Grading Phase): 300

Acres of Paving: 0

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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
1a Site Preparation	Rollers	5	8.00	80	0.38
1a Site Preparation	Rubber Tired Dozers	5	8.00	247	0.40
1a Site Preparation	Tractors/Loaders/Backhoes	5	8.00	97	0.37
1b Grading	Excavators	2	8.00	158	0.38
1b Grading	Forklifts	2	8.00	89	0.20
1b Grading	Graders	4	8.00	187	0.41
1b Grading	Rubber Tired Dozers	2	8.00	247	0.40
1b Grading	Scrapers	2	8.00	367	0.48
1b Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
1b Grading	Trenchers	2	8.00	78	0.50
2 PV System	Aerial Lifts	4	8.00	63	0.31
2 PV System	Bore/Drill Rigs	8	8.00	49	0.40
2 PV System	Concrete/Industrial Saws	2	8.00	81	0.73
2 PV System	Cranes	4	7.00	231	0.29
2 PV System	Excavators	2	8.00	158	0.38
2 PV System	Forklifts	10	8.00	89	0.20
2 PV System	Generator Sets	1	8.00	84	0.74
2 PV System	Off-Highway Tractors	8	4.00	82	0.44
2 PV System	Other Construction Equipment	2	8.00	82	0.42
2 PV System	Other General Industrial Equipment	2	8.00	88	0.34
2 PV System	Rollers	2	8.00	80	0.38
2 PV System	Rubber Tired Dozers	1	8.00	247	0.40
2 PV System	Skid Steer Loaders	8	8.00	65	0.37
2 PV System	Tractors/Loaders/Backhoes	2	8.00	97	0.37
2 PV System	Trenchers	2	8.00	78	0.50

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2 PV System	Welders	8	8.00	46	0.45
3 Electrical	Aerial Lifts	4	8.00	63	0.31
3 Electrical	Cranes	2	7.00	231	0.29
3 Electrical	Forklifts	4	8.00	89	0.20
3 Electrical	Generator Sets	2	8.00	84	0.74
3 Electrical	Off-Highway Tractors	4	4.00	82	0.44
3 Electrical	Other Construction Equipment	4	8.00	82	0.42
3 Electrical	Rollers	2	8.00	80	0.38
3 Electrical	Skid Steer Loaders	4	8.00	65	0.37
3 Electrical	Tractors/Loaders/Backhoes	2	7.00	97	0.37
3 Electrical	Trenchers	4	8.00	78	0.50
3 Electrical	Welders	4	8.00	46	0.45
4a Gen-tie	Aerial Lifts	5	7.00	63	0.31
4a Gen-tie	Cranes	2	7.00	231	0.29
4a Gen-tie	Forklifts	4	8.00	89	0.20
4a Gen-tie	Generator Sets	2	8.00	84	0.74
4a Gen-tie	Tractors/Loaders/Backhoes	2	8.00	97	0.37
4a Gen-tie	Welders	5	8.00	46	0.45
4b Cleanup	Air Compressors	5	6.00	78	0.48
4b Cleanup	Forklifts	5	8.00	89	0.20
4b Cleanup	Graders	2	8.00	187	0.41
4b Cleanup	Skid Steer Loaders	5	8.00	65	0.37
4b Cleanup	Welders	1	6.00	46	0.45

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
1a Site Preparation	15	110.00	10.00	100.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

1b Grading	18	110.00	10.00	100.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
2 PV System	66	860.00	80.00	400.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
3 Electrical	36	200.00	40.00	400.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
4a Gen-tie	20	110.00	15.00	200.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
4b Cleanup	18	110.00	10.00	20.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 1a Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8065	0.0000	0.8065	0.3730	0.0000	0.3730	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0986	1.0115	0.7605	1.5400e-003		0.0448	0.0448		0.0412	0.0412	0.0000	134.8810	134.8810	0.0436	0.0000	135.9716
Total	**0.0986**	**1.0115**	**0.7605**	**1.5400e-003**	**0.8065**	**0.0448**	**0.8513**	**0.3730**	**0.0412**	**0.4143**	**0.0000**	**134.8810**	**134.8810**	**0.0436**	**0.0000**	**135.9716**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 1a Site Preparation - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0140	2.3100e-003	8.0000e-005	0.0834	2.0000e-004	0.0836	8.7600e-003	1.9000e-004	8.9600e-003	0.0000	7.3779	7.3779	1.0000e-005	1.1600e-003	7.7238
Vendor	9.5000e-004	0.0438	8.2200e-003	3.0000e-004	0.3590	5.6000e-004	0.3596	0.0380	5.3000e-004	0.0386	0.0000	28.9647	28.9647	5.0000e-005	3.9700e-003	30.1483
Worker	0.0217	0.0179	0.2301	8.2000e-004	0.1058	4.3000e-004	0.1063	0.0281	4.0000e-004	0.0285	0.0000	75.4700	75.4700	1.0400e-003	1.6300e-003	75.9811
Total	**0.0229**	**0.0757**	**0.2406**	**1.2000e-003**	**0.5482**	**1.1900e-003**	**0.5494**	**0.0749**	**1.1200e-003**	**0.0760**	**0.0000**	**111.8126**	**111.8126**	**1.1000e-003**	**6.7600e-003**	**113.8532**

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					0.3629	0.0000	0.3629	0.1679	0.0000	0.1679	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0188	0.0814	0.8771	1.5400e-003		2.5000e-003	2.5000e-003		2.5000e-003	2.5000e-003	0.0000	134.8809	134.8809	0.0436	0.0000	135.9714
Total	**0.0188**	**0.0814**	**0.8771**	**1.5400e-003**	**0.3629**	**2.5000e-003**	**0.3654**	**0.1679**	**2.5000e-003**	**0.1704**	**0.0000**	**134.8809**	**134.8809**	**0.0436**	**0.0000**	**135.9714**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 1a Site Preparation - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0140	2.3100e-003	8.0000e-005	0.0105	2.0000e-004	0.0107	1.4900e-003	1.9000e-004	1.6800e-003	0.0000	7.3779	7.3779	1.0000e-005	1.1600e-003	7.7238
Vendor	9.5000e-004	0.0438	8.2200e-003	3.0000e-004	0.0456	5.6000e-004	0.0462	6.7400e-003	5.3000e-004	7.2800e-003	0.0000	28.9647	28.9647	5.0000e-005	3.9700e-003	30.1483
Worker	0.0217	0.0179	0.2301	8.2000e-004	0.1058	4.3000e-004	0.1063	0.0281	4.0000e-004	0.0285	0.0000	75.4700	75.4700	1.0400e-003	1.6300e-003	75.9811
Total	**0.0229**	**0.0757**	**0.2406**	**1.2000e-003**	**0.1619**	**1.1900e-003**	**0.1631**	**0.0363**	**1.1200e-003**	**0.0375**	**0.0000**	**111.8126**	**111.8126**	**1.1000e-003**	**6.7600e-003**	**113.8532**

3.3 1b Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6830	0.0000	0.6830	0.3052	0.0000	0.3052	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2414	2.3985	1.9999	4.6300e-003		0.1019	0.1019		0.0938	0.0938	0.0000	406.8913	406.8913	0.1316	0.0000	410.1812
Total	**0.2414**	**2.3985**	**1.9999**	**4.6300e-003**	**0.6830**	**0.1019**	**0.7849**	**0.3052**	**0.0938**	**0.3989**	**0.0000**	**406.8913**	**406.8913**	**0.1316**	**0.0000**	**410.1812**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 1b Grading - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0140	2.3100e-003	8.0000e-005	0.0834	2.0000e-004	0.0836	8.7600e-003	1.9000e-004	8.9600e-003	0.0000	7.3779	7.3779	1.0000e-005	1.1600e-003	7.7238
Vendor	1.9100e-003	0.0887	0.0166	6.1000e-004	0.7264	1.1300e-003	0.7276	0.0769	1.0800e-003	0.0780	0.0000	58.6029	58.6029	1.1000e-004	8.0300e-003	60.9977
Worker	0.0439	0.0362	0.4655	1.6700e-003	0.2141	8.7000e-004	0.2150	0.0569	8.0000e-004	0.0577	0.0000	152.6952	152.6952	2.1000e-003	3.2900e-003	153.7293
Total	**0.0460**	**0.1388**	**0.4844**	**2.3600e-003**	**1.0239**	**2.2000e-003**	**1.0261**	**0.1425**	**2.0700e-003**	**0.1446**	**0.0000**	**218.6760**	**218.6760**	**2.2200e-003**	**0.0125**	**222.4507**

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					0.3074	0.0000	0.3074	0.1373	0.0000	0.1373	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0568	0.2461	2.5167	4.6300e-003		7.5700e-003	7.5700e-003		7.5700e-003	7.5700e-003	0.0000	406.8908	406.8908	0.1316	0.0000	410.1807
Total	**0.0568**	**0.2461**	**2.5167**	**4.6300e-003**	**0.3074**	**7.5700e-003**	**0.3149**	**0.1373**	**7.5700e-003**	**0.1449**	**0.0000**	**406.8908**	**406.8908**	**0.1316**	**0.0000**	**410.1807**

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3.3 1b Grading - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0140	2.3100e-003	8.0000e-005	0.0105	2.0000e-004	0.0107	1.4900e-003	1.9000e-004	1.6800e-003	0.0000	7.3779	7.3779	1.0000e-005	1.1600e-003	7.7238
Vendor	1.9100e-003	0.0887	0.0166	6.1000e-004	0.0923	1.1300e-003	0.0935	0.0136	1.0800e-003	0.0147	0.0000	58.6029	58.6029	1.1000e-004	8.0300e-003	60.9977
Worker	0.0439	0.0362	0.4655	1.6700e-003	0.2141	8.7000e-004	0.2150	0.0569	8.0000e-004	0.0577	0.0000	152.6952	152.6952	2.1000e-003	3.2900e-003	153.7293
Total	**0.0460**	**0.1388**	**0.4844**	**2.3600e-003**	**0.3169**	**2.2000e-003**	**0.3191**	**0.0720**	**2.0700e-003**	**0.0741**	**0.0000**	**218.6760**	**218.6760**	**2.2200e-003**	**0.0125**	**222.4507**

3.4 2 PV System - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5646	4.9211	5.9461	9.5000e-003		0.2220	0.2220		0.2069	0.2069	0.0000	816.3308	816.3308	0.2201	0.0000	821.8327
Total	**0.5646**	**4.9211**	**5.9461**	**9.5000e-003**		**0.2220**	**0.2220**		**0.2069**	**0.2069**	**0.0000**	**816.3308**	**816.3308**	**0.2201**	**0.0000**	**821.8327**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6000e-004	0.0234	3.8700e-003	1.3000e-004	0.1398	3.4000e-004	0.1401	0.0147	3.2000e-004	0.0150	0.0000	12.3721	12.3721	2.0000e-005	1.9400e-003	12.9522
Vendor	0.0192	0.8890	0.1667	6.1600e-003	7.2810	0.0113	7.2924	0.7710	0.0108	0.7819	0.0000	587.3766	587.3766	1.0900e-003	0.0805	611.3791
Worker	0.4300	0.3545	4.5592	0.0163	2.0975	8.5600e-003	2.1060	0.5569	7.8800e-003	0.5647	0.0000	1,495.6791	1,495.6791	0.0206	0.0323	1,505.8079
Total	**0.4496**	**1.2669**	**4.7298**	**0.0226**	**9.5183**	**0.0202**	**9.5385**	**1.3426**	**0.0190**	**1.3616**	**0.0000**	**2,095.4278**	**2,095.4278**	**0.0217**	**0.1147**	**2,130.1392**

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	0.1731	2.2279	6.3549	9.5000e-003		0.0334	0.0334		0.0318	0.0318	0.0000	816.3299	816.3299	0.2201	0.0000	821.8317
Total	**0.1731**	**2.2279**	**6.3549**	**9.5000e-003**		**0.0334**	**0.0334**		**0.0318**	**0.0318**	**0.0000**	**816.3299**	**816.3299**	**0.2201**	**0.0000**	**821.8317**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6000e-004	0.0234	3.8700e-003	1.3000e-004	0.0176	3.4000e-004	0.0179	2.5000e-003	3.2000e-004	2.8200e-003	0.0000	12.3721	12.3721	2.0000e-005	1.9400e-003	12.9522
Vendor	0.0192	0.8890	0.1667	6.1600e-003	0.9254	0.0113	0.9367	0.1367	0.0108	0.1476	0.0000	587.3766	587.3766	1.0900e-003	0.0805	611.3791
Worker	0.4300	0.3545	4.5592	0.0163	2.0975	8.5600e-003	2.1060	0.5569	7.8800e-003	0.5647	0.0000	1,495.6791	1,495.6791	0.0206	0.0323	1,505.8079
Total	**0.4496**	**1.2669**	**4.7298**	**0.0226**	**3.0404**	**0.0202**	**3.0606**	**0.6961**	**0.0190**	**0.7151**	**0.0000**	**2,095.4278**	**2,095.4278**	**0.0217**	**0.1147**	**2,130.1392**

3.4 2 PV System - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.7822	6.8174	8.2373	0.0132		0.3075	0.3075		0.2866	0.2866	0.0000	1,130.8803	1,130.8803	0.3049	0.0000	1,138.5022
Total	**0.7822**	**6.8174**	**8.2373**	**0.0132**		**0.3075**	**0.3075**		**0.2866**	**0.2866**	**0.0000**	**1,130.8803**	**1,130.8803**	**0.3049**	**0.0000**	**1,138.5022**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0319	5.3600e-003	1.7000e-004	0.1936	4.6000e-004	0.1941	0.0204	4.4000e-004	0.0208	0.0000	16.7062	16.7062	3.0000e-005	2.6300e-003	17.4894
Vendor	0.0256	1.2141	0.2203	8.3500e-003	10.0866	0.0156	10.1021	1.0681	0.0149	1.0830	0.0000	796.6576	796.6576	1.4400e-003	0.1088	829.1191
Worker	0.5592	0.4385	5.8649	0.0219	2.9057	0.0112	2.9169	0.7714	0.0103	0.7817	0.0000	2,006.7974	2,006.7974	0.0255	0.0417	2,019.8578
Total	**0.5853**	**1.6846**	**6.0906**	**0.0304**	**13.1858**	**0.0272**	**13.2131**	**1.8599**	**0.0257**	**1.8855**	**0.0000**	**2,820.1612**	**2,820.1612**	**0.0269**	**0.1531**	**2,866.4663**

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	0.2397	3.0864	8.8036	0.0132		0.0462	0.0462		0.0440	0.0440	0.0000	1,130.8790	1,130.8790	0.3049	0.0000	1,138.5008
Total	**0.2397**	**3.0864**	**8.8036**	**0.0132**		**0.0462**	**0.0462**		**0.0440**	**0.0440**	**0.0000**	**1,130.8790**	**1,130.8790**	**0.3049**	**0.0000**	**1,138.5008**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0319	5.3600e-003	1.7000e-004	0.0243	4.6000e-004	0.0248	3.4600e-003	4.4000e-004	3.9000e-003	0.0000	16.7062	16.7062	3.0000e-005	2.6300e-003	17.4894
Vendor	0.0256	1.2141	0.2203	8.3500e-003	1.2819	0.0156	1.2975	0.1894	0.0149	0.2043	0.0000	796.6576	796.6576	1.4400e-003	0.1088	829.1191
Worker	0.5592	0.4385	5.8649	0.0219	2.9057	0.0112	2.9169	0.7714	0.0103	0.7817	0.0000	2,006.7974	2,006.7974	0.0255	0.0417	2,019.8578
Total	**0.5853**	**1.6846**	**6.0906**	**0.0304**	**4.2119**	**0.0272**	**4.2391**	**0.9643**	**0.0257**	**0.9899**	**0.0000**	**2,820.1612**	**2,820.1612**	**0.0269**	**0.1531**	**2,866.4663**

3.5 3 Electrical - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0647	0.6046	0.7202	1.1100e-003		0.0299	0.0299		0.0278	0.0278	0.0000	95.9814	95.9814	0.0253	0.0000	96.6150
Total	**0.0647**	**0.6046**	**0.7202**	**1.1100e-003**		**0.0299**	**0.0299**		**0.0278**	**0.0278**	**0.0000**	**95.9814**	**95.9814**	**0.0253**	**0.0000**	**96.6150**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.9400e-003	8.2000e-004	3.0000e-005	0.0295	7.0000e-005	0.0296	3.1000e-003	7.0000e-005	3.1700e-003	0.0000	2.6106	2.6106	0.0000	4.1000e-004	2.7330
Vendor	2.0200e-003	0.0938	0.0176	6.5000e-004	0.7682	1.1900e-003	0.7694	0.0814	1.1400e-003	0.0825	0.0000	61.9709	61.9709	1.2000e-004	8.4900e-003	64.5033
Worker	0.0211	0.0174	0.2237	8.0000e-004	0.1029	4.2000e-004	0.1034	0.0273	3.9000e-004	0.0277	0.0000	73.3958	73.3958	1.0100e-003	1.5800e-003	73.8929
Total	**0.0232**	**0.1161**	**0.2421**	**1.4800e-003**	**0.9006**	**1.6800e-003**	**0.9023**	**0.1118**	**1.6000e-003**	**0.1134**	**0.0000**	**137.9774**	**137.9774**	**1.1300e-003**	**0.0105**	**141.1292**

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	0.0192	0.2212	0.7656	1.1100e-003		3.7100e-003	3.7100e-003		3.5400e-003	3.5400e-003	0.0000	95.9813	95.9813	0.0253	0.0000	96.6148
Total	**0.0192**	**0.2212**	**0.7656**	**1.1100e-003**		**3.7100e-003**	**3.7100e-003**		**3.5400e-003**	**3.5400e-003**	**0.0000**	**95.9813**	**95.9813**	**0.0253**	**0.0000**	**96.6148**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.9400e-003	8.2000e-004	3.0000e-005	3.7000e-003	7.0000e-005	3.7700e-003	5.3000e-004	7.0000e-005	6.0000e-004	0.0000	2.6106	2.6106	0.0000	4.1000e-004	2.7330
Vendor	2.0200e-003	0.0938	0.0176	6.5000e-004	0.0976	1.1900e-003	0.0988	0.0144	1.1400e-003	0.0156	0.0000	61.9709	61.9709	1.2000e-004	8.4900e-003	64.5033
Worker	0.0211	0.0174	0.2237	8.0000e-004	0.1029	4.2000e-004	0.1034	0.0273	3.9000e-004	0.0277	0.0000	73.3958	73.3958	1.0100e-003	1.5800e-003	73.8929
Total	**0.0232**	**0.1161**	**0.2421**	**1.4800e-003**	**0.2043**	**1.6800e-003**	**0.2060**	**0.0423**	**1.6000e-003**	**0.0439**	**0.0000**	**137.9774**	**137.9774**	**1.1300e-003**	**0.0105**	**141.1292**

3.5 3 Electrical - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.6662	6.2296	7.4214	0.0115		0.3078	0.3078		0.2865	0.2865	0.0000	989.0260	989.0260	0.2611	0.0000	995.5541
Total	**0.6662**	**6.2296**	**7.4214**	**0.0115**		**0.3078**	**0.3078**		**0.2865**	**0.2865**	**0.0000**	**989.0260**	**989.0260**	**0.2611**	**0.0000**	**995.5541**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.8000e-004	0.0501	8.4100e-003	2.7000e-004	0.3039	7.2000e-004	0.3046	0.0320	6.9000e-004	0.0327	0.0000	26.2209	26.2209	5.0000e-005	4.1200e-003	27.4503
Vendor	0.0201	0.9528	0.1729	6.5500e-003	7.9156	0.0122	7.9278	0.8382	0.0117	0.8499	0.0000	625.1916	625.1916	1.1300e-003	0.0854	650.6663
Worker	0.2041	0.1601	2.1408	7.9900e-003	1.0606	4.1000e-003	1.0647	0.2816	3.7700e-003	0.2853	0.0000	732.4981	732.4981	9.3000e-003	0.0152	737.2652
Total	**0.2250**	**1.1630**	**2.3220**	**0.0148**	**9.2801**	**0.0170**	**9.2971**	**1.1518**	**0.0161**	**1.1679**	**0.0000**	**1,383.9106**	**1,383.9106**	**0.0105**	**0.1047**	**1,415.3818**

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	0.1977	2.2792	7.8893	0.0115		0.0382	0.0382		0.0365	0.0365	0.0000	989.0249	989.0249	0.2611	0.0000	995.5529
Total	**0.1977**	**2.2792**	**7.8893**	**0.0115**		**0.0382**	**0.0382**		**0.0365**	**0.0365**	**0.0000**	**989.0249**	**989.0249**	**0.2611**	**0.0000**	**995.5529**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.8000e-004	0.0501	8.4100e-003	2.7000e-004	0.0382	7.2000e-004	0.0389	5.4300e-003	6.9000e-004	6.1200e-003	0.0000	26.2209	26.2209	5.0000e-005	4.1200e-003	27.4503
Vendor	0.0201	0.9528	0.1729	6.5500e-003	1.0060	0.0122	1.0182	0.1486	0.0117	0.1603	0.0000	625.1916	625.1916	1.1300e-003	0.0854	650.6663
Worker	0.2041	0.1601	2.1408	7.9900e-003	1.0606	4.1000e-003	1.0647	0.2816	3.7700e-003	0.2853	0.0000	732.4981	732.4981	9.3000e-003	0.0152	737.2652
Total	**0.2250**	**1.1630**	**2.3220**	**0.0148**	**2.1048**	**0.0170**	**2.1218**	**0.4356**	**0.0161**	**0.4518**	**0.0000**	**1,383.9106**	**1,383.9106**	**0.0105**	**0.1047**	**1,415.3818**

3.6 4a Gen-tie - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1279	1.0991	1.4087	2.4200e-003		0.0415	0.0415		0.0395	0.0395	0.0000	203.9858	203.9858	0.0425	0.0000	205.0492
Total	**0.1279**	**1.0991**	**1.4087**	**2.4200e-003**		**0.0415**	**0.0415**		**0.0395**	**0.0395**	**0.0000**	**203.9858**	**203.9858**	**0.0425**	**0.0000**	**205.0492**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 4a Gen-tie - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.3000e-004	0.0275	4.6100e-003	1.5000e-004	0.1667	4.0000e-004	0.1671	0.0175	3.8000e-004	0.0179	0.0000	14.3828	14.3828	3.0000e-005	2.2600e-003	15.0571
Vendor	2.7700e-003	0.1312	0.0238	9.0000e-004	1.0897	1.6800e-003	1.0913	0.1154	1.6100e-003	0.1170	0.0000	86.0628	86.0628	1.6000e-004	0.0118	89.5696
Worker	0.0412	0.0323	0.4322	1.6100e-003	0.2141	8.3000e-004	0.2150	0.0569	7.6000e-004	0.0576	0.0000	147.8904	147.8904	1.8800e-003	3.0700e-003	148.8529
Total	**0.0444**	**0.1910**	**0.4606**	**2.6600e-003**	**1.4705**	**2.9100e-003**	**1.4734**	**0.1898**	**2.7500e-003**	**0.1925**	**0.0000**	**248.3360**	**248.3360**	**2.0700e-003**	**0.0171**	**253.4796**

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	0.0351	0.4747	1.5248	2.4200e-003		3.5200e-003	3.5200e-003		3.5200e-003	3.5200e-003	0.0000	203.9856	203.9856	0.0425	0.0000	205.0490
Total	**0.0351**	**0.4747**	**1.5248**	**2.4200e-003**		**3.5200e-003**	**3.5200e-003**		**3.5200e-003**	**3.5200e-003**	**0.0000**	**203.9856**	**203.9856**	**0.0425**	**0.0000**	**205.0490**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 4a Gen-tie - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.3000e-004	0.0275	4.6100e-003	1.5000e-004	0.0209	4.0000e-004	0.0213	2.9800e-003	3.8000e-004	3.3600e-003	0.0000	14.3828	14.3828	3.0000e-005	2.2600e-003	15.0571
Vendor	2.7700e-003	0.1312	0.0238	9.0000e-004	0.1385	1.6800e-003	0.1402	0.0205	1.6100e-003	0.0221	0.0000	86.0628	86.0628	1.6000e-004	0.0118	89.5696
Worker	0.0412	0.0323	0.4322	1.6100e-003	0.2141	8.3000e-004	0.2150	0.0569	7.6000e-004	0.0576	0.0000	147.8904	147.8904	1.8800e-003	3.0700e-003	148.8529
Total	**0.0444**	**0.1910**	**0.4606**	**2.6600e-003**	**0.3736**	**2.9100e-003**	**0.3765**	**0.0803**	**2.7500e-003**	**0.0830**	**0.0000**	**248.3360**	**248.3360**	**2.0700e-003**	**0.0171**	**253.4796**

3.7 4b Cleanup - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0510	0.4666	0.5598	1.0300e-003		0.0183	0.0183		0.0173	0.0173	0.0000	89.4447	89.4447	0.0209	0.0000	89.9661
Total	**0.0510**	**0.4666**	**0.5598**	**1.0300e-003**		**0.0183**	**0.0183**		**0.0173**	**0.0173**	**0.0000**	**89.4447**	**89.4447**	**0.0209**	**0.0000**	**89.9661**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 4b Cleanup - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.7500e-003	4.6000e-004	1.0000e-005	0.0167	4.0000e-005	0.0167	1.7500e-003	4.0000e-005	1.7900e-003	0.0000	1.4383	1.4383	0.0000	2.3000e-004	1.5057
Vendor	9.1000e-004	0.0432	7.8400e-003	3.0000e-004	0.3590	5.5000e-004	0.3596	0.0380	5.3000e-004	0.0386	0.0000	28.3579	28.3579	5.0000e-005	3.8700e-003	29.5134
Worker	0.0204	0.0160	0.2136	8.0000e-004	0.1058	4.1000e-004	0.1062	0.0281	3.8000e-004	0.0285	0.0000	73.0953	73.0953	9.3000e-004	1.5200e-003	73.5710
Total	**0.0213**	**0.0619**	**0.2219**	**1.1100e-003**	**0.4815**	**1.0000e-003**	**0.4826**	**0.0679**	**9.5000e-004**	**0.0688**	**0.0000**	**102.8914**	**102.8914**	**9.8000e-004**	**5.6200e-003**	**104.5900**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0149	0.1789	0.6426	1.0300e-003		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003	0.0000	89.4446	89.4446	0.0209	0.0000	89.9660
Total	**0.0149**	**0.1789**	**0.6426**	**1.0300e-003**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**	**0.0000**	**89.4446**	**89.4446**	**0.0209**	**0.0000**	**89.9660**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 4b Cleanup - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.7500e-003	4.6000e-004	1.0000e-005	2.0900e-003	4.0000e-005	2.1300e-003	3.0000e-004	4.0000e-005	3.4000e-004	0.0000	1.4383	1.4383	0.0000	2.3000e-004	1.5057
Vendor	9.1000e-004	0.0432	7.8400e-003	3.0000e-004	0.0456	5.5000e-004	0.0462	6.7400e-003	5.3000e-004	7.2700e-003	0.0000	28.3579	28.3579	5.0000e-005	3.8700e-003	29.5134
Worker	0.0204	0.0160	0.2136	8.0000e-004	0.1058	4.1000e-004	0.1062	0.0281	3.8000e-004	0.0285	0.0000	73.0953	73.0953	9.3000e-004	1.5200e-003	73.5710
Total	**0.0213**	**0.0619**	**0.2219**	**1.1100e-003**	**0.1536**	**1.0000e-003**	**0.1546**	**0.0351**	**9.5000e-004**	**0.0361**	**0.0000**	**102.8914**	**102.8914**	**9.8000e-004**	**5.6200e-003**	**104.5900**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1534	0.3505	2.1665	5.5400e-003	10.2955	4.7800e-003	10.3002	1.1266	4.5000e-003	1.1311	0.0000	511.9965	511.9965	0.0215	0.0237	519.5954
Unmitigated	0.1534	0.3505	2.1665	5.5400e-003	10.2955	4.7800e-003	10.3002	1.1266	4.5000e-003	1.1311	0.0000	511.9965	511.9965	0.0215	0.0237	519.5954

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
Industrial Park	90.00	90.00	90.00	1,646,256	1,646,256
Total	90.00	90.00	90.00	1,646,256	1,646,256

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 Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Industrial Park	60.00	60.00	60.00	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.538773	0.056496	0.172548	0.130930	0.027872	0.007524	0.007427	0.023548	0.000520	0.000190	0.027873	0.001148	0.005149
Industrial Park	0.538773	0.056496	0.172548	0.130930	0.027872	0.007524	0.007427	0.023548	0.000520	0.000190	0.027873	0.001148	0.005149

5.0 Energy Detail

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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 Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	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 Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

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

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1370	0.0135	1.4880	1.1000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003	0.0000	2.9010	2.9010	7.5500e-003	0.0000	3.0897
Unmitigated	0.1370	0.0135	1.4880	1.1000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003	0.0000	2.9010	2.9010	7.5500e-003	0.0000	3.0897

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1370	0.0135	1.4880	1.1000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003	0.0000	2.9010	2.9010	7.5500e-003	0.0000	3.0897
Total	**0.1370**	**0.0135**	**1.4880**	**1.1000e-004**		**5.2900e-003**	**5.2900e-003**		**5.2900e-003**	**5.2900e-003**	**0.0000**	**2.9010**	**2.9010**	**7.5500e-003**	**0.0000**	**3.0897**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1370	0.0135	1.4880	1.1000e-004		5.2900e-003	5.2900e-003		5.2900e-003	5.2900e-003	0.0000	2.9010	2.9010	7.5500e-003	0.0000	3.0897
Total	**0.1370**	**0.0135**	**1.4880**	**1.1000e-004**		**5.2900e-003**	**5.2900e-003**		**5.2900e-003**	**5.2900e-003**	**0.0000**	**2.9010**	**2.9010**	**7.5500e-003**	**0.0000**	**3.0897**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	32.3129	0.0125	5.6000e-004	32.7923
Unmitigated	32.3129	0.0125	5.6000e-004	32.7923

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0.3 / 16	32.3129	0.0125	5.6000e-004	32.7923
Total		**32.3129**	**0.0125**	**5.6000e-004**	**32.7923**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Industrial Park	0.3 / 16	32.3129	0.0125	5.6000e-004	32.7923
Total		**32.3129**	**0.0125**	**5.6000e-004**	**32.7923**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.7551	0.0446	0.0000	1.8708
Unmitigated	0.7551	0.0446	0.0000	1.8708

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	3.72	0.7551	0.0446	0.0000	1.8708
Total		**0.7551**	**0.0446**	**0.0000**	**1.8708**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Industrial Park	3.72	0.7551	0.0446	0.0000	1.8708
Total		**0.7551**	**0.0446**	**0.0000**	**1.8708**

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
Emergency Generator	1	0.5	50	61	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	2.5000e-003	8.1600e-003	9.0800e-003	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	1.1614	1.1614	1.6000e-004	0.0000	1.1655
Total	**2.5000e-003**	**8.1600e-003**	**9.0800e-003**	**1.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**	**0.0000**	**1.1614**	**1.1614**	**1.6000e-004**	**0.0000**	**1.1655**

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-16,097.8500	0.0000	0.0000	-16,097.8500

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	3735 / 0	-16,097.8500	0.0000	0.0000	-16,097.8500
Total		**-16,097.8500**	**0.0000**	**0.0000**	**-16,097.8500**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Easley Renewable Energy 400 MW

Mojave Desert Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	162,350.00	1000sqft	3,727.04	162,350,000.00	0
Industrial Park	3.00	1000sqft	0.07	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Solar electric generating facility and energy storage

Land Use - Approx 3735 acre site w 3000 sf office

Construction Phase - Overall 20 months w overlapping activities

Off-road Equipment - Ph 1a Initial site prep up to 15 pc equipment

Off-road Equipment - Ph 1b Grading appx 18 pc equipment

Off-road Equipment - Ph 2 PV arrays appx 66 pc off-road

Off-road Equipment - Ph 3 Electrical and BESS appx 36 pcs equipment

Off-road Equipment - Ph 4a Gen-tie up to 20 pc equipment

Off-road Equipment - Ph 4b Cleanup 18 pc equipment

Trips and VMT - peak appx 60 truck roundtrips daily in HDT Mix

On-road Fugitive Dust - Final mile of truck trips unpaved

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Material cut fill balanced on site, target grading access roads

Architectural Coating - Architectural coatings not applicable

Vehicle Trips - Operational trip generation rate for office

Road Dust - Final mile on unpaved surface at 25 mph onsite speed limit

Consumer Products - Consumer products not applicable

Area Coating - Architectural coating reapplication not applicable

Energy Use - Operational electricity and natural gas use not appllicable

Water And Wastewater - Operational water use up to 50 acre feet is 16.3 million gal per year

Solid Waste - Minimal solid waste generation

Land Use Change - Land use change approx 3735 acres

Construction Off-road Equipment Mitigation - Tier 4 engines except OHRVs; water 2x daily is 55% effective PM10 control per Rule 403; suppressant is 84% effective per Table XI-D

Stationary Sources - Emergency Generators and Fire Pumps - Backup generator if necessary

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	81,176,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	243,529,500.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	25.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	6,000.00	43.00
tblConstructionPhase	NumDays	15,500.00	87.00
tblConstructionPhase	NumDays	155,000.00	260.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	155,000.00	260.00
tblConstructionPhase	NumDays	155,000.00	87.00
tblConstructionPhase	NumDays	11,000.00	43.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24E	2.74	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	3.43	0.00
tblGrading	AcresOfGrading	435.00	300.00
tblGrading	AcresOfGrading	107.50	300.00
tblOffRoadEquipment	HorsePower	221.00	49.00
tblOffRoadEquipment	HorsePower	124.00	82.00
tblOffRoadEquipment	HorsePower	124.00	82.00
tblOffRoadEquipment	HorsePower	172.00	82.00
tblOffRoadEquipment	HorsePower	172.00	82.00
tblOffRoadEquipment	LoadFactor	0.50	0.40
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	MeanVehicleSpeed	40	25
tblRoadDust	RoadPercentPave	100	98

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblSolidWaste	SolidWasteGenerationRate	201,314.00	0.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	61.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripNumber	0.00	100.00
tblTripsAndVMT	HaulingTripNumber	0.00	100.00
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	26,610.00	80.00
tblTripsAndVMT	VendorTripNumber	26,610.00	40.00
tblTripsAndVMT	VendorTripNumber	26,610.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripNumber	38.00	110.00
tblTripsAndVMT	WorkerTripNumber	45.00	110.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	860.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	200.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	110.00
tblTripsAndVMT	WorkerTripNumber	13,638.00	110.00
tblVehicleTrips	CC_TL	6.60	60.00
tblVehicleTrips	CNW_TL	6.60	60.00
tblVehicleTrips	CW_TL	14.70	60.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	2.54	30.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.24	30.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	3.37	30.00
tblWater	IndoorWaterUseRate	37,543,437,500.00	0.00
tblWater	IndoorWaterUseRate	693,750.00	300,000.00
tblWater	OutdoorWaterUseRate	0.00	16,000,000.00

2.0 Emissions Summary

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	27.0451	173.9416	303.8454	0.8491	272.4146	7.1873	279.6020	36.4399	6.7013	43.1412	0.0000	84,842.4668	84,842.4668	7.4709	3.2701	86,003.7132
2026	26.3625	172.8350	294.5508	0.8327	272.4146	7.1742	279.5888	36.4399	6.6890	43.1290	0.0000	83,165.5341	83,165.5341	7.4097	3.1600	84,292.4499
Maximum	**27.0451**	**173.9416**	**303.8454**	**0.8491**	**272.4146**	**7.1873**	**279.6020**	**36.4399**	**6.7013**	**43.1412**	**0.0000**	**84,842.4668**	**84,842.4668**	**7.4709**	**3.2701**	**86,003.7132**

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					
2025	15.9067	91.1890	315.2946	0.8491	76.3512	1.4525	77.8037	16.8724	1.3791	18.2515	0.0000	84,842.4668	84,842.4668	7.4709	3.2701	86,003.7131
2026	15.2241	90.0823	306.0000	0.8327	76.3512	1.4393	77.7905	16.8724	1.3668	18.2393	0.0000	83,165.5341	83,165.5341	7.4097	3.1600	84,292.4498
Maximum	**15.9067**	**91.1890**	**315.2946**	**0.8491**	**76.3512**	**1.4525**	**77.8037**	**16.8724**	**1.3791**	**18.2515**	**0.0000**	**84,842.4668**	**84,842.4668**	**7.4709**	**3.2701**	**86,003.7131**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**41.71**	**47.73**	**-3.83**	**0.00**	**71.97**	**79.86**	**72.18**	**53.70**	**79.49**	**57.70**	**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	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
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	0.8926	1.7650	13.3015	0.0326	56.6306	0.0263	56.6569	6.2056	0.0247	6.2303		3,322.0066	3,322.0066	0.1302	0.1384	3,366.4928
Stationary	0.0501	0.1632	0.1816	2.4000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003		25.6052	25.6052	3.5900e-003		25.6949
Total	**2.4649**	**2.0780**	**30.0163**	**0.0341**	**56.6306**	**0.0924**	**56.7231**	**6.2056**	**0.0909**	**6.2965**		**3,383.1432**	**3,383.1432**	**0.2262**	**0.1384**	**3,430.0295**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
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	0.8926	1.7650	13.3015	0.0326	56.6306	0.0263	56.6569	6.2056	0.0247	6.2303		3,322.0066	3,322.0066	0.1302	0.1384	3,366.4928
Stationary	0.0501	0.1632	0.1816	2.4000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003		25.6052	25.6052	3.5900e-003		25.6949
Total	**2.4649**	**2.0780**	**30.0163**	**0.0341**	**56.6306**	**0.0924**	**56.7231**	**6.2056**	**0.0909**	**6.2965**		**3,383.1432**	**3,383.1432**	**0.2262**	**0.1384**	**3,430.0295**

	ROG	NOx	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	1a Site Preparation	Site Preparation	3/31/2025	5/28/2025	5	43	Ph 1a - Site Prep
2	1b Grading	Grading	3/31/2025	7/29/2025	5	87	Ph 1b - Grading
3	2 PV System	Building Construction	8/1/2025	7/30/2026	5	260	Ph 2 - PV System
4	3 Electrical	Building Construction	11/29/2025	11/27/2026	5	260	Ph 3 - Electrical BESS

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	4a Gen-tie	Building Construction	8/1/2026	12/1/2026	5	87	Ph 4a - Gen-tie
6	4b Cleanup	Architectural Coating	9/29/2026	11/26/2026	5	43	Ph 4b - Cleanup

Acres of Grading (Site Preparation Phase): 300

Acres of Grading (Grading Phase): 300

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
1a Site Preparation	Rollers	5	8.00	80	0.38
1a Site Preparation	Rubber Tired Dozers	5	8.00	247	0.40
1a Site Preparation	Tractors/Loaders/Backhoes	5	8.00	97	0.37
1b Grading	Excavators	2	8.00	158	0.38
1b Grading	Forklifts	2	8.00	89	0.20
1b Grading	Graders	4	8.00	187	0.41
1b Grading	Rubber Tired Dozers	2	8.00	247	0.40
1b Grading	Scrapers	2	8.00	367	0.48
1b Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
1b Grading	Trenchers	2	8.00	78	0.50
2 PV System	Aerial Lifts	4	8.00	63	0.31
2 PV System	Bore/Drill Rigs	8	8.00	49	0.40
2 PV System	Concrete/Industrial Saws	2	8.00	81	0.73
2 PV System	Cranes	4	7.00	231	0.29
2 PV System	Excavators	2	8.00	158	0.38
2 PV System	Forklifts	10	8.00	89	0.20
2 PV System	Generator Sets	1	8.00	84	0.74
2 PV System	Off-Highway Tractors	8	4.00	82	0.44

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2 PV System	Other Construction Equipment	2	8.00	82	0.42
2 PV System	Other General Industrial Equipment	2	8.00	88	0.34
2 PV System	Rollers	2	8.00	80	0.38
2 PV System	Rubber Tired Dozers	1	8.00	247	0.40
2 PV System	Skid Steer Loaders	8	8.00	65	0.37
2 PV System	Tractors/Loaders/Backhoes	2	8.00	97	0.37
2 PV System	Trenchers	2	8.00	78	0.50
2 PV System	Welders	8	8.00	46	0.45
3 Electrical	Aerial Lifts	4	8.00	63	0.31
3 Electrical	Cranes	2	7.00	231	0.29
3 Electrical	Forklifts	4	8.00	89	0.20
3 Electrical	Generator Sets	2	8.00	84	0.74
3 Electrical	Off-Highway Tractors	4	4.00	82	0.44
3 Electrical	Other Construction Equipment	4	8.00	82	0.42
3 Electrical	Rollers	2	8.00	80	0.38
3 Electrical	Skid Steer Loaders	4	8.00	65	0.37
3 Electrical	Tractors/Loaders/Backhoes	2	7.00	97	0.37
3 Electrical	Trenchers	4	8.00	78	0.50
3 Electrical	Welders	4	8.00	46	0.45
4a Gen-tie	Aerial Lifts	5	7.00	63	0.31
4a Gen-tie	Cranes	2	7.00	231	0.29
4a Gen-tie	Forklifts	4	8.00	89	0.20
4a Gen-tie	Generator Sets	2	8.00	84	0.74
4a Gen-tie	Tractors/Loaders/Backhoes	2	8.00	97	0.37
4a Gen-tie	Welders	5	8.00	46	0.45
4b Cleanup	Air Compressors	5	6.00	78	0.48
4b Cleanup	Forklifts	5	8.00	89	0.20
4b Cleanup	Graders	2	8.00	187	0.41
4b Cleanup	Skid Steer Loaders	5	8.00	65	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4b Cleanup	Welders	1	6.00	46	0.45

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
1a Site Preparation	15	110.00	10.00	100.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
1b Grading	18	110.00	10.00	100.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
2 PV System	66	860.00	80.00	400.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
3 Electrical	36	200.00	40.00	400.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
4a Gen-tie	20	110.00	15.00	200.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
4b Cleanup	18	110.00	10.00	20.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 1a Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					37.5093	0.0000	37.5093	17.3500	0.0000	17.3500			0.0000			0.0000
Off-Road	4.5858	47.0464	35.3705	0.0714		2.0841	2.0841		1.9173	1.9173		6,915.3895	6,915.3895	2.2366		6,971.3039
Total	**4.5858**	**47.0464**	**35.3705**	**0.0714**	**37.5093**	**2.0841**	**39.5933**	**17.3500**	**1.9173**	**19.2674**		**6,915.3895**	**6,915.3895**	**2.2366**		**6,971.3039**

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	0.0102	0.6113	0.1068	3.5700e-003	4.2275	9.3100e-003	4.2368	0.4429	8.9100e-003	0.4518		378.1548	378.1548	6.9000e-004	0.0594	395.8845
Vendor	0.0449	1.9167	0.3824	0.0141	18.2078	0.0260	18.2337	1.9201	0.0248	1.9450		1,484.7920	1,484.7920	2.8000e-003	0.2031	1,545.3962
Worker	1.0908	0.7540	13.2191	0.0419	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		4,235.3621	4,235.3621	0.0577	0.0782	4,260.1157
Total	**1.1459**	**3.2820**	**13.7083**	**0.0596**	**27.4504**	**0.0554**	**27.5058**	**3.6926**	**0.0523**	**3.7449**		**6,098.3089**	**6,098.3089**	**0.0612**	**0.3408**	**6,201.3963**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 1a Site Preparation - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					16.8792	0.0000	16.8792	7.8075	0.0000	7.8075			0.0000			0.0000
Off-Road	0.8735	3.7852	40.7973	0.0714		0.1165	0.1165		0.1165	0.1165	0.0000	6,915.3895	6,915.3895	2.2366		6,971.3039
Total	**0.8735**	**3.7852**	**40.7973**	**0.0714**	**16.8792**	**0.1165**	**16.9956**	**7.8075**	**0.1165**	**7.9240**	**0.0000**	**6,915.3895**	**6,915.3895**	**2.2366**		**6,971.3039**

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	0.0102	0.6113	0.1068	3.5700e-003	0.5228	9.3100e-003	0.5321	0.0732	8.9100e-003	0.0821		378.1548	378.1548	6.9000e-004	0.0594	395.8845
Vendor	0.0449	1.9167	0.3824	0.0141	2.2776	0.0260	2.3036	0.3303	0.0248	0.3551		1,484.7920	1,484.7920	2.8000e-003	0.2031	1,545.3962
Worker	1.0908	0.7540	13.2191	0.0419	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		4,235.3621	4,235.3621	0.0577	0.0782	4,260.1157
Total	**1.1459**	**3.2820**	**13.7083**	**0.0596**	**7.8156**	**0.0554**	**7.8710**	**1.7331**	**0.0523**	**1.7853**		**6,098.3089**	**6,098.3089**	**0.0612**	**0.3408**	**6,201.3963**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 1b Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.7011	0.0000	15.7011	7.0153	0.0000	7.0153			0.0000			0.0000
Off-Road	5.5487	55.1379	45.9753	0.1065		2.3427	2.3427		2.1553	2.1553		10,310.8240	10,310.8240	3.3347		10,394.1922
Total	**5.5487**	**55.1379**	**45.9753**	**0.1065**	**15.7011**	**2.3427**	**18.0437**	**7.0153**	**2.1553**	**9.1706**		**10,310.8240**	**10,310.8240**	**3.3347**		**10,394.1922**

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	5.0400e-003	0.3021	0.0528	1.7700e-003	2.0894	4.6000e-003	2.0940	0.2189	4.4000e-003	0.2233		186.9041	186.9041	3.4000e-004	0.0294	195.6671
Vendor	0.0449	1.9167	0.3824	0.0141	18.2078	0.0260	18.2337	1.9201	0.0248	1.9450		1,484.7920	1,484.7920	2.8000e-003	0.2031	1,545.3962
Worker	1.0908	0.7540	13.2191	0.0419	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		4,235.3621	4,235.3621	0.0577	0.0782	4,260.1157
Total	**1.1407**	**2.9729**	**13.6543**	**0.0578**	**25.3124**	**0.0507**	**25.3631**	**3.4686**	**0.0477**	**3.5164**		**5,907.0582**	**5,907.0582**	**0.0609**	**0.3107**	**6,001.1789**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 1b Grading - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0655	0.0000	7.0655	3.1569	0.0000	3.1569			0.0000			0.0000
Off-Road	1.3057	5.6579	57.8547	0.1065		0.1741	0.1741		0.1741	0.1741	0.0000	10,310.8240	10,310.8240	3.3347		10,394.1922
Total	**1.3057**	**5.6579**	**57.8547**	**0.1065**	**7.0655**	**0.1741**	**7.2396**	**3.1569**	**0.1741**	**3.3310**	**0.0000**	**10,310.8240**	**10,310.8240**	**3.3347**		**10,394.1922**

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	5.0400e-003	0.3021	0.0528	1.7700e-003	0.2584	4.6000e-003	0.2630	0.0362	4.4000e-003	0.0406		186.9041	186.9041	3.4000e-004	0.0294	195.6671
Vendor	0.0449	1.9167	0.3824	0.0141	2.2776	0.0260	2.3036	0.3303	0.0248	0.3551		1,484.7920	1,484.7920	2.8000e-003	0.2031	1,545.3962
Worker	1.0908	0.7540	13.2191	0.0419	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		4,235.3621	4,235.3621	0.0577	0.0782	4,260.1157
Total	**1.1407**	**2.9729**	**13.6543**	**0.0578**	**7.5512**	**0.0507**	**7.6019**	**1.6960**	**0.0477**	**1.7438**		**5,907.0582**	**5,907.0582**	**0.0609**	**0.3107**	**6,001.1789**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.3598	90.2961	109.1035	0.1742		4.0725	4.0725		3.7954	3.7954		16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**10.3598**	**90.2961**	**109.1035**	**0.1742**		**4.0725**	**4.0725**		**3.7954**	**3.7954**		**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.7400e-003	0.4044	0.0707	2.3600e-003	2.7966	6.1600e-003	2.8028	0.2930	5.9000e-003	0.2989		250.1639	250.1639	4.6000e-004	0.0393	261.8928
Vendor	0.3595	15.3338	3.0589	0.1129	145.6621	0.2078	145.8699	15.3609	0.1987	15.5596		11,878.3362	11,878.3362	0.0224	1.6251	12,363.1692
Worker	8.5278	5.8950	103.3496	0.3276	39.2097	0.1571	39.3668	10.3952	0.1446	10.5398		33,112.8312	33,112.8312	0.4512	0.6116	33,306.3590
Total	**8.8940**	**21.6332**	**106.4792**	**0.4429**	**187.6684**	**0.3710**	**188.0394**	**26.0490**	**0.3492**	**26.3982**		**45,241.3313**	**45,241.3313**	**0.4741**	**2.2760**	**45,931.4209**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1752	40.8797	116.6040	0.1742		0.6124	0.6124		0.5831	0.5831	0.0000	16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**3.1752**	**40.8797**	**116.6040**	**0.1742**		**0.6124**	**0.6124**		**0.5831**	**0.5831**	**0.0000**	**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.7400e-003	0.4044	0.0707	2.3600e-003	0.3458	6.1600e-003	0.3520	0.0484	5.9000e-003	0.0543		250.1639	250.1639	4.6000e-004	0.0393	261.8928
Vendor	0.3595	15.3338	3.0589	0.1129	18.2209	0.2078	18.4286	2.6420	0.1987	2.8407		11,878.3362	11,878.3362	0.0224	1.6251	12,363.1692
Worker	8.5278	5.8950	103.3496	0.3276	39.2097	0.1571	39.3668	10.3952	0.1446	10.5398		33,112.8312	33,112.8312	0.4512	0.6116	33,306.3590
Total	**8.8940**	**21.6332**	**106.4792**	**0.4429**	**57.7764**	**0.3710**	**58.1474**	**13.0855**	**0.3492**	**13.4348**		**45,241.3313**	**45,241.3313**	**0.4741**	**2.2760**	**45,931.4209**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.3598	90.2961	109.1035	0.1742		4.0725	4.0725		3.7954	3.7954		16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**10.3598**	**90.2961**	**109.1035**	**0.1742**		**4.0725**	**4.0725**		**3.7954**	**3.7954**		**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.7200e-003	0.3983	0.0706	2.3000e-003	2.7966	6.0900e-003	2.8027	0.2930	5.8200e-003	0.2988		243.8405	243.8405	4.6000e-004	0.0383	255.2732
Vendor	0.3462	15.1205	2.9131	0.1106	145.6621	0.2060	145.8681	15.3609	0.1971	15.5579		11,629.4631	11,629.4631	0.0214	1.5866	12,102.8102
Worker	7.9902	5.2666	95.9863	0.3172	39.2097	0.1487	39.3583	10.3952	0.1368	10.5320		32,065.4355	32,065.4355	0.4028	0.5707	32,245.5687
Total	**8.3430**	**20.7855**	**98.9700**	**0.4301**	**187.6684**	**0.3608**	**188.0292**	**26.0490**	**0.3397**	**26.3887**		**43,938.7390**	**43,938.7390**	**0.4247**	**2.1956**	**44,603.6521**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1752	40.8797	116.6040	0.1742		0.6124	0.6124		0.5831	0.5831	0.0000	16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**3.1752**	**40.8797**	**116.6040**	**0.1742**		**0.6124**	**0.6124**		**0.5831**	**0.5831**	**0.0000**	**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.7200e-003	0.3983	0.0706	2.3000e-003	0.3458	6.0900e-003	0.3519	0.0484	5.8200e-003	0.0542		243.8405	243.8405	4.6000e-004	0.0383	255.2732
Vendor	0.3462	15.1205	2.9131	0.1106	18.2209	0.2060	18.4269	2.6420	0.1971	2.8390		11,629.4631	11,629.4631	0.0214	1.5866	12,102.8102
Worker	7.9902	5.2666	95.9863	0.3172	39.2097	0.1487	39.3583	10.3952	0.1368	10.5320		32,065.4355	32,065.4355	0.4028	0.5707	32,245.5687
Total	**8.3430**	**20.7855**	**98.9700**	**0.4301**	**57.7764**	**0.3608**	**58.1371**	**13.0855**	**0.3397**	**13.4253**		**43,938.7390**	**43,938.7390**	**0.4247**	**2.1956**	**44,603.6521**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6216	52.5701	62.6278	0.0970		2.5972	2.5972		2.4178	2.4178		9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**5.6216**	**52.5701**	**62.6278**	**0.0970**		**2.5972**	**2.5972**		**2.4178**	**2.4178**		**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.7400e-003	0.4044	0.0707	2.3600e-003	2.7966	6.1600e-003	2.8028	0.2930	5.9000e-003	0.2989		250.1639	250.1639	4.6000e-004	0.0393	261.8928
Vendor	0.1798	7.6669	1.5295	0.0565	72.8311	0.1039	72.9349	7.6804	0.0994	7.7798		5,939.1681	5,939.1681	0.0112	0.8125	6,181.5846
Worker	1.9832	1.3709	24.0348	0.0762	9.1185	0.0365	9.1551	2.4175	0.0336	2.4511		7,700.6584	7,700.6584	0.1049	0.1422	7,745.6649
Total	**2.1697**	**9.4422**	**25.6349**	**0.1350**	**84.7462**	**0.1466**	**84.8928**	**10.3909**	**0.1389**	**10.5298**		**13,889.9905**	**13,889.9905**	**0.1166**	**0.9941**	**14,189.1423**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6679	19.2338	66.5765	0.0970		0.3225	0.3225		0.3078	0.3078	0.0000	9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**1.6679**	**19.2338**	**66.5765**	**0.0970**		**0.3225**	**0.3225**		**0.3078**	**0.3078**	**0.0000**	**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.7400e-003	0.4044	0.0707	2.3600e-003	0.3458	6.1600e-003	0.3520	0.0484	5.9000e-003	0.0543		250.1639	250.1639	4.6000e-004	0.0393	261.8928
Vendor	0.1798	7.6669	1.5295	0.0565	9.1104	0.1039	9.2143	1.3210	0.0994	1.4204		5,939.1681	5,939.1681	0.0112	0.8125	6,181.5846
Worker	1.9832	1.3709	24.0348	0.0762	9.1185	0.0365	9.1551	2.4175	0.0336	2.4511		7,700.6584	7,700.6584	0.1049	0.1422	7,745.6649
Total	**2.1697**	**9.4422**	**25.6349**	**0.1350**	**18.5748**	**0.1466**	**18.7214**	**3.7869**	**0.1389**	**3.9258**		**13,889.9905**	**13,889.9905**	**0.1166**	**0.9941**	**14,189.1423**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6216	52.5701	62.6278	0.0970		2.5972	2.5972		2.4178	2.4178		9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**5.6216**	**52.5701**	**62.6278**	**0.0970**		**2.5972**	**2.5972**		**2.4178**	**2.4178**		**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.7200e-003	0.3983	0.0706	2.3000e-003	2.7966	6.0900e-003	2.8027	0.2930	5.8200e-003	0.2988		243.8405	243.8405	4.6000e-004	0.0383	255.2732
Vendor	0.1731	7.5603	1.4566	0.0553	72.8311	0.1030	72.9341	7.6804	0.0985	7.7790		5,814.7315	5,814.7315	0.0107	0.7933	6,051.4051
Worker	1.8582	1.2248	22.3224	0.0738	9.1185	0.0346	9.1531	2.4175	0.0318	2.4493		7,457.0780	7,457.0780	0.0937	0.1327	7,498.9695
Total	**2.0380**	**9.1834**	**23.8495**	**0.1314**	**84.7462**	**0.1437**	**84.8899**	**10.3909**	**0.1362**	**10.5271**		**13,515.6500**	**13,515.6500**	**0.1048**	**0.9644**	**13,805.6478**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6679	19.2338	66.5765	0.0970		0.3225	0.3225		0.3078	0.3078	0.0000	9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**1.6679**	**19.2338**	**66.5765**	**0.0970**		**0.3225**	**0.3225**		**0.3078**	**0.3078**	**0.0000**	**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.7200e-003	0.3983	0.0706	2.3000e-003	0.3458	6.0900e-003	0.3519	0.0484	5.8200e-003	0.0542		243.8405	243.8405	4.6000e-004	0.0383	255.2732
Vendor	0.1731	7.5603	1.4566	0.0553	9.1104	0.1030	9.2134	1.3210	0.0985	1.4195		5,814.7315	5,814.7315	0.0107	0.7933	6,051.4051
Worker	1.8582	1.2248	22.3224	0.0738	9.1185	0.0346	9.1531	2.4175	0.0318	2.4493		7,457.0780	7,457.0780	0.0937	0.1327	7,498.9695
Total	**2.0380**	**9.1834**	**23.8495**	**0.1314**	**18.5748**	**0.1437**	**18.7185**	**3.7869**	**0.1362**	**3.9231**		**13,515.6500**	**13,515.6500**	**0.1048**	**0.9644**	**13,805.6478**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 4a Gen-tie - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9398	25.2661	32.3836	0.0557		0.9533	0.9533		0.9087	0.9087		5,169.1006	5,169.1006	1.0779		5,196.0479
Total	**2.9398**	**25.2661**	**32.3836**	**0.0557**		**0.9533**	**0.9533**		**0.9087**	**0.9087**		**5,169.1006**	**5,169.1006**	**1.0779**		**5,196.0479**

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	0.0100	0.5952	0.1054	3.4400e-003	4.1789	9.1000e-003	4.1880	0.4378	8.7000e-003	0.4465		364.3594	364.3594	6.9000e-004	0.0573	381.4427
Vendor	0.0649	2.8351	0.5462	0.0207	27.3117	0.0386	27.3503	2.8802	0.0370	2.9171		2,180.5243	2,180.5243	4.0100e-003	0.2975	2,269.2769
Worker	1.0220	0.6736	12.2773	0.0406	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		4,101.3929	4,101.3929	0.0515	0.0730	4,124.4332
Total	**1.0969**	**4.1039**	**12.9290**	**0.0648**	**36.5057**	**0.0667**	**36.5724**	**4.6476**	**0.0632**	**4.7108**		**6,646.2766**	**6,646.2766**	**0.0562**	**0.4278**	**6,775.1528**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 4a Gen-tie - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8068	10.9123	35.0520	0.0557		0.0809	0.0809		0.0809	0.0809	0.0000	5,169.1006	5,169.1006	1.0779		5,196.0479
Total	**0.8068**	**10.9123**	**35.0520**	**0.0557**		**0.0809**	**0.0809**		**0.0809**	**0.0809**	**0.0000**	**5,169.1006**	**5,169.1006**	**1.0779**		**5,196.0479**

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	0.0100	0.5952	0.1054	3.4400e-003	0.5168	9.1000e-003	0.5259	0.0723	8.7000e-003	0.0811		364.3594	364.3594	6.9000e-004	0.0573	381.4427
Vendor	0.0649	2.8351	0.5462	0.0207	3.4164	0.0386	3.4550	0.4954	0.0370	0.5323		2,180.5243	2,180.5243	4.0100e-003	0.2975	2,269.2769
Worker	1.0220	0.6736	12.2773	0.0406	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		4,101.3929	4,101.3929	0.0515	0.0730	4,124.4332
Total	**1.0969**	**4.1039**	**12.9290**	**0.0648**	**8.9484**	**0.0667**	**9.0151**	**1.8973**	**0.0632**	**1.9605**		**6,646.2766**	**6,646.2766**	**0.0562**	**0.4278**	**6,775.1528**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 4b Cleanup - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.3722	21.7005	26.0375	0.0480		0.8500	0.8500		0.8050	0.8050		4,585.8567	4,585.8567	1.0693		4,612.5880
Total	**2.3722**	**21.7005**	**26.0375**	**0.0480**		**0.8500**	**0.8500**		**0.8050**	**0.8050**		**4,585.8567**	**4,585.8567**	**1.0693**		**4,612.5880**

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	2.0300e-003	0.1204	0.0213	7.0000e-004	0.8455	1.8400e-003	0.8473	0.0886	1.7600e-003	0.0904		73.7192	73.7192	1.4000e-004	0.0116	77.1756
Vendor	0.0433	1.8901	0.3641	0.0138	18.2078	0.0258	18.2335	1.9201	0.0246	1.9447		1,453.6829	1,453.6829	2.6700e-003	0.1983	1,512.8513
Worker	1.0220	0.6736	12.2773	0.0406	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		4,101.3929	4,101.3929	0.0515	0.0730	4,124.4332
Total	**1.0673**	**2.6841**	**12.6628**	**0.0551**	**24.0685**	**0.0466**	**24.1151**	**3.3383**	**0.0439**	**3.3822**		**5,628.7950**	**5,628.7950**	**0.0543**	**0.2829**	**5,714.4601**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 4b Cleanup - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6924	8.3192	29.8895	0.0480		0.0732	0.0732		0.0732	0.0732	0.0000	4,585.8567	4,585.8567	1.0693		4,612.5880
Total	**0.6924**	**8.3192**	**29.8895**	**0.0480**		**0.0732**	**0.0732**		**0.0732**	**0.0732**	**0.0000**	**4,585.8567**	**4,585.8567**	**1.0693**		**4,612.5880**

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	2.0300e-003	0.1204	0.0213	7.0000e-004	0.1046	1.8400e-003	0.1064	0.0146	1.7600e-003	0.0164		73.7192	73.7192	1.4000e-004	0.0116	77.1756
Vendor	0.0433	1.8901	0.3641	0.0138	2.2776	0.0258	2.3034	0.3303	0.0246	0.3549		1,453.6829	1,453.6829	2.6700e-003	0.1983	1,512.8513
Worker	1.0220	0.6736	12.2773	0.0406	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		4,101.3929	4,101.3929	0.0515	0.0730	4,124.4332
Total	**1.0673**	**2.6841**	**12.6628**	**0.0551**	**7.3974**	**0.0466**	**7.4440**	**1.6745**	**0.0439**	**1.7184**		**5,628.7950**	**5,628.7950**	**0.0543**	**0.2829**	**5,714.4601**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8926	1.7650	13.3015	0.0326	56.6306	0.0263	56.6569	6.2056	0.0247	6.2303		3,322.0066	3,322.0066	0.1302	0.1384	3,366.4928
Unmitigated	0.8926	1.7650	13.3015	0.0326	56.6306	0.0263	56.6569	6.2056	0.0247	6.2303		3,322.0066	3,322.0066	0.1302	0.1384	3,366.4928

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
Industrial Park	90.00	90.00	90.00	1,646,256	1,646,256
Total	90.00	90.00	90.00	1,646,256	1,646,256

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 Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Industrial Park	60.00	60.00	60.00	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.538773	0.056496	0.172548	0.130930	0.027872	0.007524	0.007427	0.023548	0.000520	0.000190	0.027873	0.001148	0.005149
Industrial Park	0.538773	0.056496	0.172548	0.130930	0.027872	0.007524	0.007427	0.023548	0.000520	0.000190	0.027873	0.001148	0.005149

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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 Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	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 Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
Unmitigated	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
Total	**1.5223**	**0.1498**	**16.5332**	**1.2400e-003**		**0.0588**	**0.0588**		**0.0588**	**0.0588**		**35.5314**	**35.5314**	**0.0924**		**37.8418**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
Total	**1.5223**	**0.1498**	**16.5332**	**1.2400e-003**		**0.0588**	**0.0588**		**0.0588**	**0.0588**		**35.5314**	**35.5314**	**0.0924**		**37.8418**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	50	61	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0501	0.1632	0.1816	2.4000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003		25.6052	25.6052	3.5900e-003		25.6949
Total	**0.0501**	**0.1632**	**0.1816**	**2.4000e-004**		**7.3600e-003**	**7.3600e-003**		**7.3600e-003**	**7.3600e-003**		**25.6052**	**25.6052**	**3.5900e-003**		**25.6949**

11.0 Vegetation

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Easley Renewable Energy 400 MW

Mojave Desert Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	162,350.00	1000sqft	3,727.04	162,350,000.00	0
Industrial Park	3.00	1000sqft	0.07	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Solar electric generating facility and energy storage

Land Use - Approx 3735 acre site w 3000 sf office

Construction Phase - Overall 20 months w overlapping activities

Off-road Equipment - Ph 1a Initial site prep up to 15 pc equipment

Off-road Equipment - Ph 1b Grading appx 18 pc equipment

Off-road Equipment - Ph 2 PV arrays appx 66 pc off-road

Off-road Equipment - Ph 3 Electrical and BESS appx 36 pcs equipment

Off-road Equipment - Ph 4a Gen-tie up to 20 pc equipment

Off-road Equipment - Ph 4b Cleanup 18 pc equipment

Trips and VMT - peak appx 60 truck roundtrips daily in HDT Mix

On-road Fugitive Dust - Final mile of truck trips unpaved

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Material cut fill balanced on site, target grading access roads

Architectural Coating - Architectural coatings not applicable

Vehicle Trips - Operational trip generation rate for office

Road Dust - Final mile on unpaved surface at 25 mph onsite speed limit

Consumer Products - Consumer products not applicable

Area Coating - Architectural coating reapplication not applicable

Energy Use - Operational electricity and natural gas use not appllicable

Water And Wastewater - Operational water use up to 50 acre feet is 16.3 million gal per year

Solid Waste - Minimal solid waste generation

Land Use Change - Land use change approx 3735 acres

Construction Off-road Equipment Mitigation - Tier 4 engines except OHRVs; water 2x daily is 55% effective PM10 control per Rule 403; suppressant is 84% effective per Table XI-D

Stationary Sources - Emergency Generators and Fire Pumps - Backup generator if necessary

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	81,176,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	243,529,500.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	25.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	6,000.00	43.00
tblConstructionPhase	NumDays	15,500.00	87.00
tblConstructionPhase	NumDays	155,000.00	260.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	155,000.00	260.00
tblConstructionPhase	NumDays	155,000.00	87.00
tblConstructionPhase	NumDays	11,000.00	43.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24E	2.74	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	3.43	0.00
tblGrading	AcresOfGrading	435.00	300.00
tblGrading	AcresOfGrading	107.50	300.00
tblOffRoadEquipment	HorsePower	221.00	49.00
tblOffRoadEquipment	HorsePower	124.00	82.00
tblOffRoadEquipment	HorsePower	124.00	82.00
tblOffRoadEquipment	HorsePower	172.00	82.00
tblOffRoadEquipment	HorsePower	172.00	82.00
tblOffRoadEquipment	LoadFactor	0.50	0.40
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	HaulingPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	MeanVehicleSpeed	40	25
tblRoadDust	RoadPercentPave	100	98

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblSolidWaste	SolidWasteGenerationRate	201,314.00	0.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	61.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripNumber	0.00	100.00
tblTripsAndVMT	HaulingTripNumber	0.00	100.00
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripLength	6.60	60.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	26,610.00	80.00
tblTripsAndVMT	VendorTripNumber	26,610.00	40.00
tblTripsAndVMT	VendorTripNumber	26,610.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripLength	16.80	60.00
tblTripsAndVMT	WorkerTripNumber	38.00	110.00
tblTripsAndVMT	WorkerTripNumber	45.00	110.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	860.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	200.00
tblTripsAndVMT	WorkerTripNumber	68,188.00	110.00
tblTripsAndVMT	WorkerTripNumber	13,638.00	110.00
tblVehicleTrips	CC_TL	6.60	60.00
tblVehicleTrips	CNW_TL	6.60	60.00
tblVehicleTrips	CW_TL	14.70	60.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	2.54	30.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.24	30.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	3.37	30.00
tblWater	IndoorWaterUseRate	37,543,437,500.00	0.00
tblWater	IndoorWaterUseRate	693,750.00	300,000.00
tblWater	OutdoorWaterUseRate	0.00	16,000,000.00

2.0 Emissions Summary

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	27.3317	175.4010	272.2503	0.8041	272.4146	7.1874	279.6021	36.4399	6.7014	43.1413	0.0000	80,298.2208	80,298.2208	7.4123	3.2846	81,462.3366
2026	26.6719	174.2474	265.1874	0.7892	272.4146	7.1743	279.5889	36.4399	6.6892	43.1291	0.0000	78,773.1262	78,773.1262	7.3582	3.1733	79,902.7236
Maximum	**27.3317**	**175.4010**	**272.2503**	**0.8041**	**272.4146**	**7.1874**	**279.6021**	**36.4399**	**6.7014**	**43.1413**	**0.0000**	**80,298.2208**	**80,298.2208**	**7.4123**	**3.2846**	**81,462.3366**

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					
2025	16.1933	92.6484	283.6995	0.8041	76.3512	1.4526	77.8038	16.8724	1.3792	18.2516	0.0000	80,298.2208	80,298.2208	7.4123	3.2846	81,462.3365
2026	15.5335	91.4948	276.6366	0.7892	76.3512	1.4395	77.7906	16.8724	1.3670	18.2394	0.0000	78,773.1262	78,773.1262	7.3582	3.1733	79,902.7235
Maximum	**16.1933**	**92.6484**	**283.6995**	**0.8041**	**76.3512**	**1.4526**	**77.8038**	**16.8724**	**1.3792**	**18.2516**	**0.0000**	**80,298.2208**	**80,298.2208**	**7.4123**	**3.2846**	**81,462.3365**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**41.25**	**47.33**	**-4.26**	**0.00**	**71.97**	**79.86**	**72.18**	**53.70**	**79.49**	**57.70**	**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	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
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	0.8318	1.8726	11.2166	0.0299	56.6306	0.0263	56.6569	6.2056	0.0248	6.2303		3,041.1515	3,041.1515	0.1280	0.1409	3,086.3370
Stationary	0.0501	0.1632	0.1816	2.4000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003		25.6052	25.6052	3.5900e-003		25.6949
Total	**2.4041**	**2.1857**	**27.9315**	**0.0313**	**56.6306**	**0.0925**	**56.7231**	**6.2056**	**0.0909**	**6.2965**		**3,102.2880**	**3,102.2880**	**0.2240**	**0.1409**	**3,149.8738**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
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	0.8318	1.8726	11.2166	0.0299	56.6306	0.0263	56.6569	6.2056	0.0248	6.2303		3,041.1515	3,041.1515	0.1280	0.1409	3,086.3370
Stationary	0.0501	0.1632	0.1816	2.4000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003		25.6052	25.6052	3.5900e-003		25.6949
Total	**2.4041**	**2.1857**	**27.9315**	**0.0313**	**56.6306**	**0.0925**	**56.7231**	**6.2056**	**0.0909**	**6.2965**		**3,102.2880**	**3,102.2880**	**0.2240**	**0.1409**	**3,149.8738**

	ROG	NOx	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	1a Site Preparation	Site Preparation	3/31/2025	5/28/2025	5	43	Ph 1a - Site Prep
2	1b Grading	Grading	3/31/2025	7/29/2025	5	87	Ph 1b - Grading
3	2 PV System	Building Construction	8/1/2025	7/30/2026	5	260	Ph 2 - PV System
4	3 Electrical	Building Construction	11/29/2025	11/27/2026	5	260	Ph 3 - Electrical BESS

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	4a Gen-tie	Building Construction	8/1/2026	12/1/2026	5	87	Ph 4a - Gen-tie
6	4b Cleanup	Architectural Coating	9/29/2026	11/26/2026	5	43	Ph 4b - Cleanup

Acres of Grading (Site Preparation Phase): 300

Acres of Grading (Grading Phase): 300

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
1a Site Preparation	Rollers	5	8.00	80	0.38
1a Site Preparation	Rubber Tired Dozers	5	8.00	247	0.40
1a Site Preparation	Tractors/Loaders/Backhoes	5	8.00	97	0.37
1b Grading	Excavators	2	8.00	158	0.38
1b Grading	Forklifts	2	8.00	89	0.20
1b Grading	Graders	4	8.00	187	0.41
1b Grading	Rubber Tired Dozers	2	8.00	247	0.40
1b Grading	Scrapers	2	8.00	367	0.48
1b Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
1b Grading	Trenchers	2	8.00	78	0.50
2 PV System	Aerial Lifts	4	8.00	63	0.31
2 PV System	Bore/Drill Rigs	8	8.00	49	0.40
2 PV System	Concrete/Industrial Saws	2	8.00	81	0.73
2 PV System	Cranes	4	7.00	231	0.29
2 PV System	Excavators	2	8.00	158	0.38
2 PV System	Forklifts	10	8.00	89	0.20
2 PV System	Generator Sets	1	8.00	84	0.74
2 PV System	Off-Highway Tractors	8	4.00	82	0.44

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2 PV System	Other Construction Equipment	2	8.00	82	0.42
2 PV System	Other General Industrial Equipment	2	8.00	88	0.34
2 PV System	Rollers	2	8.00	80	0.38
2 PV System	Rubber Tired Dozers	1	8.00	247	0.40
2 PV System	Skid Steer Loaders	8	8.00	65	0.37
2 PV System	Tractors/Loaders/Backhoes	2	8.00	97	0.37
2 PV System	Trenchers	2	8.00	78	0.50
2 PV System	Welders	8	8.00	46	0.45
3 Electrical	Aerial Lifts	4	8.00	63	0.31
3 Electrical	Cranes	2	7.00	231	0.29
3 Electrical	Forklifts	4	8.00	89	0.20
3 Electrical	Generator Sets	2	8.00	84	0.74
3 Electrical	Off-Highway Tractors	4	4.00	82	0.44
3 Electrical	Other Construction Equipment	4	8.00	82	0.42
3 Electrical	Rollers	2	8.00	80	0.38
3 Electrical	Skid Steer Loaders	4	8.00	65	0.37
3 Electrical	Tractors/Loaders/Backhoes	2	7.00	97	0.37
3 Electrical	Trenchers	4	8.00	78	0.50
3 Electrical	Welders	4	8.00	46	0.45
4a Gen-tie	Aerial Lifts	5	7.00	63	0.31
4a Gen-tie	Cranes	2	7.00	231	0.29
4a Gen-tie	Forklifts	4	8.00	89	0.20
4a Gen-tie	Generator Sets	2	8.00	84	0.74
4a Gen-tie	Tractors/Loaders/Backhoes	2	8.00	97	0.37
4a Gen-tie	Welders	5	8.00	46	0.45
4b Cleanup	Air Compressors	5	6.00	78	0.48
4b Cleanup	Forklifts	5	8.00	89	0.20
4b Cleanup	Graders	2	8.00	187	0.41
4b Cleanup	Skid Steer Loaders	5	8.00	65	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4b Cleanup	Welders	1	6.00	46	0.45

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
1a Site Preparation	15	110.00	10.00	100.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
1b Grading	18	110.00	10.00	100.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
2 PV System	66	860.00	80.00	400.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
3 Electrical	36	200.00	40.00	400.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
4a Gen-tie	20	110.00	15.00	200.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT
4b Cleanup	18	110.00	10.00	20.00	60.00	60.00	60.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 1a Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					37.5093	0.0000	37.5093	17.3500	0.0000	17.3500			0.0000			0.0000
Off-Road	4.5858	47.0464	35.3705	0.0714		2.0841	2.0841		1.9173	1.9173		6,915.3895	6,915.3895	2.2366		6,971.3039
Total	**4.5858**	**47.0464**	**35.3705**	**0.0714**	**37.5093**	**2.0841**	**39.5933**	**17.3500**	**1.9173**	**19.2674**		**6,915.3895**	**6,915.3895**	**2.2366**		**6,971.3039**

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	9.6700e-003	0.6432	0.1084	3.5700e-003	4.2275	9.3200e-003	4.2368	0.4429	8.9200e-003	0.4518		378.4186	378.4186	6.7000e-004	0.0595	396.1603
Vendor	0.0446	2.0163	0.3855	0.0141	18.2078	0.0260	18.2338	1.9201	0.0249	1.9450		1,485.3576	1,485.3576	2.7300e-003	0.2034	1,546.0396
Worker	1.1210	0.7771	9.9363	0.0372	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		3,763.0489	3,763.0489	0.0517	0.0794	3,788.0017
Total	**1.1753**	**3.4366**	**10.4302**	**0.0549**	**27.4504**	**0.0554**	**27.5058**	**3.6926**	**0.0523**	**3.7449**		**5,626.8251**	**5,626.8251**	**0.0551**	**0.3423**	**5,730.2015**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 1a Site Preparation - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					16.8792	0.0000	16.8792	7.8075	0.0000	7.8075			0.0000			0.0000
Off-Road	0.8735	3.7852	40.7973	0.0714		0.1165	0.1165		0.1165	0.1165	0.0000	6,915.3895	6,915.3895	2.2366		6,971.3039
Total	**0.8735**	**3.7852**	**40.7973**	**0.0714**	**16.8792**	**0.1165**	**16.9956**	**7.8075**	**0.1165**	**7.9240**	**0.0000**	**6,915.3895**	**6,915.3895**	**2.2366**		**6,971.3039**

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	9.6700e-003	0.6432	0.1084	3.5700e-003	0.5228	9.3200e-003	0.5321	0.0732	8.9200e-003	0.0821		378.4186	378.4186	6.7000e-004	0.0595	396.1603
Vendor	0.0446	2.0163	0.3855	0.0141	2.2776	0.0260	2.3036	0.3303	0.0249	0.3551		1,485.3576	1,485.3576	2.7300e-003	0.2034	1,546.0396
Worker	1.1210	0.7771	9.9363	0.0372	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		3,763.0489	3,763.0489	0.0517	0.0794	3,788.0017
Total	**1.1753**	**3.4366**	**10.4302**	**0.0549**	**7.8156**	**0.0554**	**7.8710**	**1.7331**	**0.0523**	**1.7853**		**5,626.8251**	**5,626.8251**	**0.0551**	**0.3423**	**5,730.2015**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 1b Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.7011	0.0000	15.7011	7.0153	0.0000	7.0153			0.0000			0.0000
Off-Road	5.5487	55.1379	45.9753	0.1065		2.3427	2.3427		2.1553	2.1553		10,310.8240	10,310.8240	3.3347		10,394.1922
Total	**5.5487**	**55.1379**	**45.9753**	**0.1065**	**15.7011**	**2.3427**	**18.0437**	**7.0153**	**2.1553**	**9.1706**		**10,310.8240**	**10,310.8240**	**3.3347**		**10,394.1922**

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	4.7800e-003	0.3179	0.0536	1.7700e-003	2.0894	4.6100e-003	2.0940	0.2189	4.4100e-003	0.2233		187.0345	187.0345	3.3000e-004	0.0294	195.8033
Vendor	0.0446	2.0163	0.3855	0.0141	18.2078	0.0260	18.2338	1.9201	0.0249	1.9450		1,485.3576	1,485.3576	2.7300e-003	0.2034	1,546.0396
Worker	1.1210	0.7771	9.9363	0.0372	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		3,763.0489	3,763.0489	0.0517	0.0794	3,788.0017
Total	**1.1704**	**3.1113**	**10.3754**	**0.0531**	**25.3124**	**0.0507**	**25.3631**	**3.4686**	**0.0478**	**3.5164**		**5,435.4410**	**5,435.4410**	**0.0548**	**0.3122**	**5,529.8446**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 1b Grading - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0655	0.0000	7.0655	3.1569	0.0000	3.1569			0.0000			0.0000
Off-Road	1.3057	5.6579	57.8547	0.1065		0.1741	0.1741		0.1741	0.1741	0.0000	10,310.8240	10,310.8240	3.3347		10,394.1922
Total	**1.3057**	**5.6579**	**57.8547**	**0.1065**	**7.0655**	**0.1741**	**7.2396**	**3.1569**	**0.1741**	**3.3310**	**0.0000**	**10,310.8240**	**10,310.8240**	**3.3347**		**10,394.1922**

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	4.7800e-003	0.3179	0.0536	1.7700e-003	0.2584	4.6100e-003	0.2630	0.0362	4.4100e-003	0.0406		187.0345	187.0345	3.3000e-004	0.0294	195.8033
Vendor	0.0446	2.0163	0.3855	0.0141	2.2776	0.0260	2.3036	0.3303	0.0249	0.3551		1,485.3576	1,485.3576	2.7300e-003	0.2034	1,546.0396
Worker	1.1210	0.7771	9.9363	0.0372	5.0152	0.0201	5.0353	1.3296	0.0185	1.3481		3,763.0489	3,763.0489	0.0517	0.0794	3,788.0017
Total	**1.1704**	**3.1113**	**10.3754**	**0.0531**	**7.5512**	**0.0507**	**7.6019**	**1.6960**	**0.0478**	**1.7438**		**5,435.4410**	**5,435.4410**	**0.0548**	**0.3122**	**5,529.8446**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.3598	90.2961	109.1035	0.1742		4.0725	4.0725		3.7954	3.7954		16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**10.3598**	**90.2961**	**109.1035**	**0.1742**		**4.0725**	**4.0725**		**3.7954**	**3.7954**		**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.4000e-003	0.4255	0.0717	2.3600e-003	2.7966	6.1600e-003	2.8028	0.2930	5.9000e-003	0.2989		250.3385	250.3385	4.4000e-004	0.0394	262.0752
Vendor	0.3568	16.1305	3.0840	0.1130	145.6621	0.2078	145.8700	15.3609	0.1988	15.5597		11,882.8606	11,882.8606	0.0219	1.6272	12,368.3164
Worker	8.7642	6.0752	77.6835	0.2911	39.2097	0.1571	39.3668	10.3952	0.1446	10.5398		29,420.2007	29,420.2007	0.4044	0.6207	29,615.2857
Total	**9.1273**	**22.6312**	**80.8392**	**0.4064**	**187.6684**	**0.3711**	**188.0395**	**26.0490**	**0.3493**	**26.3983**		**41,553.3998**	**41,553.3998**	**0.4267**	**2.2873**	**42,245.6774**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1752	40.8797	116.6040	0.1742		0.6124	0.6124		0.5831	0.5831	0.0000	16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**3.1752**	**40.8797**	**116.6040**	**0.1742**		**0.6124**	**0.6124**		**0.5831**	**0.5831**	**0.0000**	**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.4000e-003	0.4255	0.0717	2.3600e-003	0.3458	6.1600e-003	0.3520	0.0484	5.9000e-003	0.0543		250.3385	250.3385	4.4000e-004	0.0394	262.0752
Vendor	0.3568	16.1305	3.0840	0.1130	18.2209	0.2078	18.4287	2.6420	0.1988	2.8408		11,882.8606	11,882.8606	0.0219	1.6272	12,368.3164
Worker	8.7642	6.0752	77.6835	0.2911	39.2097	0.1571	39.3668	10.3952	0.1446	10.5398		29,420.2007	29,420.2007	0.4044	0.6207	29,615.2857
Total	**9.1273**	**22.6312**	**80.8392**	**0.4064**	**57.7764**	**0.3711**	**58.1475**	**13.0855**	**0.3493**	**13.4348**		**41,553.3998**	**41,553.3998**	**0.4267**	**2.2873**	**42,245.6774**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.3598	90.2961	109.1035	0.1742		4.0725	4.0725		3.7954	3.7954		16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**10.3598**	**90.2961**	**109.1035**	**0.1742**		**4.0725**	**4.0725**		**3.7954**	**3.7954**		**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.3700e-003	0.4192	0.0716	2.3000e-003	2.7966	6.0900e-003	2.8027	0.2930	5.8300e-003	0.2988		244.0117	244.0117	4.4000e-004	0.0384	255.4521
Vendor	0.3433	15.9045	2.9418	0.1106	145.6621	0.2061	145.8682	15.3609	0.1971	15.5580		11,633.9193	11,633.9193	0.0209	1.5886	12,107.8535
Worker	8.2452	5.4247	72.1265	0.2819	39.2097	0.1487	39.3583	10.3952	0.1368	10.5320		28,496.0829	28,496.0829	0.3617	0.5790	28,677.6648
Total	**8.5949**	**21.7483**	**75.1400**	**0.3948**	**187.6684**	**0.3608**	**188.0292**	**26.0490**	**0.3398**	**26.3888**		**40,374.0138**	**40,374.0138**	**0.3830**	**2.2060**	**41,040.9704**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 2 PV System - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1752	40.8797	116.6040	0.1742		0.6124	0.6124		0.5831	0.5831	0.0000	16,511.0219	16,511.0219	4.4512		16,622.3019
Total	**3.1752**	**40.8797**	**116.6040**	**0.1742**		**0.6124**	**0.6124**		**0.5831**	**0.5831**	**0.0000**	**16,511.0219**	**16,511.0219**	**4.4512**		**16,622.3019**

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	6.3700e-003	0.4192	0.0716	2.3000e-003	0.3458	6.0900e-003	0.3519	0.0484	5.8300e-003	0.0542		244.0117	244.0117	4.4000e-004	0.0384	255.4521
Vendor	0.3433	15.9045	2.9418	0.1106	18.2209	0.2061	18.4269	2.6420	0.1971	2.8391		11,633.9193	11,633.9193	0.0209	1.5886	12,107.8535
Worker	8.2452	5.4247	72.1265	0.2819	39.2097	0.1487	39.3583	10.3952	0.1368	10.5320		28,496.0829	28,496.0829	0.3617	0.5790	28,677.6648
Total	**8.5949**	**21.7483**	**75.1400**	**0.3948**	**57.7764**	**0.3608**	**58.1372**	**13.0855**	**0.3398**	**13.4253**		**40,374.0138**	**40,374.0138**	**0.3830**	**2.2060**	**41,040.9704**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6216	52.5701	62.6278	0.0970		2.5972	2.5972		2.4178	2.4178		9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**5.6216**	**52.5701**	**62.6278**	**0.0970**		**2.5972**	**2.5972**		**2.4178**	**2.4178**		**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.4000e-003	0.4255	0.0717	2.3600e-003	2.7966	6.1600e-003	2.8028	0.2930	5.9000e-003	0.2989		250.3385	250.3385	4.4000e-004	0.0394	262.0752
Vendor	0.1784	8.0653	1.5420	0.0565	72.8311	0.1039	72.9350	7.6804	0.0994	7.7798		5,941.4303	5,941.4303	0.0109	0.8136	6,184.1582
Worker	2.0382	1.4128	18.0659	0.0677	9.1185	0.0365	9.1551	2.4175	0.0336	2.4511		6,841.9072	6,841.9072	0.0940	0.1444	6,887.2758
Total	**2.2230**	**9.9036**	**19.6797**	**0.1265**	**84.7462**	**0.1466**	**84.8928**	**10.3909**	**0.1389**	**10.5299**		**13,033.6759**	**13,033.6759**	**0.1054**	**0.9973**	**13,333.5092**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6679	19.2338	66.5765	0.0970		0.3225	0.3225		0.3078	0.3078	0.0000	9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**1.6679**	**19.2338**	**66.5765**	**0.0970**		**0.3225**	**0.3225**		**0.3078**	**0.3078**	**0.0000**	**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.4000e-003	0.4255	0.0717	2.3600e-003	0.3458	6.1600e-003	0.3520	0.0484	5.9000e-003	0.0543		250.3385	250.3385	4.4000e-004	0.0394	262.0752
Vendor	0.1784	8.0653	1.5420	0.0565	9.1104	0.1039	9.2144	1.3210	0.0994	1.4204		5,941.4303	5,941.4303	0.0109	0.8136	6,184.1582
Worker	2.0382	1.4128	18.0659	0.0677	9.1185	0.0365	9.1551	2.4175	0.0336	2.4511		6,841.9072	6,841.9072	0.0940	0.1444	6,887.2758
Total	**2.2230**	**9.9036**	**19.6797**	**0.1265**	**18.5748**	**0.1466**	**18.7214**	**3.7869**	**0.1389**	**3.9258**		**13,033.6759**	**13,033.6759**	**0.1054**	**0.9973**	**13,333.5092**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6216	52.5701	62.6278	0.0970		2.5972	2.5972		2.4178	2.4178		9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**5.6216**	**52.5701**	**62.6278**	**0.0970**		**2.5972**	**2.5972**		**2.4178**	**2.4178**		**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.3700e-003	0.4192	0.0716	2.3000e-003	2.7966	6.0900e-003	2.8027	0.2930	5.8300e-003	0.2988		244.0117	244.0117	4.4000e-004	0.0384	255.4521
Vendor	0.1717	7.9522	1.4709	0.0553	72.8311	0.1030	72.9341	7.6804	0.0986	7.7790		5,816.9596	5,816.9596	0.0104	0.7943	6,053.9268
Worker	1.9175	1.2616	16.7736	0.0656	9.1185	0.0346	9.1531	2.4175	0.0318	2.4493		6,626.9960	6,626.9960	0.0841	0.1347	6,669.2244
Total	**2.0955**	**9.6330**	**18.3161**	**0.1232**	**84.7462**	**0.1437**	**84.8899**	**10.3909**	**0.1362**	**10.5271**		**12,687.9673**	**12,687.9673**	**0.0950**	**0.9673**	**12,978.6032**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 3 Electrical - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6679	19.2338	66.5765	0.0970		0.3225	0.3225		0.3078	0.3078	0.0000	9,200.1231	9,200.1231	2.4290		9,260.8480
Total	**1.6679**	**19.2338**	**66.5765**	**0.0970**		**0.3225**	**0.3225**		**0.3078**	**0.3078**	**0.0000**	**9,200.1231**	**9,200.1231**	**2.4290**		**9,260.8480**

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	6.3700e-003	0.4192	0.0716	2.3000e-003	0.3458	6.0900e-003	0.3519	0.0484	5.8300e-003	0.0542		244.0117	244.0117	4.4000e-004	0.0384	255.4521
Vendor	0.1717	7.9522	1.4709	0.0553	9.1104	0.1030	9.2135	1.3210	0.0986	1.4196		5,816.9596	5,816.9596	0.0104	0.7943	6,053.9268
Worker	1.9175	1.2616	16.7736	0.0656	9.1185	0.0346	9.1531	2.4175	0.0318	2.4493		6,626.9960	6,626.9960	0.0841	0.1347	6,669.2244
Total	**2.0955**	**9.6330**	**18.3161**	**0.1232**	**18.5748**	**0.1437**	**18.7185**	**3.7869**	**0.1362**	**3.9231**		**12,687.9673**	**12,687.9673**	**0.0950**	**0.9673**	**12,978.6032**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 4a Gen-tie - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9398	25.2661	32.3836	0.0557		0.9533	0.9533		0.9087	0.9087		5,169.1006	5,169.1006	1.0779		5,196.0479
Total	**2.9398**	**25.2661**	**32.3836**	**0.0557**		**0.9533**	**0.9533**		**0.9087**	**0.9087**		**5,169.1006**	**5,169.1006**	**1.0779**		**5,196.0479**

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	9.5200e-003	0.6264	0.1070	3.4400e-003	4.1789	9.1000e-003	4.1880	0.4378	8.7100e-003	0.4465		364.6151	364.6151	6.6000e-004	0.0573	381.7101
Vendor	0.0644	2.9821	0.5516	0.0207	27.3117	0.0386	27.3503	2.8802	0.0370	2.9171		2,181.3599	2,181.3599	3.9100e-003	0.2979	2,270.2225
Worker	1.0546	0.6939	9.2255	0.0361	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		3,644.8478	3,644.8478	0.0463	0.0741	3,668.0734
Total	**1.1285**	**4.3023**	**9.8841**	**0.0602**	**36.5057**	**0.0668**	**36.5725**	**4.6476**	**0.0632**	**4.7108**		**6,190.8228**	**6,190.8228**	**0.0508**	**0.4292**	**6,320.0060**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 4a Gen-tie - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8068	10.9123	35.0520	0.0557		0.0809	0.0809		0.0809	0.0809	0.0000	5,169.1006	5,169.1006	1.0779		5,196.0479
Total	**0.8068**	**10.9123**	**35.0520**	**0.0557**		**0.0809**	**0.0809**		**0.0809**	**0.0809**	**0.0000**	**5,169.1006**	**5,169.1006**	**1.0779**		**5,196.0479**

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	9.5200e-003	0.6264	0.1070	3.4400e-003	0.5168	9.1000e-003	0.5259	0.0723	8.7100e-003	0.0811		364.6151	364.6151	6.6000e-004	0.0573	381.7101
Vendor	0.0644	2.9821	0.5516	0.0207	3.4164	0.0386	3.4551	0.4954	0.0370	0.5323		2,181.3599	2,181.3599	3.9100e-003	0.2979	2,270.2225
Worker	1.0546	0.6939	9.2255	0.0361	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		3,644.8478	3,644.8478	0.0463	0.0741	3,668.0734
Total	**1.1285**	**4.3023**	**9.8841**	**0.0602**	**8.9484**	**0.0668**	**9.0151**	**1.8973**	**0.0632**	**1.9605**		**6,190.8228**	**6,190.8228**	**0.0508**	**0.4292**	**6,320.0060**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 4b Cleanup - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.3722	21.7005	26.0375	0.0480		0.8500	0.8500		0.8050	0.8050		4,585.8567	4,585.8567	1.0693		4,612.5880
Total	**2.3722**	**21.7005**	**26.0375**	**0.0480**		**0.8500**	**0.8500**		**0.8050**	**0.8050**		**4,585.8567**	**4,585.8567**	**1.0693**		**4,612.5880**

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	1.9300e-003	0.1267	0.0217	7.0000e-004	0.8455	1.8400e-003	0.8473	0.0886	1.7600e-003	0.0904		73.7710	73.7710	1.3000e-004	0.0116	77.2297
Vendor	0.0429	1.9881	0.3677	0.0138	18.2078	0.0258	18.2335	1.9201	0.0246	1.9448		1,454.2399	1,454.2399	2.6100e-003	0.1986	1,513.4817
Worker	1.0546	0.6939	9.2255	0.0361	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		3,644.8478	3,644.8478	0.0463	0.0741	3,668.0734
Total	**1.0995**	**2.8086**	**9.6149**	**0.0506**	**24.0685**	**0.0466**	**24.1151**	**3.3383**	**0.0439**	**3.3822**		**5,172.8587**	**5,172.8587**	**0.0490**	**0.2842**	**5,258.7848**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 4b Cleanup - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6924	8.3192	29.8895	0.0480		0.0732	0.0732		0.0732	0.0732	0.0000	4,585.8567	4,585.8567	1.0693		4,612.5880
Total	**0.6924**	**8.3192**	**29.8895**	**0.0480**		**0.0732**	**0.0732**		**0.0732**	**0.0732**	**0.0000**	**4,585.8567**	**4,585.8567**	**1.0693**		**4,612.5880**

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	1.9300e-003	0.1267	0.0217	7.0000e-004	0.1046	1.8400e-003	0.1064	0.0146	1.7600e-003	0.0164		73.7710	73.7710	1.3000e-004	0.0116	77.2297
Vendor	0.0429	1.9881	0.3677	0.0138	2.2776	0.0258	2.3034	0.3303	0.0246	0.3549		1,454.2399	1,454.2399	2.6100e-003	0.1986	1,513.4817
Worker	1.0546	0.6939	9.2255	0.0361	5.0152	0.0190	5.0342	1.3296	0.0175	1.3471		3,644.8478	3,644.8478	0.0463	0.0741	3,668.0734
Total	**1.0995**	**2.8086**	**9.6149**	**0.0506**	**7.3974**	**0.0466**	**7.4440**	**1.6745**	**0.0439**	**1.7184**		**5,172.8587**	**5,172.8587**	**0.0490**	**0.2842**	**5,258.7848**

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8318	1.8726	11.2166	0.0299	56.6306	0.0263	56.6569	6.2056	0.0248	6.2303		3,041.1515	3,041.1515	0.1280	0.1409	3,086.3370
Unmitigated	0.8318	1.8726	11.2166	0.0299	56.6306	0.0263	56.6569	6.2056	0.0248	6.2303		3,041.1515	3,041.1515	0.1280	0.1409	3,086.3370

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
Industrial Park	90.00	90.00	90.00	1,646,256	1,646,256
Total	90.00	90.00	90.00	1,646,256	1,646,256

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 Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Industrial Park	60.00	60.00	60.00	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.538773	0.056496	0.172548	0.130930	0.027872	0.007524	0.007427	0.023548	0.000520	0.000190	0.027873	0.001148	0.005149
Industrial Park	0.538773	0.056496	0.172548	0.130930	0.027872	0.007524	0.007427	0.023548	0.000520	0.000190	0.027873	0.001148	0.005149

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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 Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	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 Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Industrial Park	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

Easley Renewable Energy 400 MW - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
Unmitigated	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
Total	**1.5223**	**0.1498**	**16.5332**	**1.2400e-003**		**0.0588**	**0.0588**		**0.0588**	**0.0588**		**35.5314**	**35.5314**	**0.0924**		**37.8418**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5223	0.1498	16.5332	1.2400e-003		0.0588	0.0588		0.0588	0.0588		35.5314	35.5314	0.0924		37.8418
Total	**1.5223**	**0.1498**	**16.5332**	**1.2400e-003**		**0.0588**	**0.0588**		**0.0588**	**0.0588**		**35.5314**	**35.5314**	**0.0924**		**37.8418**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	50	61	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0501	0.1632	0.1816	2.4000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003		25.6052	25.6052	3.5900e-003		25.6949
Total	**0.0501**	**0.1632**	**0.1816**	**2.4000e-004**		**7.3600e-003**	**7.3600e-003**		**7.3600e-003**	**7.3600e-003**		**25.6052**	**25.6052**	**3.5900e-003**		**25.6949**

11.0 Vegetation

Attachment C

AVOIDED GHG EMISSIONS

Avoided GHG Emissions - Electricity Production

Operation - Emissions Avoided by Producing Electricity

Generation Project - approximate production minus transmission losses

Generation Capacity (MW)	**400**
Capacity Factor (Riverside East)	0.26
Transmission Line Loss Factor	7.8%
839,979	**MWh/yr**

Basis: production = MW Capacity * Capacity Factor * (1 - Transmission Loss) * 8760 hr/year
Capacity factor estimate from NREL PVWatts calculator

Proposed Project - IP Easley LLC, design estimate

650 MW BESS, year 1	**200 MW BESS, year 1**
(MWh/yr)	**(MWh/yr)**
894,400	275,200

GHG Emission Factors - for conventional generation technologies for marginal generation

Notes: Marginal generation is from less efficient (higher emitting) generators in the mix of dispatchable resources.
e.g., avoided emissions from power plants that would turn down to accommodate additional renewable generation. (CPUC 2022)

Estimated CO2 Emission Factors (CEC 2019, Table B-22)			**650 MW BESS**	**200 MW BESS**
Technology	**Low Case (lbs/MWh)**	**Low Case (MTCO2/MWh)**	**Avoided (MTCO2/yr)**	**Avoided (MTCO2/yr)**
Conventional Combustion Turbines	1,167.70	0.530	473,733	145,764
Advanced Combustion Turbines	1,123.20	0.509	455,679	140,209
Conventional Combined Cycle Technologies	822.5	0.373	333,686	102,673
Conventional Combined Cycle w/Duct Firing	822.5	0.373	333,686	102,673

References:
CEC (California Energy Commission) . 2019. Staff Report. Estimated Cost of New Utility-Scale Generation in California: 2018 Update. CEC-200-2019-500. May.
CPUC (California Public Utilities Commission) . 2022. Greenhouse Gas and Criteria Pollutant Accounting Methodology for use in Load-Serving Entity Portfolio Development in 2022 Integrated Resource Plans. July.

GHG Emission Factors - for electricity imported from an "unspecified" source for marginal generation

Unspecified Resources CO2 Emission Factor		**Unspecified (MTCO2/MWh)**	**Avoided (MTCO2/yr)**	**Avoided (MTCO2/yr)**
Open Market Purchases, western power system GHG		0.428	382,803	117,786

California ARB (Air Resources Board) . Regulation for Mandatory Reporting of GHG Emissions (17 CCR 95111).
California ARB . July 2017. Final Statement of Reasons. Amendments to the Regulation for the Mandatory Reporting of GHG Emissions.

Easley Renewable Energy Project - GHG Balance of Construction Emissions after Year 1

Months to balance one-time Construction emissions - offset by the combined effects of O&M, Land Use Conversion, and Emissions Avoided by Producing Electricity

	Construction (MTCO2e)
Construction Total (one-time)	11,978

	Operation and Maintenance	Land Use Conversion	650 MW BESS	200 MW BESS		650 MW BESS	200 MW BESS
After Commencing Operation	**(MTCO2e/yr)**	**(MTCO2e/yr)**	**Avoided (MTCO2/yr)**	**Avoided (MTCO2/yr)**		**Construction Balance, Year 1 (MT)**	**Construction Balance, Year 1 (MT)**
Year 1 of Operation	559	16,098	-333,686	-102,673		-305,051	-74,038

Rolling Months 1 through 12	**(MTCO2e/month)**	**(MTCO2e/month)**	**(MTCO2/month)**	**(MTCO2/month)**		**Running Balance**	**Running Balance**
Month 1	47	1,341	-27,807	-8,556		-14,441	4,810
Month 2	47	1,341	-27,807	-8,556		-40,860	-2,358
Month 3	47	1,341	-27,807	-8,556		-67,279	-9,526
Month 4	47	1,341	-27,807	-8,556		-93,698	-16,694
Month 5	47	1,341	-27,807	-8,556		-120,117	-23,862
Month 6	47	1,341	-27,807	-8,556		-146,536	-31,030
Month 7	47	1,341	-27,807	-8,556		-172,955	-38,198
Month 8	47	1,341	-27,807	-8,556		-199,375	-45,366
Month 9	47	1,341	-27,807	-8,556		-225,794	-52,534
Month 10	47	1,341	-27,807	-8,556		-252,213	-59,702
Month 11	47	1,341	-27,807	-8,556		-278,632	-66,870
Month 12	47	1,341	-27,807	-8,556		-305,051	-74,038
Year 1, Sum of Months 1 through 12	559	16,098	-333,686	-102,673			

Easley Renewable Energy Project - GHG Balance of Life-of-Project Emissions

Years to balance 30-year Life-of-Project Construction, O&M, Land Use Conversion - offset by Emissions Avoided by Producing Electricity

	Construction (MTCO2e)
Construction Total (one-time)	11,978

	Operation and Maintenance	Land Use Conversion	650 MW BESS	200 MW BESS		650 MW BESS	200 MW BESS
After Commencing Operation	**(MTCO2e)**	**(MTCO2e)**	**Avoided (MTCO2)**	**Avoided (MTCO2)**		**Project Lifetime Balance (MT)**	**Project Lifetime Balance (MT)**
30 years Life-of-Project	16,755	482,936	-10,010,578	-3,080,178		-9,498,909	-2,568,508

Rolling Years 1 through 30	Avoided (MTCO2/yr)	Avoided (MTCO2/yr)		Running Balance	Running Balance
Year 1	-333,686	-102,673		177,983	408,997
Year 2	-333,686	-102,673		-155,703	306,324
Year 3	-333,686	-102,673		-489,388	203,652
Year 4	-333,686	-102,673		-823,074	100,979
Year 5	-333,686	-102,673		-1,156,760	-1,694
Year 6	-333,686	-102,673		-1,490,446	-104,366
Year 7	-333,686	-102,673		-1,824,132	-207,039
Year 8	-333,686	-102,673		-2,157,818	-309,711
Year 9	-333,686	-102,673		-2,491,504	-412,384
Year 10	-333,686	-102,673		-2,825,190	-515,057
Year 11	-333,686	-102,673		-3,158,876	-617,729
Year 12	-333,686	-102,673		-3,492,562	-720,402
Year 13	-333,686	-102,673		-3,826,248	-823,074
Year 14	-333,686	-102,673		-4,159,934	-925,747
Year 15	-333,686	-102,673		-4,493,620	-1,028,420
Year 16	-333,686	-102,673		-4,827,306	-1,131,092
Year 17	-333,686	-102,673		-5,160,991	-1,233,765
Year 18	-333,686	-102,673		-5,494,677	-1,336,437
Year 19	-333,686	-102,673		-5,828,363	-1,439,110
Year 20	-333,686	-102,673		-6,162,049	-1,541,783
Year 21	-333,686	-102,673		-6,495,735	-1,644,455
Year 22	-333,686	-102,673		-6,829,421	-1,747,128
Year 23	-333,686	-102,673		-7,163,107	-1,849,800
Year 24	-333,686	-102,673		-7,496,793	-1,952,473
Year 25	-333,686	-102,673		-7,830,479	-2,055,146
Year 26	-333,686	-102,673		-8,164,165	-2,157,818
Year 27	-333,686	-102,673		-8,497,851	-2,260,491
Year 28	-333,686	-102,673		-8,831,537	-2,363,163
Year 29	-333,686	-102,673		-9,165,223	-2,465,836
Year 30	-333,686	-102,673		-9,498,909	-2,568,508
Life-of-Project, Sum of Years 1 through 30	-10,010,578	-3,080,178			