



## **Appendix C**

Air Quality Technical Memorandum

## MEMORANDUM

**To:** Lockhart Solar PV II, LLC

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**Date:** September 27, 2021

**Subject:** Lockhart Solar PV II Project – Air Quality Technical Memorandum

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### PURPOSE

The purpose of this memorandum is to evaluate potential short- and long-term air quality impacts as a result of the Lockhart Solar PV II Project (Project), located in unincorporated Hinkley, California.

### PROJECT LOCATION

The Project Site is located in unincorporated Hinkley, California, approximately 7 miles north of the intersection of Harper Lake Road and Mojave-Barstow Highway 58. The Project Site is bordered on the south by the existing Solar Energy Generating System (SEGS) VIII and IX Solar Thermal Power Plants, which the County of San Bernardino (County) approved for repowering to photovoltaic (PV) solar and battery storage in 2019 as part of the Lockhart Solar I Facility (CUP Project #201900125, approved in 2019); Harper Lake Road to the east; Hoffman Road to the west; and vacant land to the north.

### EXISTING SITE CONDITIONS

The Project Site consists of area within three parcels, each of which contain vacant, previously disturbed land, miscellaneous concrete foundations, various electrical lines and poles, as well as existing facilities within the Shared Facilities Area. The Project is largely sited on land previously approved by the California Energy Commission (CEC) for development of SEGS X, a solar thermal power facility for which construction was initiated but was never completed. The Project Site has been subject to near complete surface disturbance associated with past agricultural use, grading during initial construction of the SEGS X facility, as well as construction of the shared facilities area for the existing SEGS VIII and IX Solar Thermal Power Plants. Approximately 600-acres were identified for the SEGS X power plant including land for associated facilities to be shared with the two adjacent solar thermal power plants (SEGS VIII and IX). Prior to work stoppage, several concrete foundations for the power block as well as concrete foundations for solar racking had been installed in the central and southwest portions of the Project Site.

## **PROJECT DESCRIPTION**

The Project includes the development of a utility scale, solar PV electricity generation and energy storage facility that would produce up to 150 megawatts (MW) of solar energy and include up to 4 gigawatt hours (GWh) of energy storage capacity rate in a battery energy storage system (BESS). Development includes demolition of existing SEGS X concrete foundations (as needed) to allow for construction of Project facilities. Concrete from SEGS X foundations would be demolished and exported from the Project Site for proper disposal at a licensed landfill.

The Project is bordered on the south by the approved Lockhart Solar I Facility and the existing SEGS VIII and IX Solar Thermal Plants. The Project would share existing operations and maintenance (O&M) facilities with the Lockhart Solar I Facility (i.e., O&M building, warehouse and employee building), water and septic systems, switchyard and electrical transmission infrastructure, and a new collector substation (approved and to be constructed) within the Shared Facilities Area to connect the Project to the existing 13.8-mile transmission line which runs to the Southern California Edison (SCE)-owned Kramer Junction substation. The Shared Facility Area includes the already approved BESS for Lockhart Solar I (County permitted), BESS for SEGS IX (CEC permitted), and the new BESS for the Project, as these facilities are integral to the collector substation. In addition, the already approved collector substation and the existing switchyard located within the Shared Facilities Area will be upgraded, as necessary, to connect the Project to the existing transmission line which runs to SCE-owned Kramer Junction substation. The Project is subject to conditional use permit (CUP) approval from the County.

Project construction is anticipated to be completed over a period of approximately 14 months. Project construction activities generally fall into three main categories: (1) site preparation, (2) system installation, and (3) testing, commissioning, and cleanup.

Typical O&M activities during Project operations include, but are not limited to, facility monitoring; administration and reporting; remote operations of inverters, BESS system and other equipment; site security and management; communication protocol; repair and maintenance of solar facilities, electrical transmission lines, and other Project facilities; and periodic solar panel washing.

At the end of the Project's operational term, the Applicant may determine that the Project Site should be decommissioned and deconstructed, or it may seek an extension of its CUP(s). The Applicant would work with the County to ensure decommissioning of the Project after its productive lifetime complies with all applicable local, State, and federal requirements and best management practices (BMPs). Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure would be removed, including the fences and the concrete pads that may support the inverters, transformers, and related equipment. The exterior fencing and gates would be removed, and materials would be recycled to the extent feasible. Project roads would be restored to their pre-construction condition to the extent feasible, unless the landowner elects to retain the improved roads for access throughout the property. The area would be thoroughly cleaned, and all debris removed.

## **ENVIRONMENTAL SETTING**

### **Regional Topography**

The State of California is divided geographically into 15 air basins, generally along geographic or topographic boundaries. The Project Site is located in the Mojave Desert Air Basin (Basin). The Basin includes the desert portion of Los Angeles and San Bernardino Counties, the eastern desert portion of Kern County, and the northeastern desert portion of Riverside County. The Mojave Desert Air Quality Management District (MDAQMD) has jurisdiction over stationary sources of air pollution located within San Bernardino County's High Desert and Riverside County's Palo Verde Valley, which includes the Project Site.

The Basin is bound in the northwest by the Tehachapi Mountains, in the southwest by the San Gabriel Mountains, and in the south by the San Bernardino Mountains. To the north, the Basin is defined by the San Bernardino-Inyo County boundary, to the northeast the California-Nevada state line, and to the east by the Colorado River.<sup>1</sup> The San Gabriel and San Bernardino Mountains are high and rugged, with the highest peaks being 10,066 feet above sea level (Mt. San Antonio) and 11,503 feet (Mt. San Gorgonio), respectively. The Basin generally lies at 3,000 to 6,000 feet elevation.

The Mojave Desert is situated in a transitional zone between the Great Basin Desert to the north and the Sonoran Desert to the south (mainly between 34 and 38°N latitudes)<sup>2</sup>. The area is primarily a rain-shadow desert, meaning it experiences little rainfall because it is sheltered from prevailing rain-bearing winds (i.e. off the Pacific Ocean) by a range of mountains.

### **Meteorology and Climate**

Factors such as wind, sunlight, temperature, humidity, and rainfall, affect the accumulation and/or dispersion of air pollutants throughout the Basin. Local meteorological conditions are greatly affected by the topography of the region.

Prevailing winds in the Basin are out of west and southwest. These prevailing winds are due to the proximity of the Basin to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north. Air masses pushed onshore in Southern California by differential heating are channeled through the mountain passes. Although a portion of the prevailing winds come from the Los Angeles Basin via the canyons, the vast majority of the winds are a result of the orographic effect and the desert heat low-pressure systems. The “orographic effect” is the phenomenon whereby the air is forced over the mountain range and loses moisture as it rises. When it descends, it also compresses and heats up. The speed of the wind is aided by the “desert heat low”, which routinely form over the eastern Mojave Desert area. During the summer a Pacific Subtropical High Cell, that sits off the coast generally influences the Basin, inhibiting cloud formation and encouraging daytime solar heating. The Basin is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The Basin averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The Basin is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least three months have maximum average temperature over 100.4° F.<sup>1</sup>

### **Criteria Air Pollutants**

Carbon Monoxide (CO). Carbon monoxide is a colorless and odorless gas formed by the incomplete

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<sup>1</sup> Mojave Desert Air Quality Management District, *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*, February 2020.

combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. Automobile exhaust accounts for most CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. Concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Ozone (O<sub>3</sub>). Ozone (O<sub>3</sub>) is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOCs), sometimes referred to as reactive organic gases (ROGs), and nitrogen oxides (NO<sub>x</sub>) react in the presence of ultraviolet sunlight. O<sub>3</sub> is not a primary pollutant; it is a secondary pollutant formed by complex interactions of the two precursor pollutants directly emitted into the atmosphere. Automobile exhaust and industrial sources are the primary sources of VOCs and NOx. Meteorology and terrain play major roles in O<sub>3</sub> formation. Ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O<sub>3</sub> can damage the tissues of the respiratory tract, causing inflammation and irritation, and result in symptoms such as coughing, chest tightness, and worsening of asthma symptoms.

Nitrogen Dioxide (NO<sub>2</sub>). Most NO<sub>2</sub>, like O<sub>3</sub>, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO<sub>2</sub> are collectively referred to as NO<sub>x</sub> and are major contributors to ozone formation. High concentrations of NO<sub>2</sub> can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO<sub>2</sub> and chronic pulmonary fibrosis. Some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million (ppm) by volume.

Particulate Matter (PM<sub>2.5</sub> and PM<sub>10</sub>). Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM<sub>2.5</sub> and PM<sub>10</sub> represent fractions of particulate matter. Fine particulate matter, or PM<sub>2.5</sub>, is roughly 1/28 the diameter of a human hair. PM<sub>2.5</sub> results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves. In addition, PM<sub>2.5</sub> can be formed in the atmosphere from gases such as sulfur oxides (SO<sub>x</sub>), NO<sub>x</sub>, and VOC. Inhalable or coarse particulate matter, or PM<sub>10</sub>, is about 1/7 the thickness of a human hair. Major sources of PM<sub>10</sub> include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

PM<sub>2.5</sub> and PM<sub>10</sub> pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM<sub>2.5</sub> and PM<sub>10</sub> can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates, can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM<sub>10</sub> tends to collect in the upper portion of the

respiratory system, PM<sub>2.5</sub> is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Sulfur Dioxide (SO<sub>2</sub>). Sulfur dioxide is a colorless, pungent gas formed primarily by the combustion of sulfur containing fossil fuels. Main sources of SO<sub>2</sub> are coal and oil used in power plants and industries; as such, the highest levels of SO<sub>2</sub> are generally found near large industrial complexes. In recent years, sulfur dioxide concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO<sub>2</sub> and limits on the sulfur content of fuels. SO<sub>2</sub> is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO<sub>2</sub> can also yellow plant leaves and corrode iron and steel.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O<sub>3</sub> to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O<sub>3</sub>, which is a criteria pollutant. The terms VOC and reactive organic gases (ROG) (see below) are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O<sub>3</sub> and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O<sub>3</sub>, which is a criteria pollutant. The terms ROG and VOC are often used interchangeably.

### **Local Ambient Air Quality**

Ambient air quality for the Project Site can be determined from ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends in the region are documented by measurements made by the MDAQMD, the air pollution regulatory agency in the Basin that maintains air quality monitoring stations which process ambient air quality measurements. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentration. USEPA requires monitoring sites be capable of informing air pollution control officers about peak air pollution levels, typical levels in populated areas, air pollution transported into and out of a city or region, and air pollution levels near specific sources. Monitors must be designated with an appropriate site type so that the data collected can be used to support a specific federal monitoring objective.<sup>2</sup>

The MDAQMD monitors air quality at six monitoring stations throughout the Basin.<sup>3</sup> Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentration. The closest air monitoring station to the Project Site that

<sup>2</sup> California Air Resources Board, *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts*, <https://www.mdaqmd.ca.gov/home/showpublisheddocument/5982/636710697943470000>, accessed September 19, 2021.

<sup>3</sup> Mojave Desert Air Quality Management District, Ambient Air Quality Monitoring, <http://mdaqmd.ca.gov/air-quality/monitoring-info>, accessed April 28, 2021.

monitors O<sub>3</sub>, CO, NO<sub>2</sub>, and PM<sub>10</sub> is the Barstow Monitoring station, located approximately 27.2 miles southeast of the Project Site at 301 East Mountain View Street.<sup>4</sup> The Barstow Monitoring Station is designated a “Population exposure” site type with middle and neighborhood scale representation.<sup>5</sup> The concentrations recorded at the station are expected to be similar at distances 100 to 500 meters for O<sub>3</sub>, CO, and NO<sub>2</sub>, and at distances of 0.5 to 4.0 kilometers for PM<sub>10</sub>, if the area has relatively uniform land use. Only the Victorville – Park Avenue Monitoring Station, located approximately 53 miles south of the Project Site at 14306 Park Avenue monitors PM<sub>2.5</sub> in all of the Basin.<sup>6</sup> This data is designated as representative at the neighborhood scale (0.5 to 4.0 kilometers). The unincorporated County land surrounding the Project Site is developed at a far lower intensity than land uses within Barstow or Victorville, meaning that the data from the Barstow and Victorville Monitoring Stations are likely substantially over predicting ambient levels at the Project Site. Nonetheless, it is the most applicable data available for all pollutants, with the exception of O<sub>3</sub>. The Basin includes three regional O<sub>3</sub> monitors (representative of homogenous rural areas tens to hundreds of kilometers from the monitor site), two at Joshua Tree National Park and one at Mojave National Preserve. The data from Joshua Tree are not considered representative of ambient levels at the Project Site due to the proximity of Joshua Tree to major population centers and the effect of the mountains limiting transport of pollutants generated in the non-desert areas to the vicinity of the Project Site.

The air quality data from 2017 to 2019 monitored at Barstow Monitoring Station, the Victorville – Park Avenue Monitoring Station, and the Mojave National Preserve Monitoring Station is presented in Table 1, Summary of Air Quality Data. This table lists the monitored maximum concentrations and number of exceedances of State/Federal air quality standards for each year.

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<sup>4</sup> California Air Resources Board, Quality Assurance Air Monitoring Site Information, Site Information for Barstow, [https://ww3.arb.ca.gov/qaweb/iframe\\_site.php?s\\_arb\\_code=36155](https://ww3.arb.ca.gov/qaweb/iframe_site.php?s_arb_code=36155), accessed April 28, 2021.

<sup>5</sup> Ibid.

<sup>6</sup> California Air Resources Board, Quality Assurance Air Monitoring Site Information, Site Information for Victorville – Park Avenue, [https://ww3.arb.ca.gov/qaweb/iframe\\_site.php?s\\_arb\\_code=36306](https://ww3.arb.ca.gov/qaweb/iframe_site.php?s_arb_code=36306), accessed April 28, 2021.

**Table 1**  
**Summary of Air Quality Data**

Pollutant	California Standard	Federal Primary Standard	Year	Maximum Concentration <sup>1</sup>	Days (Samples) State/Federal Std. Exceeded		
Ozone (O <sub>3</sub> ) (8-hour) <sup>2</sup>	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2017	0.072 ppm	8 / 8		
			2018	0.088 ppm	88 / 79		
			2019	0.074 ppm	23 / 19		
Ozone (O <sub>3</sub> ) (1-hour) <sup>3</sup>	0.09 ppm for 1 hour	NA <sup>7</sup>	2017	0.084 ppm	0 / 0		
			2018	0.126 ppm	5 / 1		
			2019	0.090 ppm	0 / 0		
Ozone (O <sub>3</sub> ) (8-hour) <sup>3</sup>	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2017	0.077 ppm	10 / 9		
			2018	0.105 ppm	51 / 49		
			2019	0.082 ppm	10 / 9		
Carbon Monoxide (CO)(1-hour) <sup>3</sup>	20 ppm for 1 hour	35 ppm for 1 hour	2017	0.844 ppm	0 / 0		
			2018	5.408 ppm	0 / 0		
			2019	0.573 ppm	0 / 0		
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>3</sup>	0.180 ppm for 1 hour	0.100 ppm for 1 hour	2017	0.061 ppm	0 / 0		
			2018	0.059 ppm	0 / 0		
			2019	0.060 ppm	0 / 0		
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>4,5</sup>	No Separate Standard	35 µg/m <sup>3</sup> for 24 hours	2017	29.2 µg/m <sup>3</sup>	* / 0		
			2018	33.2 µg/m <sup>3</sup>	* / 0		
			2019	20.0 µg/m <sup>3</sup>	* / 0		
Particulate Matter (PM <sub>10</sub> ) <sup>3,4,6</sup>	50 µg/m <sup>3</sup> for 24 hours	150 µg/m <sup>3</sup> for 24 hours <sup>8</sup>	2017	206.9 mg/m <sup>3</sup>	* / 1		
			2018	101.3 mg/m <sup>3</sup>	* / 0		
			2019	209.5 mg/m <sup>3</sup>	* / 1		
ppm = parts per million; PM <sub>10</sub> = particulate matter 10 microns in diameter or less; µg/m <sup>3</sup> = micrograms per cubic meter; PM <sub>2.5</sub> = particulate matter 2.5 microns in diameter or less; NA = not applicable; * = insufficient data available to determine the value							
<p>Notes:</p> <ol style="list-style-type: none"> <li>1. Maximum concentration is measured over the same period as the California Standards.</li> <li>2. Data collected from the Mojave National Preserve Station located in Kelso, CA; 4th highest 8-hour maximum reported in accordance with the form of the applicable NAAQS.</li> <li>3. Data collected from the Barstow Monitoring Station located at 301 E Mountain View Street.</li> <li>4. PM<sub>10</sub> and PM<sub>2.5</sub> exceedances are derived from the number of samples exceeded, not days.</li> <li>5. Data collected from the Victorville – Park Avenue Monitoring Station is at 14306 Park Avenue.</li> <li>6. PM<sub>10</sub> exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.</li> <li>7. The Federal standard for 1-hour ozone was revoked in June 2005.</li> <li>8. The Federal standard for average PM<sub>10</sub> was revoked in December 2006.</li> </ol>							
<p>Sources:</p> <p>For CO, see California Air Resources Board, AQMIS2: Air Quality Data, <a href="https://www.arb.ca.gov/aqmis2/aqselect.php">https://www.arb.ca.gov/aqmis2/aqselect.php</a>, accessed April 28, 2021.</p> <p>For all other pollutants, see California Air Resources Board, ADAM Air Quality Data Statistics, <a href="http://www.arb.ca.gov/adam/">http://www.arb.ca.gov/adam/</a>, accessed April 28, 2021.</p>							

The attainment status for various pollutants in the Basin are listed in Table 2, Federal and State Ambient Air Quality Attainment Status. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Areas for which there is insufficient data available are designated unclassified. As shown in Table 2, the Project Site is a Federal nonattainment area for O<sub>3</sub> and PM<sub>10</sub> and a state nonattainment area for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The Project Site is classified as attainment or unclassified for lead, visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

**Table 2**  
**Federal and State Ambient Air Quality Attainment Status**

Pollutant	Federal	State
Ozone ( $O_3$ )	Non-attainment <sup>1</sup>	Nonattainment
Nitrogen Dioxide ( $NO_2$ )	Unclassified/Attainment	Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Sulfur Dioxide ( $SO_2$ )	Unclassified/Attainment	Attainment
Coarse Particulate Matter ( $PM_{10}$ )	Non-attainment <sup>2</sup>	Nonattainment
Fine Particulate Matter ( $PM_{2.5}$ )	Unclassified/Attainment	Nonattainment <sup>1</sup>

Notes:

1. Southwest corner of desert portion of San Bernardino County only.
2. San Bernardino County portion only.

Source: Mojave Desert Air Quality Management District. "California Environmental Quality Act (CEQA) and Federal Conformity Guidelines." August 2016.

## REGULATORY SETTING

### Federal

#### Clean Air Act

The federal Clean Air Act (CAA), which was initially established by the U.S. Congress in 1970 and substantially revised in 1977 and 1990, can be found in Title 42, Chapter 85 of the United States Code. An important aspect of the CAA is its requirement for the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS). There are NAAQS in place for seven “criteria” pollutants: CO, lead,  $NO_2$ ,  $O_3$ , particle matter ( $PM_{10}$  and  $PM_{2.5}$ ), and  $SO_2$ . Standards are classified as primary and secondary. Primary standards are designed to protect public health, including sensitive individuals, such as children and the elderly, whereas secondary standards are designed to protect public welfare, such as visibility and crop or material damage. The USEPA sets the NAAQS based on a process that involves science policy workshops, a risk/exposure assessment (REA) that draws on the information and conclusions of the science policy workshops to development quantitative characterizations of exposures and associated risks to human health or the environment, and a policy assessment by USEPA staff that bridges the gap between agency scientific assessments and the judgments required of the USEPA administrator, who then takes the proposed standards through the federal rulemaking process.<sup>3</sup> The NAAQS are set to be protective of human health.

The CAA requires the USEPA to routinely review and update the NAAQS in accordance with the latest available scientific evidence. For example, the USEPA revoked the annual  $PM_{10}$  standard in 2006 due to a lack of evidence linking health problems to long-term exposure to  $PM_{10}$  emissions. The 1-hour standard for  $O_3$  was revoked in 2005 in favor of a new 8-hour standard that is intended to better protect public health.

CAA Section 182(e)(5) allows the USEPA administrator to approve provisions of an attainment strategy in an extreme area that anticipates development of new control techniques or improvement of existing control technologies if the state has submitted enforceable commitments to develop and adopt contingency measures to be implemented if the anticipated technologies do not achieve planned reductions.

Nonattainment areas that are classified as “serious” or “worse” are required to revise their air quality management plans to include specific emission reduction strategies to meet interim milestones in

implementing emission controls and improving air quality. The USEPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the act. If a state fails to correct these planning deficiencies within two years of federal notification, the USEPA is required to develop a Federal Implementation Plan for the identified nonattainment area or areas.

## **State**

### *California Clean Air Act*

The California Clean Air Act of 1988 requires all air pollution control districts in the state to aim to achieve and maintain state ambient air quality standards for O<sub>3</sub>, CO, and NO<sub>2</sub> by the earliest practical date and to develop plans and regulations specifying how the districts will meet this goal. There are no planning requirements for the state PM<sub>10</sub> standard.

CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for meeting state requirements of the federal Clean Air Act, administrating the California Clean Air Act, and establishing the California Ambient Air Quality Standards (CAAQS). The California Clean Air Act, amended in 1992, requires all air districts in the state to endeavor to achieve and maintain the CAAQS. California law does not require that CAAQS be met by specified dates as is the case with NAAQS. Rather, it requires incremental progress toward attainment.<sup>4</sup> California law continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS due to federal penalties for failure to meet federal attainment deadlines.

The CAAQS are generally stricter than national standards for the same pollutants, but there is no penalty for nonattainment. Similar to the federal process, the standards for the CAAQS are adopted after review by CARB staff of the scientific literature produced by agencies such as the Office of Environmental Health Hazard Assessment (OEHHA), the Air Quality Advisory Committee, which is comprised of experts in health sciences, exposure assessment, monitoring methods, and atmospheric sciences appointed by the Office of the President of the University of California, and public review and comment.<sup>2</sup> The CAAQS are set at levels determined to be protective of human health.

### *State Implementation Plans*

An important component of the MDAQMD's air quality planning strategy is contained in the State Implementation Plan (SIP) for the State of California. The federal Clean Air Act requires all states to submit a SIP to the USEPA. This statewide SIP is often referred to as an "infrastructure" SIP. Infrastructure SIPs are administrative in nature and describe the authorities, resources, and programs a state has in place to implement, maintain, and enforce the federal standards. It does not contain any proposals for emission control measures.

In addition to infrastructure SIPs, the Clean Air Act requires submissions of SIPs for areas that are out of compliance with the NAAQS. These area attainment SIPs are comprehensive plans that describe how an out-of-compliance area will attain and maintain the particular NAAQS standard(s) it does not conform to. Once an out-of-compliance area has attained the standard in question, a maintenance SIP is required for a period of time to ensure the area will continue to meet the standard.

SIPs are not single documents. They are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. Many of

California's SIPs rely on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. State law makes CARB the lead agency for all purposes related to SIPs. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards those revisions to the USEPA for approval and publication in the Federal Register.

## **Local**

### ***Mojave Desert Air Quality Management District (MDAQMD)***

#### **MDAQMD Federal 8-hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area)**

On April 15, 2004, the USEPA designated the Western Mojave Desert nonattainment area as nonattainment for the 8-hour ozone NAAQS pursuant to the provisions of the Federal CAA. The Western Mojave Desert Ozone Nonattainment Area includes part of San Bernardino County, a portion of the MDAQMD, as well as the Antelope Valley portion of Los Angeles County. As a result, the MDAQMD prepared its Ozone Attainment Plan in June 2008 to: (1) demonstrate that the MDAQMD will meet the primary required Federal ozone planning milestones, attainment of the 8-hour ozone NAAQS by 2019 (revised June 2021); (2) present the progress the MDAQMD will make towards meeting all required ozone planning milestones; and (3) discuss the newest 0.075 part per million 8-hour ozone NAAQS, preparatory to an expected non-attainment designation for the new NAAQS. In February 2017, MDAQMD updated the 2008 Ozone Attainment Plan and adopted the *MDAQMD Federal 75 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Plan)* to satisfy FCAA requirements that the MDAQMD develop a plan to attain the 0.075 ppm 8-hour ozone NAAQS.

#### **Final Mojave Desert Planning Area Federal Particulate Matter 10 (PM<sub>10</sub>) Attainment Plan**

On January 20, 1994, the USEPA re-designated a significant portion of the Mojave Desert as a nonattainment area with respect to the NAAQS for PM<sub>10</sub>. This nonattainment area covers a vast geographical region, including the urban areas of Victor Valley and Barstow, the Morongo Basin, along with the rural desert environs reaching to the Nevada and Arizona state lines. The PM<sub>10</sub> Attainment Plan was prepared in July 1995 to provide a complete description and submittal to USEPA of the PM<sub>10</sub> attainment planning elements which the MDAQMD will implement to bring the nonattainment area into compliance with federal law. Most importantly, the PM<sub>10</sub> Attainment Plan serves as a planning tool for reducing PM<sub>10</sub> pollution. The PM<sub>10</sub> Attainment Plan sets forth an air quality improvement program for the region which will be implemented by both the public and private sector of the community.

#### **MDAQMD Rules**

The MDAQMD has adopted rules to limit air emissions. Many of these rules were put in place as required by measures specified in various SIPs and air quality management plans. The MDAQMD rules that are applicable to the project are:

- Rule 401 – Visible Emissions. This rule prohibits discharges of air contaminants or other material, which are as dark or darker in shade as that designated No. 1 on the Ringelmann Chart.

- Rule 402 – Nuisance. This rule prohibits the discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.
- Rule 403 – Fugitive Dust. The purpose of this rule is to control the amount of PM entrained in the atmosphere from manmade sources of fugitive dust. The rule prohibits emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area to be visible beyond the emission source's property line.

### ***San Bernardino County Countywide Plan / Policy Plan***

The County's Countywide Plan, adopted on October 27, 2020, serves as a set of plans and tools for the County's unincorporated communities and complements the Countywide vision. The Countywide Plan consists of the Policy Plan, Business Plan, and Community Action Guides, together with the supporting environmental clearance. The Policy Plan is a component of the Countywide Plan that is an update and expansion of the County's General Plan for the unincorporated areas. The following goals and policies are applicable to the Project:

#### ***Natural Resources Element***

##### **Goal NR-1: Air Quality**

Air quality that promotes health and wellness of residents in San Bernardino County through improvements in locally generated emission.

- Policy NR-1.1 Land use. We promote compact and transit-oriented development countywide and regulate the types and locations of development in unincorporated areas to minimize vehicle miles traveled and greenhouse gas emissions.
- Policy NR-1.2 Indoor air quality. We promote the improvement of indoor air quality through the California Building and Energy Codes and through the provision of public health programs and services.
- Policy NR-1.3 Coordination on air pollution. We collaborate with air quality management districts and other local agencies to monitor and reduce major pollutants affecting the county at the emission source.
- Policy NR-1.6 Fugitive dust emissions. We coordinate with air quality management districts on requirements for dust control plans, revegetation, and soil compaction to prevent fugitive dust emissions.
- Policy NR-1.8 Construction and operations. We invest in County facilities and fleet vehicles to improve energy efficiency and reduce emissions. We encourage County contractors and other builders and developers to use low-emission construction vehicles and equipment to improve air quality and reduce emissions.
- Policy NR-1.9 Building design and upgrades. We use the CALGreen Code to meet energy efficiency standards for new buildings and encourage the upgrading of existing buildings to incorporate

design elements, building materials, and fixtures that improve environmental sustainability and reduce emissions.

*Renewable Energy Element*

RE Policy 4.1 Apply standards to the design, siting, and operation of all renewable energy facilities that protect the environment, including sensitive biological resources, air quality, water supply and quality, cultural, archaeological, paleontological and scenic resources.

RE Policy 4.3.1 Define measures required to minimize ground disturbance, soil erosion, flooding, and blowing of sand and dust, with appropriate enforcement mechanisms in the Development Code

*Hazards Element*

Policy HZ-3.3 Air quality management districts establish community emissions reduction plans for unincorporated environmental justice focus areas that should be considered in these areas. With particular emphasis in addressing the types of pollution identified in the Hazard Element table.

*San Bernardino County Development Code*

The San Bernardino County Development Code (Development Code) Section 83.01.040 (pertaining to construction air quality) will apply to the construction phase of the Project. Relevant provisions of the section are listed below.

- (c) Diesel Exhaust Emissions Control Measures. The following emissions control measures shall apply to all discretionary land use projects approved by the County on or after January 15, 2009:
- (1) On-Road Diesel Vehicles. On-road diesel vehicles are regulated by the State of California Air Resources Board.
- (2) Off-Road Diesel Vehicle/Equipment Operations. All business establishments and contractors that use off-road diesel vehicle/equipment as part of their normal business operations shall adhere to the following measures during their operations in order to reduce diesel particulate matter emissions from diesel-fueled engines:
- (A) Off-road vehicles/equipment shall not be left idling on site for periods in excess of five minutes. The idling limit does not apply to:
- (I) Idling when queuing;
- (II) Idling to verify that the vehicle is in safe operating condition;
- (III) Idling for testing, servicing, repairing or diagnostic purposes;
- (IV) Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane);

- (V) Idling required to bring the machine system to operating temperature; and
  - (VI) Idling necessary to ensure safe operation of the vehicle.
- (B) Use reformulated ultra-low-sulfur diesel fuel in equipment and use equipment certified by the U.S. Environmental Protection Agency (EPA) or that pre-dates EPA regulations.
  - (C) Maintain engines in good working order to reduce emissions.
  - (D) Signs shall be posted requiring vehicle drivers to turn off engines when parked.
  - (E) Any requirements or standards subsequently adopted by the South Coast Air Quality Management District, the Mojave Desert Air Quality Management District or the California Air Resources Board.
  - (F) Provide temporary traffic control during all phases of construction.
  - (G) On-site electrical power connections shall be provided for electric construction tools to eliminate the need for diesel-powered electric generators, where feasible.
  - (H) Maintain construction equipment engines in good working order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.
  - (I) Contractors shall use ultra-low sulfur diesel fuel for stationary construction equipment as required by Air Quality Management District (AQMD) Rules 431.1 and 431.2 to reduce the release of undesirable emissions.
  - (J) Substitute electric and gasoline-powered equipment for diesel-powered equipment, where feasible.

Development Code Section 84.29.035 (Required Findings for Approval of a Commercial Solar Energy Facility) includes the following requirements relevant to fugitive dust emissions:

- (c) The finding of fact shall include the following:
  - (20) The proposed commercial solar energy generation facility will be designed, constructed, and operated so as to minimize dust generation, including provision of sufficient watering of excavated or graded soil during construction to prevent excessive dust. Watering will occur at a minimum of three (3) times daily on disturbed soil areas with active operations, unless dust is otherwise controlled by rainfall or use of a dust palliative, or other approved dust control measure.
  - (21) All clearing, grading, earth moving, and excavation activities will cease during period of winds greater than 20 miles per hour (mph), averaged over one hour, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property, and in conformance with AQMD regulations.

- (22) For sites where the boundary of a new commercial solar energy generation facility will be located within one-quarter mile of a primary residential structure, an adequate wind barrier will be provided to reduce potentially blowing dust in the direction of the residence during construction and ongoing operation of the commercial solar energy generation facility.
- (23) Any unpaved roads and access ways will be treated and maintained with a dust palliative or graveled or treated by another approved dust control Chapter 83.09 of the Development Code.
- (24) On-site vehicle speed will be limited to 15 mph.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) THRESHOLDS**

The environmental analysis in this memorandum is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended.<sup>7</sup> The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

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

### ***MDAQMD Air Quality Thresholds***

Under the California Environmental Quality Act (CEQA), the MDAQMD is an expert commenting agency on air quality and related matters within its jurisdiction or impacting on its jurisdiction. Under the Federal Clean Air Act, the MDAQMD has adopted federal attainment plans for ozone and PM<sub>10</sub>. The MDAQMD has dedicated assets to reviewing projects to ensure that they will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

According to the MDAQMD's *CEQA and Federal conformity Guideline*, a project is significant if it triggers or exceed the most appropriate evaluation criteria:

1. Generates total emissions (direct and indirect) in the excess of the thresholds given in Table 3, MDAQMD Significant Emission Thresholds;

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<sup>7</sup> California Natural Resources Agency, *Final Adopted Text for Revisions to the CEQA Guidelines*, effective December 28, 2018, [https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018\\_CEQA\\_FINAL\\_TEXT\\_122818.pdf](https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf).

2. Generates a violation of any ambient air quality standard when added to the local background;
3. Does not conform with the applicable attainment or maintenance plan(s)<sup>8</sup>;
4. Exposes sensitive receptors to substantial pollution concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/ or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.

**Table 3**  
**MDAQMD Significant Emissions Thresholds**

Criteria Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO <sub>x</sub> )	25	137
Volatile Organic Compounds (VOC)	25	137
Oxides of Sulfur (SO <sub>x</sub> )	25	137
Particulate Matter (PM <sub>10</sub> )	15	82
Fine Particulate Matter (PM <sub>2.5</sub> )	12	65
Hydrogen Sulfide (H <sub>2</sub> S)	10	54
Lead (Pb)	0.6	3

Source: Mojave Desert Air Quality Management District, CEQA and Federal Conformity Guidelines, page 9, February 2020.

## IMPACT ANALYSIS

### Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan?

**Less Than Significant Impact.** The Project Site is located within the Mojave Desert Air Basin and is regulated by the MDAQMD. The MDAQMD PM<sub>10</sub> Attainment Plan and Ozone Attainment Plan established under the Western Mojave Desert Air Quality Management Plans (AQMPs) set forth a comprehensive set of programs that will lead the Basin into compliance with Federal and State air quality standards. The control measures and related emission reduction estimates within the MDAQMD PM<sub>10</sub> Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with these attainment plans is determined by:

- Demonstrating Project consistency with local land use plans and/or population projections (**Criterion 1**);
- Demonstrating Project compliance with applicable MDAQMD Rules and Regulations (**Criterion 2**); and

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<sup>8</sup> A project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold.

- Demonstrating Project implementation will not increase the frequency or severity of a violation in the Federal or State ambient air quality standards (**Criterion 3**).

**Criterion 1:** Consistency with local land use plans and/or population projections.

Growth projections included in the AQMPs form the basis for the projections of air pollutant emissions and are based on general plan land use designations and the Southern California Association of Governments (SCAG) 2016–2040 *Regional Transportation Plan/Sustainable Communities Strategy* (2016-2040 RTP/SCS) demographics forecasts. While SCAG has recently adopted the 2020-2045 *Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), the MDAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. As such, this consistency analysis is based off the 2016-2040 RTP/SCS. The population, housing, and employment forecasts within the 2016-2040 RTP/SCS are based on local general plans as well as input from local governments, such as the County. The MDAQMD has incorporated these same demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment) into the AQMPs.

San Bernardino Land Use Service Zoning Maps is the local law that regulates various aspects of how land can be used.<sup>9</sup> The Project Site is designated as RLM (Resource/Land Management) in the current Countywide Plan. The implementing land use/zoning districts within the RLM designation include Rural Living (RL).<sup>10</sup> When the 2016-2040 RTP/SCS was adopted, the property likely was designated Resource Conservation (RC). Solar generation facilities are allowed under the current land use designation and was allowed under the RC land use designation. However, the zoning is expected to be changed to RC with Board approval of an upcoming County-initiated Zoning ordinance and map update. In the event the Project is considered prior to the adoption of the County-initiated zoning ordinance and map update, the Project is requesting a site-specific zone change for the Project Site from RL to RC. The RC land use zoning district provides sites for open space and recreational activities, single-family homes on very large parcels and similar and compatible uses. Utility scale Renewable Energy Facilities are allowed in this zone. Solar generation facilities are permitted under the RC zone upon approval of a Conditional Use Permit (CUP).

The San Bernardino County General Plan Housing Element<sup>11</sup> regulates the RL zoning for rural residential uses, incidental agricultural uses, and similar and compatible use. The General Plan also indicates that if a project cannot be processed administratively or thorough a minor use permit, a CUP will be required. The Project Site is bordered on the south by the existing SEGS VII and IX Solar Thermal Power Plants, which the County approved for repowering to PV solar and battery storage in 2019 as part of the Lockhart Solar I Facility (CUP Project #201900125, approved in 2019). Similarly, with County-approval of the CUP, solar generation facilities would be allowed on the Project Site.

The County's unincorporated area population estimate as of January 1, 2021 was 1,871,997 persons, and the County's total area population estimate as of January 1, 2021 was 2,175,909 persons.<sup>12</sup> SCAG growth forecasts in the 2016-2040 RTP/SCS estimate the County's population to reach 2,731,000 persons by 2040,

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<sup>9</sup> San Bernardino County Lan Use Service Zoning Maps, Interactive Zoning Layers. <http://cms.sbcounty.gov/lus/Planning/ZoningOverlayMaps/ZoningMaps.aspx>, Accessed on May 3, 2021.

<sup>10</sup> Ibid.

<sup>11</sup> County of San Bernardino 2013 – 2021 Housing Element, January 28, 2014 [http://www.sbcounty.gov/uploads/lus/GeneralPlan/Adopted\\_5th\\_Cycle\\_Housing\\_Element\\_County\\_of\\_San\\_Bernardino2013-2021.pdf](http://www.sbcounty.gov/uploads/lus/GeneralPlan/Adopted_5th_Cycle_Housing_Element_County_of_San_Bernardino2013-2021.pdf), January, 2014.

<sup>12</sup> State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark*, May 2020.

representing a total increase of 620,000 persons between 2015 and 2040.<sup>13</sup> Additionally, SCAG growth forecasts in the 2016-2040 RTP/SCS estimate the County's employment to reach 1,028,000 jobs by 2040, representing a total increase of 299,000 jobs between 2012 and 2040.<sup>14</sup>

The Project would include neither a residential component that would increase local population growth, nor a commercial component that would substantially increase employment. Construction of the Project would not result in residential, commercial, or growth-inducing development that would result in a substantial increase in growth-related emissions. In addition, because of the presence of locally available construction workers, and because of the relatively short duration of construction (approximately 14 months), workers are not expected to relocate to the area with their families.

The County approved the Lockhart Solar I Facility (CUP Project #201900125) in 2019, which contemplated that existing SEGS operations staff to continue operation of the Lockhart Solar I Facility. The Lockhart Solar I Facility operations staff would also support operations for the Project; therefore, no additional operations staff would be required. As such, there would be no employee or population growth as a result of the Project, and the Project would not cause the SCAG growth forecast to be exceeded. As the MDAQMD has incorporated these forecasts on population, housing, and employment into the AQMPs, the Project would be consistent with the AQMPs. Impacts would be less than significant.

**Criterion 2:** Compliance with applicable MDAQMD Rules and Regulations.

The Project would be required to comply with all applicable MDAQMD Rules and Regulations. This would include MDAQMD Rules 401, 402, and 403. MDAQMD Rule 403 requires periodic watering for short-term stabilization of disturbed surface area to minimize visible fugitive dust ( $PM_{10}$ ) emissions, covering loaded haul vehicles, and reduction of non-essential earth moving activities during higher wind conditions. The Project would not comply with applicable MDAQMD rules, enforced through Project Conditions of Approval, and not conflict with applicable MDAQMD Rules and Regulations; therefore, impacts would be less than significant.

**Criterion 3:** Demonstrating Project implementation will not increase the frequency or severity of a violation in the Federal or State ambient air quality standards.

Analysis of the Project's potential to result in more frequent or severe violations of the CAAQS and NAAQS can be satisfied by comparing Project emissions to MDAQMD thresholds. As discussed under Impact AQ-2 below, unmitigated short-term construction emissions would potentially exceed MDAQMD significance threshold established for  $NO_x$ . With compliance to MDAQMD Rule 403 and implementation of Mitigation Measure MM AQ-1,  $NO_x$  emissions during construction would fall below the significance thresholds set by the MDAQMD. Unmitigated long-term operational emissions of all criteria pollutants studied ( $NO_x$ , ROG, CO,  $NO_x$ ,  $PM_{10}$ , and  $PM_{2.5}$ ) would be less than the applicable MDAQMD significance thresholds. Therefore, the Project would not delay the Basin's attainment goals for ozone  $O_3$ <sup>15</sup>,  $PM_{10}$ , and  $PM_{2.5}$ , and would not result in an increase in the frequency or severity of existing air quality violations. As such, the Project would not cause or contribute to localized air quality violations or delay the attainment of air quality standard or interim emissions reductions specified in the AQMPs; thus, impacts would be reduced to less than significant.

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<sup>13</sup> Southern California Association of Governments, *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy Demographics & Growth Forecast Appendix*, April 2016.

<sup>14</sup> Ibid.

<sup>15</sup> Ground level  $O_3$  is created during a photochemical reaction from  $NO_x$  and ROG emissions.

## Conclusion

As discussed above, the Project would comply with MDAQMD Rules and Regulations and would not induce population growth. Further, the Project, after implementation of the mitigation measure, would not cause or contribute to localized air quality violations or delay the attainment of air quality standard or interim emissions reductions specified in the AQMPs. Thus, the Project would not result in or cause NAAQS or CAAQS violations. As such, with implementation of Mitigation Measure MM AQ-1, the Project would be consistent with the MDAQMD's AQMPs, and impacts would be less than significant.

**Mitigation Measure:** Refer to Mitigation Measure MM AQ-1 below.

**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?**

### **Less Than Significant Impact with Mitigation.**

#### **Short-Term Construction**

As stated, Project construction is anticipated to be completed over a period of approximately 14 months. The Project involves construction activities associated with demolition, grading, and facilities construction. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model version 2016.3.2 (CalEEMod) program defaults.<sup>16</sup> Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared using CalEEMod. Refer to [Appendix A, Air Quality Emissions Data](#), for the CalEEMod outputs and results. [Table 4, Estimated Unmitigated Short-Term Construction Emissions](#), presents the anticipated unmitigated daily short-term construction emissions.

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<sup>16</sup> CalEEMod 2016.3.2 was the latest model version when this memorandum was initially prepared (August 18, 2021). CalEEMod 2020.4.0 updated: on-road emission factors to EMFAC2017, which has been manually updated in the modeling for the Project; utility intensity factors, which is not applicable to the Project as the Project would not generate electricity emissions; and 2019 Title 24 standards, which is not applicable to the Project as the Project would not construct any buildings. As such, CalEEMod 2016.3.2 is deemed appropriate for the Project.

**Table 4**  
**Estimated Unmitigated Short-Term Construction Emissions**

Construction Related Emissions	Pollutant (pounds/day) <sup>1</sup>					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b><i>Unmitigated Construction</i></b>						
Year 1 (2022)	18.16	175.53	178.86	0.36	12.98	9.25
Year 2 (2023)	11.91	119.62	130.55	0.22	6.26	5.50
<b>Maximum Daily Emissions</b>	<b>18.16</b>	<b>175.53</b>	<b>178.86</b>	<b>0.36</b>	<b>12.98</b>	<b>9.25</b>
MDAQMD Thresholds	137	137	548	137	82	65
<b>Is Threshold Exceeded?</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Note:						
1. Emissions were estimated using CalEEMod, version 2016.3.2. Winter emissions represent worst-case scenario and are therefore presented as a conservative analysis.						
2. The reduction/credits for construction emissions are based on adjustments to CalEEMod based on the MDAQMD Rules that are required during project construction. The adjustments applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; stabilization of graded areas as quickly as possible; application of MDAQMD-approved non-toxic dust control to the grading areas or water exposed surfaces three times daily; cover stockpiles with tarps; and limit speeds on unpaved roads to 15 miles per hour.						
Source: Refer to <a href="#">Appendix A, Air Quality Emissions Data</a> , for detailed model input/output data.						

### **Fugitive Dust Emissions**

In general, construction activities can be a source of fugitive dust emissions that temporarily impact local air quality and/or be a nuisance to those living and working in the vicinity of a construction project. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways (including demolition as well as construction activities). Fugitive dust emissions can vary substantially from day to day, depending on the level of activity, specific construction activity operations, and weather conditions.

Dust (larger than 10 microns) generated by construction activities usually becomes more of a local nuisance than a serious health problem. PM<sub>10</sub> generated as a part of fugitive dust emissions pose a much greater health risk than dust. PM<sub>10</sub> can pose a serious health hazard when alone or when in combination with other pollutants. PM<sub>2.5</sub> is typically produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. PM<sub>2.5</sub> is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources, but can still be present in fugitive dust emissions. Fugitive dust from demolition activities, site preparation, and facilities construction activities is expected to be short-term and would cease upon completion of Project construction. The Project would implement all applicable MDAQMD dust control techniques, limitations on construction hours, and adhere to MDAQMD Rule 403 (which require watering of inactive and perimeter areas, track out requirements, etc.), to reduce PM<sub>10</sub> and PM<sub>2.5</sub> concentrations. Additionally, the Project would comply with Development Code Section 84.29.035, which would minimize fugitive dust generation through control measures. As noted in [Table 4](#), total PM<sub>10</sub> and PM<sub>2.5</sub> emissions would not exceed MDAQMD thresholds during Project construction. Fugitive dust emission impacts from Project construction would be less than significant.

### **Construction Equipment and Worker Vehicle Exhaust**

Exhaust emissions (e.g., NO<sub>x</sub> and CO) from Project construction activities would include emissions associated with the transport of machinery and supplies/materials to and from the Project Site, emissions produced on-site as the equipment is used, and emissions from construction workers personal vehicles traveling to/from the site. As presented in [Table 4](#), unmitigated construction exhaust emission would exceed the MDAQMD emissions threshold for NO<sub>x</sub>. Therefore, implementation of Mitigation Measure MM AQ-1 would be required to reduce emissions. Mitigation Measure MM AQ-1 requires all off-road diesel-fueled construction vehicles and equipment greater than 50 horsepower meet Tier 4 Final emissions standards during Project construction activities. Tier 4 standards regulate NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from nonroad (or off-road) diesel engines and require emissions of NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> to be reduced from Tier 1-3 standards. The County and Applicant are committed to using the cleanest off-road equipment available (see Mitigation Measure MM AQ-1 below for details); however, market availability may make exclusive use of equipment certified to meet Tier 4 Final standards infeasible. Mitigation Measure MM AQ-1 includes a waiver provision to account for the potential unavailability of Tier 4 equipment. Although the Project could achieve less than significant NO<sub>x</sub> emissions (the only pollutant in excess of thresholds), meaning total daily emissions below 137 pounds per day, using all Tier 3 equipment, Mitigation Measure MM AQ-1 includes limits on the circumstances and extent that the Applicant can request and be granted a waiver from the stringent Tier 4 Final equipment requirement.

As presented in [Table 5](#), *Estimated Mitigated Short-Term Construction Emissions*, construction equipment and worker vehicle exhaust emissions, with implementation of Mitigation Measure MM AQ-1, would not exceed the established MDAQMD thresholds for all criteria pollutants. Impacts would be reduced to less than significant levels.

**Table 5**  
**Estimated Mitigated Short-Term Construction Emissions**

Construction Related Emissions	Pollutant (pounds/day) <sup>1</sup>					
	ROG	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Mitigated Construction<sup>2</sup></b>						
Year 1 (2022)	4.66	27.89	212.24	0.36	5.50	2.41
Year 2 (2023)	2.84	12.34	146.19	0.22	0.75	0.46
<b>Maximum Daily Emissions</b>	<b>4.66</b>	<b>27.89</b>	<b>212.24</b>	<b>0.36</b>	<b>5.50</b>	<b>2.41</b>
MDAQMD Thresholds	137	137	548	137	82	65
<b>Is Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Notes:						
1. Emissions were estimated using CalEEMod, version 2016.3.2. Winter emissions represent worst-case scenario and are therefore presented as a conservative analysis.						
2. Mitigation Measure MM AQ-1 requires that all off-road diesel-fueled construction vehicles and equipment greater than 50 horsepower meet Tier 4 Final emissions standards during demolition, grading, and facilities construction. The outputs shown here assumes all of the equipment would be Tier 4 Final. As previously noted, market availability may make exclusive use of equipment certified to meet Tier 4 Final standards infeasible. Mitigation Measure MM AQ-1 includes a waiver provision to account for the potential unavailability of Tier 4 equipment. Although the Project could achieve less than significant NO <sub>x</sub> emissions (the only pollutant in excess of thresholds), meaning total daily emissions below 137 pounds per day, using all Tier 3 equipment, Mitigation Measure MM AQ-1 includes limits on the circumstances and extent that the Applicant can request and be granted a waiver from the stringent Tier 4 Final equipment requirement.						
Source: Refer to <a href="#">Appendix A, Air Quality Emissions Data</a> , for detailed model input/output data.						

### ***ROG Emissions***

In addition to exhaust and particulate emissions, construction equipment and worker vehicles also create ROG emissions, which are O<sub>3</sub> precursors. In accordance with the methodology prescribed by the MDAQMD, the ROG emissions have been quantified with the CalEEMod model. ROG emissions associated with the Project would be less than significant; refer to [Table 4](#).

### ***Total Daily Construction Emissions***

In accordance with the MDAQMD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. As indicated in [Table 5](#), criteria pollutant emissions during Project construction would not exceed the MDAQMD significance thresholds with the implementation of Mitigation Measure MM AQ-1. Thus, total Project construction-related air emissions would be less than significant with mitigation incorporated.

### ***Naturally Occurring Asbestos***

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by the CARB in 1986. Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities.

According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report* (August 2000), serpentinite and ultramafic rocks do not occur within the vicinity of the Project Site. Thus, there would be no impact in this regard.

### ***Long-Term (Operational) Emissions***

The Project would not use natural gas and would not involve area architectural coatings or landscaping activities during operation. The Project would consume negligible amounts of electricity for auxiliary equipment, such as BESS HVAC units, communications equipment, and lighting. Therefore, area sources and electricity emissions were not modeled for the Project, and the only air pollutants emission source during operation would be from mobile sources.

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, potential air quality impact may be of either regional or local concern. For example, ROG, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are all pollutants of regional concern (NO<sub>x</sub> and ROG react with sunlight to form O<sub>3</sub> [photochemical smog], and wind currents readily transport SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>); however, CO tends to be a localized pollutant, dispersing rapidly at the source. During operations, the Project would generate minimal periodic operational vehicle trips internal to the Project Site for required maintenance activities. In addition, it was assumed that the Project would generate 40 trips per year associated with solar panel washing activities; refer to [Appendix A](#) for assumptions and calculations. Fugitive dust emissions generated from vehicle operations would be minimized through

compliance with Development Code Section 84.29.035, which requires sufficient watering of unpaved roads and limits on-site vehicle speed to 15 mph. Table 6, Long-Term (Operational) Emissions, presents the anticipated mobile source emissions. As shown in Table 6, emissions generated by vehicle traffic associated with the Project would not exceed established MDAQMD thresholds; therefore, potential impacts from mobile source emissions would be less than significant. In addition, as electric vehicles (EV) become more prevalent, the Project could be using EVs for on-site and off-site transportation in the future, thus eliminating the emissions of some of these pollutants.

**Table 6**  
**Estimated Long-Term (Operational) Emissions**

Emissions Source	Pollutant (lbs/day) <sup>1</sup>					
	ROG	NOx	CO	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Total Estimated Summer Emissions (Mobile Sources)</b>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<b>Total Estimated Winter Emissions (Mobile Sources)</b>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MDAQMD Threshold	137	137	548	137	82	65
<b>Is Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note:  
1. Emissions were estimated using CalEEMod, version 2016.3.2 and the California Air Resources Board, Emission FACtor (EMFAC 2017) web database.  
Source: Refer to Appendix A, for detailed model input/output data.

### **Total Operational Emissions**

As shown in Table 6, estimated total Project operational emissions during both summer and winter would not exceed established MDAQMD thresholds; therefore, potential operational emissions impacts from Project operations would be less than significant.

### **Air Quality Health Impacts**

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, ozone precursors VOCs and NO<sub>x</sub> affect air quality on a regional scale. Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating criteria pollutants generated by an individual project to specific health effects or additional days of nonattainment would produce meaningless results. The NAAQS and CAAQS are set to be protective of human health, however, which means that the Project's less than significant increases in regional air pollution from criteria air pollutants would have less than significant impacts on human health.

The South Coast Air Quality Management District (SCAQMD),<sup>17</sup> has stated that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants from individual projects for various reasons including modeling limitations as well as the fact that certain emissions are the result of chemical interactions and it is impossible to determine exactly where in the atmosphere precursor air pollutants will interact.

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<sup>17</sup> South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

The SCAQMD acknowledges that health effects quantification from ozone, as an example, is correlated with the increases in ambient level of ozone in the air (concentration) that an individual person breathes. SCAQMD has written that it would take a large amount of additional emissions to cause a modeled increase in ambient ozone levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's 2012 *Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO<sub>x</sub> and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce ozone levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify ozone-related health impacts caused by NO<sub>x</sub> or VOC emissions from relatively small projects (defined as projects with less than a regional scope) due to photochemistry and regional model limitations.

Because the Project, with mitigation, would not exceed MDAQMD's health-protective thresholds for construction and operational air emissions, the Project would have a less than significant impact for air quality health impacts as well and no modeling of health impacts was performed.

### **Decommissioning**

At the end of the Project's operational term, the Applicant may determine that the Project Site should be decommissioned and deconstructed, or it may seek an extension of its CUP(s). The Applicant would work with the County to ensure decommissioning of the Project after its productive lifetime complies with all applicable local, state, and federal requirements BMPs. The Project would include best management practices (BMPs) to ensure the collection and recycling of modules and to avoid the potential for modules to be disposed of as municipal waste.

Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure would be removed, including the fences and the concrete pads that may support the inverters, transformers, and related equipment. The exterior fencing and gates would be removed, and materials would be recycled to the extent feasible. Project roads would be restored to their pre-construction condition to the extent feasible, unless the landowner elects to retain the improved roads for access throughout the property. The area would be thoroughly cleaned, and all debris removed. A collection and recycling program would be utilized to promote recycling of Project components and minimize disposal in landfills.

While decommissioning would likely take the same or fewer months than construction and involve less construction equipment and workers on a daily basis, for the purposes of presenting a conservative analysis, it was assumed that Project decommissioning would generate the same emissions as Project construction. As shown in [Table 4](#), unmitigated emissions of NO<sub>x</sub> associated with decommissioning of the Project would exceed the MDAQMD threshold. Compliance with MDAQMD rules and implementation of Mitigation Measure MM AQ-1 would reduce the criteria pollutant emissions to below the thresholds; therefore, impacts would be less than significant with mitigation incorporated.

### **Cumulative Short-Term Construction Impacts**

With respect to the Project's construction-period air quality emissions and cumulative Basin-wide conditions, the MDAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMPs pursuant to FCAA mandates. As such, the Project would comply with MDAQMD Rule 403 greatest

requirements and implement all applicable MDAQMD rules to reduce construction air emissions to the extent feasible. Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the Project Site. Examples of best available control measures for dust include the application of water and soil stabilizers, covering of loads, avoiding track out onto public roads, and the minimization of non-essential grading during high wind conditions. In addition, the Project would comply with adopted AQMPs emissions control measures. Implementation of MDAQMD Rule 403 and the AQMPs emissions control measures would help the Project further reduce emissions from construction activities. Pursuant to MDAQMD rules and mandates, these same requirements (i.e., Rule 403 compliance and compliance with adopted AQMPs emissions control measures) would also be imposed on construction projects throughout the Basin, which would include cumulative projects.

As discussed in Table 5 above, the Project's estimated short-term construction emissions with implementation of Mitigation Measure MM AQ-1 would be below the MDAQMD thresholds and would result in less than significant air quality impacts. Thus, the Project's construction emissions would not contribute to a cumulatively considerable air quality impact for nonattainment criteria pollutants in the Basin. A less than significant impact would occur in this regard.

### **Cumulative Long-Term Operational Impacts**

As discussed in Table 6, the Project would not result in long-term operational air quality impacts. Additionally, adherence to MDAQMD rules and regulations alleviate cumulatively considerable contributions to potential significant impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed to address existing significant cumulative impacts. As a result, the Project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, no cumulative operational impacts associated with implementation of the Project would result.

#### **Mitigation Measure:**

- MM AQ-1** All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 Final emission standards during demolition, grading, and facilities construction. In addition, construction equipment shall be outfitted with best available control technologies (BACT) devices certified by the California Air Resources Board (CARB). Emissions control devices used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. An exemption from these requirements may be granted by the County in the event that the Applicant documents that equipment with the required tier is not reasonably available and the Applicant proposes to replace that equipment with similar sized equipment which meets the next most stringent standard available (i.e., the Applicant must seek replacement equipment that meets Tier 4 Interim standards, and only when none are found to be reasonably available, seek equipment meeting Tier 3 standards, etc.). Under no circumstances will the County allow more than half of the heavy-duty equipment usage for Project construction or decommissioning (measured as total horse-power hours of usage) to be less stringent than Tier 4 Final.

A copy of each unit's certified tier specification, BACT documentation, and CARB operating permit shall be provided to the County of San Bernardino at the time of mobilization of each applicable unit of equipment.

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

**Less Than Significant Impact.**

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, parks, daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor to the Project Site is a potential residential use located approximately 4,320 feet to the north. Michael Baker did not verify that this is an inhabited residence due to its remote location. However, this location is the closest potential sensitive receptor and therefore the most conservative. The next sensitive receptor is located further than 8,000 feet (i.e. 1.6 miles) from the Project Site to the south.

**Construction**

As stated, Project construction is anticipated to be completed over a period of approximately 14 months. Project construction activities are anticipated to involve the operation of diesel-powered equipment, which would emit Diesel Particulate Matter (DPM). In 1998, the CARB identified diesel exhaust as a Toxic Air Contaminant (TAC). Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. Project construction would comply with the California Code of Regulations (CCR), Title 13, Section 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. In addition, the Project would implement Mitigation Measure MM AQ-1 that would reduce emissions from certain pollutants related to construction exhaust. Implementation of these regulations and measures would reduce the amount of DPM emissions from Project construction. Due to the distance between the Project Site and the closest sensitive receptors, potential health impacts on sensitive receptors associated with exposure to DPM from Project construction would be less than significant.

Furthermore, construction activities are expected to occur well below the 30-year exposure period used in health risk assessments and would adhere to MDAQMD Rule 403 and San Bernardino County Code 84.29.035, and implement Mitigation Measure AQ-1, which would further reduce emissions from certain pollutants related to construction exhaust. Implementation of these regulations and measures would reduce the amount of DPM emissions from Project construction. . Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction of the Project would not result in a significant increase in elevated cancer risk to nearby sensitive receptors and impacts would be less than significant.

## **Operations**

As stated in the Project Description, typical O&M activities during Project operations include, but are not limited to, facility monitoring; administration and reporting; remote operations of inverters, BESS system and other equipment; site security and management; communication protocol; repair and maintenance of solar facilities, electrical transmission lines, and other Project facilities; and periodic panel washing. None of these activities would result in the generation of excessive TAC emissions, or associated health risks. Therefore, operation of the Project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors and potential impacts would be less than significant.

## **Carbon Monoxide Hotspots**

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.). CO is primarily a product of incomplete combustion of gaseous or liquid fuels, meaning tailpipe emissions are worse in stop-and-go congested traffic as compared to free flowing conditions. The Project does not include any stationary sources of combustion, and results in a net increase of only 40 vehicle trips per year. The Project is not located near existing CO hotspots and the trips associated with the project are insufficient to create a CO hotspot.

With such low existing ambient levels of CO, low levels of CO emissions from the Project and lack of congested roadways around the Project, the Project would not cause CO hotspots in excess of applicable NAAQS or CAAQS standards at any intersections within the County, and impacts would be less than significant.

## **Valley Fever**

Coccidioidomycosis (CM), often referred to as San Joaquin Valley Fever or Valley Fever, commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top 2-12 inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus “blooms” and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-moving activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever.

The fungus is known to live in the soil in the southwestern United States and parts of Mexico and Central and South America. People and animals can get sick when they breathe in dust that contains the Valley fever fungus. This fungus infects the lungs and can cause respiratory symptoms including cough, fever, chest pain, and tiredness. In California, the number of reported Valley fever cases has greatly increased in recent years. In fact, Valley fever cases tripled from 2014 to 2018. The number of Valley Fever cases in the United States has been steadily increasing over the past few years. There were over 11,000 reported cases in 2015, and the CDC estimates that an additional 150,000 cases go undiagnosed each year. About

28 percent of all cases occur in California. In 2015, there were 36 cases of Valley Fever in San Bernardino County, an incidence rate of 1.7 cases per 100,000 people.<sup>18</sup>

When a susceptible human who is not immune inhales these airborne spores, they enter the lungs and may cause respiratory infections, such as pneumonia. Roughly 60 percent of individuals infected with CI have no symptoms. For the remaining 40 percent, a wide spectrum of clinical symptoms can occur. The most common presentation of CM is a mild, influenza-like illness while the more severe includes pneumonia-like symptoms requiring rest and medication (fungus-killing medicines). The symptoms of the disease typically begin about two weeks after inhaling the spores. These symptoms typically include flu-like symptoms such as fever, aching, chills, sweats, fatigue, cough, and headache. In uncomplicated CM, symptoms usually subside in a few weeks or months.

In approximately one percent of infected persons, disseminated disease develops, in which CM is spread from the lungs to other areas of the body such as the skin, bones, brain, or other organs. This spreading of CM infection beyond the lungs can be fatal. Meningitis, the most lethal complication of disseminated CM, may cause a stiff neck, severe and persistent headache, nausea, vomiting, and various other central nervous system symptoms such as disorientation, loss of balance or equilibrium, inability to think clearly and loss of consciousness. People with diabetes and women who contract CM while they are pregnant are particularly prone to dissemination of the disease.

Currently, no vaccine is available to prevent this infection. Further, there is no effective way to detect and monitor CI growth patterns in the soil. Thus, controlling the growth of the fungus in the environment to reduce the risk to individuals is currently not a viable option. A skin test can be conducted to identify individuals who have been infected in the past and would have developed immunity to the fungus, although recurrence as a result of immuno-suppression is possible. Even if the fungus is present in soil, earthmoving activities may not result in increased incidence of valley fever. Propagation of Coccidioides is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells.

To reduce exposure to CI, development projects implement measures to prevent wind dispersion of arthrospores, such as applying dust control palliatives, water, or vegetation to fungus-bearing soils. To facilitate early identification of infection and subsequent treatment, the San Bernardino County Department of Public Health Division of Environmental Health Service recommends using dust suppression methods include wetting the soil during work or covering bare soil. The California Department of Public Health recommends stopping outside activity during conditions where the dust cannot be controlled well. Appropriate use of respiratory protect may be also needed in some circumstances.

During ground disturbing activities associated Project construction, the potential exists that such activities could disturb dust particles and, if present, CI spores, which could then be released into the air and potentially be inhaled by on-site workers and nearby sensitive receptors; exposure to these spores can cause Valley Fever. Due to the distance of the nearest sensitive receptor, the Project is not anticipated to exacerbate the risk of existing sensitive receptors to contract Valley Fever. Although CEQA does not require the analysis of a Project's impacts on its construction workers, such analysis is included for informational purposes. The best approaches to reducing construction workers' risk of contracting Valley Fever are awareness and dust reduction because dust can be an indicator that increased efforts are

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<sup>18</sup> San Bernardino County Coccidioidomycosis Fact Sheet, <http://www.sbccounty.gov/uploads/dph/dehs/Depts/EnvironmentalHealth/EHSDocuments/Coccidioidomycosis.pdf>, accessed May 6, 2021.

needed to control other airborne particulates (including CI spores, if any). Therefore, the Project is required to control dust through compliance with applicable MDAQMD rules as well as provide training and awareness of Valley Fever via Mitigation Measure MM AQ-2. Compliance with MDAQMD rules reduce dust. For example, Rule 401 prohibits a person from discharging into the atmosphere any air emission contaminant for a period or periods aggregating more than three minutes in any single hour emissions that is: (a) as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines; or (b) of such opacity as to obscure an observer's view to a degree equal to or greater than 20 percent opacity. Rule 402 prohibits the discharge of air contaminants in quantities that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public. Rule 402 and Mitigation Measure MM AQ-2 would further ensure worker safety through education and ensuring implementation of required OSHA safety measures.

With the implementation of Mitigation Measure MM AQ-2, the potential for the release of CI spores, if present, and the associated potential for workers or nearby residents to contract Valley Fever from Project construction activities would be minimized. Accordingly, the Project would not add significantly to the existing exposure level of construction workers or nearby residents to the CI fugus. Therefore, potential impacts would be less than significant with mitigation incorporated.

**Mitigation Measure:**

- MM AQ-2** Prior to ground disturbance activities, the Applicant must prepare a Valley Fever Management Plan (VFMP), including a Valley Fever training program, to be implemented during construction to address potential risks from *Coccidioides immitis* by minimizing the potential for unsafe dust exposure during construction. The VFMP will identify best management practices including:
- Development of an educational Valley Fever Training Handout for distribution to onsite workers, which should include general information about the causes, symptoms, and treatment instructions regarding Valley Fever, including contact information of local health departments and clinics knowledgeable about Valley Fever.
  - Conducting Valley Fever training sessions to educate all Project construction workers regarding appropriate dust management and safety procedures, symptoms of Valley Fever, testing and treatment options. This training must be completed by all workers and visitors (expected to be on-site for more than 2 days) prior to participating in or working in proximity to any ground disturbing activities. Signed documentation of successful completion of the training is to be kept on-site for the duration of construction.
  - Developing a job-specific Job Hazard Analyses (JHA), in accordance with Cal/OSHA regulations, to analyze the risk of worker exposure to dust, and maintain and manage safety supplies identified by the JHA.
  - Provide and/or require, if determined to be needed based on the applicable JHA, National Institute for Occupational Safety and Health-approved half-face respirators equipped with a minimum N-95 protection factor for use during worker collocation with surface disturbance activities, following completion of medical evaluations, fit-testing, and proper training on use of respirators.

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

***Less Than Significant Impact.*** According to the CARB's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project includes construction of a solar generation and storage facility and does not include any uses identified by the CARB as being associated with odors.

Project construction activities may generate detectable odors from heavy-duty equipment exhaust. However, construction-related odors would be short-term in nature and cease upon completion of Project construction. Further, the nearest potential residence is too far from the Project Site to detect construction odors. In addition, the Project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors, if any, from heavy-duty equipment exhaust. Therefore, potential impacts would be short-term and are considered less than significant.

As previously noted, land uses associated with odor complaints do not typically include solar energy generation and storage facilities. During operations, the Project would generate minimal periodic operational vehicle trips internal to the Project Site for required maintenance activities. In addition, it was assumed that the Project would generate 40 trips per year associated with solar panel washing activities. Project operation vehicle trips would be minimal and not of sufficient number to create concentrations of odorous fumes to form and cause a nuisance. As such, potential impacts would be easily dispersed in the atmosphere and are less than significant.

**Mitigation Measures:** No mitigation is required.

## REFERENCES

### Documents

1. California Air Resources Board, *ADAM Air Quality Data Statistics*, <http://www.arb.ca.gov/adam/>, accessed April 19, 2021.
2. California Air Resources Board, *AQMIS2: Air Quality Data*, <https://www.arb.ca.gov/aqmis2/aqdselect.php>, accessed April 19, 2021.
3. California Air Resources Board, Quality Assurance Air Monitoring Site Information, Site Information for Barstow, [https://ww3.arb.ca.gov/qaweb/iframe\\_site.php?s\\_arb\\_code=36155](https://ww3.arb.ca.gov/qaweb/iframe_site.php?s_arb_code=36155), accessed April 28, 2021.
4. California Air Resources Board, Quality Assurance Air Monitoring Site Information, Site Information for Victorville – Park Avenue, [https://ww3.arb.ca.gov/qaweb/iframe\\_site.php?s\\_arb\\_code=36306](https://ww3.arb.ca.gov/qaweb/iframe_site.php?s_arb_code=36306), accessed April 28, 2021.
5. California Air Resources Board, *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts*, <https://www.mdaqmd.ca.gov/home/showpublisheddocument/5982/636710697943470000>, accessed September 19, 2021.
6. County of San Bernardino 2013 – 2021 Housing Element, January 28, 2014. [http://www.sbcounty.gov/uploads/lus/GeneralPlan/Adopted\\_5th\\_Cycle\\_Housing\\_Element\\_County\\_of\\_San\\_Bernardino2013-2021.pdf](http://www.sbcounty.gov/uploads/lus/GeneralPlan/Adopted_5th_Cycle_Housing_Element_County_of_San_Bernardino2013-2021.pdf).
7. California Natural Resources Agency, Final Adopted Text for Revisions to the CEQA Guidelines, effective December 28, 2018, [https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018\\_CEQA\\_FINAL\\_TEXT\\_122818.pdf](https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf).
8. Mojave Desert Air Quality Management District, Ambient Air Quality Monitoring, <http://mdaqmd.ca.gov/air-quality/monitoring-info>, accessed April 28, 2021.
9. Mojave Desert Air Quality Management District, California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, February 2020.
10. San Bernardino County Code – Title 8 – Development Code, Agricultural and Resource Management Land Use Zoning District. [http://www.sbcounty.gov/Uploads/lus/Handouts/Development\\_Standards\\_Agricultural\\_and\\_Resource\\_Management.pdf](http://www.sbcounty.gov/Uploads/lus/Handouts/Development_Standards_Agricultural_and_Resource_Management.pdf). Accessed on May 5, 2021.
11. San Bernardino County Coccidioidomycosis Fact Sheet, <http://www.sbcounty.gov/uploads/dph/dehs/Depts/EnvironmentalHealth/EHSDocuments/Coccidioidomycosis.pdf>, accessed on May 6, 2021.

12. San Bernardino County Code – Title 8 – Development Code, Residential Land Use Zoning Districts. [http://www.sbcounty.gov/Uploads/lus/Handouts/Development\\_Standards\\_Residential.pdf](http://www.sbcounty.gov/Uploads/lus/Handouts/Development_Standards_Residential.pdf). Accessed on May 5, 2021.
13. San Bernardino Land Use Service Zoning Maps, Interactive Zoning Layers, <http://cms.sbcounty.gov/lus/Planning/ZoningOverlayMaps/ZoningMaps.aspx>, Accessed on May 3, 2021.
14. San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.*
15. South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.*
16. Southern California Association of Governments, *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy Demographics & Growth Forecast*, April 2016.
17. State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark*, May 2020.
18. United States Environmental Protection Agency, *Carbon Monoxide Emissions*, [https://cfpub.epa.gov/roe/indicator\\_pdf.cfm?i=10](https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10), accessed by June 2, 2021.

### **Websites / Programs**

1. Google Earth, 2021.
2. South Coast Air Quality Management District, California Emissions Estimator Model (CalEEMod), version 2016.3.2.
3. California Air Resources Board, EMission FACtor Model 2017 (EMFAC 2017).

## **Appendix A**

### Air Quality Emissions Data

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**Lockhart Construction\_only unmitigated**  
Mojave Desert AQMD Air District, Summer**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	61.44	1000sqft	1.41	61,440.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	534	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

**1.3 User Entered Comments & Non-Default Data**

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

Project Characteristics - per 2019 SCE Sustainability Report

Land Use - Per AVEP ESS data, the 375 MW-ac project took up 153600 sqf of floor surface

Construction Phase - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Trips and VMT - per AQ questionnaire

Demolition - per AQ questionnaire

Grading - per AQ Questionnaire

Area Coating - Rule 1113

Energy Use -

Water And Wastewater - During 14-month construction, it will use 240 acre-feet.

$240/14*12=206=67032206$  gallons/year

Construction Off-road Equipment Mitigation - Rule 403

Energy Mitigation - Title 24, 2019 is 30% more efficient than 2016.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	200.00	304.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	4.00	65.00
tblGrading	MaterialExported	0.00	20,000.00

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	17.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblWater	IndoorWaterUseRate	14,208,000.00	0.00
tblWater	OutdoorWaterUseRate	0.00	67,032,206.00

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

## 2.0 Emissions Summary

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### 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					
2022	18.1594	175.5820	179.3742	0.3598	9.4983	8.3180	17.4621	4.0772	7.6793	11.4054	0.0000	34,950.48 45	34,950.48 45	10.3185	0.0000	35,208.44 73	
2023	11.9138	119.6300	130.7542	0.2237	0.3934	5.8685	6.2620	0.1057	5.3991	5.5048	0.0000	21,687.84 56	21,687.84 56	6.8514	0.0000	21,859.12 98	
Maximum	18.1594	175.5820	179.3742	0.3598	9.4983	8.3180	17.4621	4.0772	7.6793	11.4054	0.0000	34,950.48 45	34,950.48 45	10.3185	0.0000	35,208.44 73	

#### 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					
2022	18.1594	175.5820	179.3742	0.3598	5.0126	8.3180	12.9764	1.9172	7.6793	9.2454	0.0000	34,950.48 45	34,950.48 45	10.3185	0.0000	35,208.44 73	
2023	11.9138	119.6300	130.7542	0.2237	0.3934	5.8685	6.2620	0.1057	5.3991	5.5048	0.0000	21,687.84 55	21,687.84 55	6.8514	0.0000	21,859.12 98	
Maximum	18.1594	175.5820	179.3742	0.3598	5.0126	8.3180	12.9764	1.9172	7.6793	9.2454	0.0000	34,950.48 45	34,950.48 45	10.3185	0.0000	35,208.44 73	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

	ROG	NOx	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	45.35	0.00	18.91	51.64	0.00	12.77	0.00	0.00	0.00	0.00	0.00	0.00

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**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	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0590	0.5362	0.4504	3.2200e-003		0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118		647.2354	
Mobile	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.3997	5,246.3997	0.2722			5,253.2051	
Total	2.4645	6.9225	12.0308	0.0546	3.5374	0.0667	3.6041	0.9466	0.0650	1.0116	5,889.8251	5,889.8251	0.2846	0.0118		5,900.4548	

**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	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101		555.4392	
Mobile	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.3997	5,246.3997	0.2722			5,253.2051	
Total	2.4561	6.8465	11.9669	0.0541	3.5374	0.0609	3.5983	0.9466	0.0593	1.0058	5,798.5711	5,798.5711	0.2828	0.0101		5,808.6586	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

	ROG	NOx	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	0.34	1.10	0.53	0.84	0.00	8.66	0.16	0.00	8.89	0.57	0.00	1.55	1.55	0.61	14.24	1.56

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	3/28/2022	5	40	
2	Building Construction	Building Construction	2/1/2022	3/31/2023	5	304	
3	Grading	Grading	5/2/2022	7/29/2022	5	65	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 65

Acres of Paving: 0

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	4	8.00	158	0.38
Demolition	Off-Highway Trucks	5	8.00	402	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Skid Steer Loaders	3	8.00	65	0.37

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	0	0.00	187	0.41
Grading	Graders	2	8.00	187	0.41
Grading	Off-Highway Trucks	1	8.00	402	0.38
Grading	Other Material Handling Equipment	1	8.00	168	0.40
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Excavators	4	8.00	158	0.38
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Off-Highway Tractors	1	8.00	124	0.44
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rough Terrain Forklifts	12	8.00	100	0.40
Building Construction	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	17	8.00	97	0.37
Building Construction	Trenchers	10	8.00	78	0.50
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	16	40.00	0.00	632.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	2,500.00	16.80	6.60	50.00	LD_Mix	HDT_Mix	HHDT
Building Construction	50	26.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4601	0.0000	3.4601	0.5240	0.0000	0.5240			0.0000			0.0000
Off-Road	5.0805	42.0384	45.0341	0.1187		1.7101	1.7101		1.5998	1.5998	11,464.68 47	11,464.68 47	3.3769			11,549.10 73
Total	5.0805	42.0384	45.0341	0.1187	3.4601	1.7101	5.1702	0.5240	1.5998	2.1237	11,464.68 47	11,464.68 47	3.3769			11,549.10 73

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.2 Demolition - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0696	2.9922	0.3445	0.0125	0.2771	6.4400e-003	0.2836	0.0760	6.1600e-003	0.0822	1,310.9530	1,310.9530	0.0720			1,312.7533
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.2293	0.1468	1.7766	4.7900e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	477.3850	477.3850	0.0138			477.7307
<b>Total</b>	<b>0.2989</b>	<b>3.1390</b>	<b>2.1212</b>	<b>0.0173</b>	<b>0.7881</b>	<b>9.3200e-003</b>	<b>0.7974</b>	<b>0.2115</b>	<b>8.8200e-003</b>	<b>0.2204</b>	<b>1,788.3380</b>	<b>1,788.3380</b>	<b>0.0858</b>			<b>1,790.4840</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2820	0.0000	1.2820	0.1941	0.0000	0.1941			0.0000			0.0000
Off-Road	5.0805	42.0384	45.0341	0.1187		1.7101	1.7101		1.5998	1.5998	0.0000	11,464.6847	11,464.6847	3.3769		11,549.1073
<b>Total</b>	<b>5.0805</b>	<b>42.0384</b>	<b>45.0341</b>	<b>0.1187</b>	<b>1.2820</b>	<b>1.7101</b>	<b>2.9921</b>	<b>0.1941</b>	<b>1.5998</b>	<b>1.7939</b>	<b>0.0000</b>	<b>11,464.6847</b>	<b>11,464.6847</b>	<b>3.3769</b>		<b>11,549.1073</b>

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.2 Demolition - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0696	2.9922	0.3445	0.0125	0.2771	6.4400e-003	0.2836	0.0760	6.1600e-003	0.0822	1,310.9530	1,310.9530	0.0720			1,312.7533
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.2293	0.1468	1.7766	4.7900e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	477.3850	477.3850	0.0138			477.7307
Total	0.2989	3.1390	2.1212	0.0173	0.7881	9.3200e-003	0.7974	0.2115	8.8200e-003	0.2204	1,788.3380	1,788.3380	0.0858			1,790.4840

**3.3 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	21,097.3627	21,097.3627	6.8233			21,267.9456
Total	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	21,097.3627	21,097.3627	6.8233			21,267.9456

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.3 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0258	0.8644	0.1762	2.7700e-003	0.0613	1.0900e-003	0.0624	0.0177	1.0400e-003	0.0187	289.7989	289.7989	0.0235			290.3855	
Worker	0.1491	0.0954	1.1548	3.1200e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898	310.3002	310.3002	8.9900e-003			310.5250	
Total	0.1749	0.9598	1.3310	5.8900e-003	0.3934	2.9600e-003	0.3964	0.1057	2.7700e-003	0.1085	600.0991	600.0991	0.0325			600.9105	

**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	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	0.0000	21,097.36 27	21,097.36 27	6.8233		21,267.94 55	
Total	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	0.0000	21,097.36 27	21,097.36 27	6.8233		21,267.94 55	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.3 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0258	0.8644	0.1762	2.7700e-003	0.0613	1.0900e-003	0.0624	0.0177	1.0400e-003	0.0187	289.7989	289.7989	0.0235			290.3855	
Worker	0.1491	0.0954	1.1548	3.1200e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898	310.3002	310.3002	8.9900e-003			310.5250	
Total	0.1749	0.9598	1.3310	5.8900e-003	0.3934	2.9600e-003	0.3964	0.1057	2.7700e-003	0.1085	600.0991	600.0991	0.0325			600.9105	

**3.3 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	11.7542	118.8732	129.5523	0.2180		5.8662	5.8662		5.3969	5.3969	21,106.83	21,106.83	6.8264			21,277.49	
Total	11.7542	118.8732	129.5523	0.2180		5.8662	5.8662		5.3969	5.3969	21,106.83	21,106.83	6.8264			21,277.49	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.3 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0206	0.6711	0.1514	2.7000e-003	0.0613	5.7000e-004	0.0619	0.0177	5.4000e-004	0.0182	282.3990	282.3990	0.0170	282.8244			
Worker	0.1391	0.0856	1.0505	3.0000e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897	298.6105	298.6105	7.9800e-003	298.8100			
Total	0.1597	0.7568	1.2019	5.7000e-003	0.3934	2.3900e-003	0.3958	0.1057	2.2100e-003	0.1080	581.0095	581.0095	0.0250			581.6343	

**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	11.7542	118.8732	129.5523	0.2180		5.8662	5.8662		5.3969	5.3969	0.0000	21,106.83 60	21,106.83 60	6.8264		21,277.49 55	
Total	11.7542	118.8732	129.5523	0.2180		5.8662	5.8662		5.3969	5.3969	0.0000	21,106.83 60	21,106.83 60	6.8264		21,277.49 55	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.3 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0206	0.6711	0.1514	2.7000e-003	0.0613	5.7000e-004	0.0619	0.0177	5.4000e-004	0.0182	282.3990	282.3990	0.0170	282.8244			
Worker	0.1391	0.0856	1.0505	3.0000e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897	298.6105	298.6105	7.9800e-003	298.8100			
Total	0.1597	0.7568	1.2019	5.7000e-003	0.3934	2.3900e-003	0.3958	0.1057	2.2100e-003	0.1080	581.0095	581.0095	0.0250			581.6343	

**3.4 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					7.1258	0.0000	7.1258	3.4313	0.0000	3.4313	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.1036	31.7756	23.9063	0.0558		1.3253	1.3253		1.2193	1.2193	5,402.7809	5,402.7809	1.7474			5,446.4651	
Total	3.1036	31.7756	23.9063	0.0558	7.1258	1.3253	8.4512	3.4313	1.2193	4.6506	5,402.7809	5,402.7809	1.7474			5,446.4651	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.4 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2858	11.1516	1.5613	0.0637	1.6853	0.0383	1.7236	0.4623	0.0366	0.4989	6,675.335 1	6,675.335 1	0.1829			6,679.907 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1319	0.0844	1.0216	2.7600e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	274.4964	274.4964	7.9500e-003			274.6952
Total	0.4177	11.2360	2.5829	0.0664	1.9790	0.0400	2.0190	0.5402	0.0382	0.5783	6,949.831 4	6,949.831 4	0.1909			6,954.602 8

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6401	0.0000	2.6401	1.2713	0.0000	1.2713			0.0000			0.0000
Off-Road	3.1036	31.7756	23.9063	0.0558		1.3253	1.3253		1.2193	1.2193	0.0000	5,402.780 9	5,402.780 9	1.7474		5,446.465 1
Total	3.1036	31.7756	23.9063	0.0558	2.6401	1.3253	3.9655	1.2713	1.2193	2.4906	0.0000	5,402.780 9	5,402.780 9	1.7474		5,446.465 1

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**3.4 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.2858	11.1516	1.5613	0.0637	1.6853	0.0383	1.7236	0.4623	0.0366	0.4989	6,675.335 1	6,675.335 1	0.1829			6,679.907 7	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1319	0.0844	1.0216	2.7600e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	274.4964	274.4964	7.9500e-003			274.6952	
Total	0.4177	11.2360	2.5829	0.0664	1.9790	0.0400	2.0190	0.5402	0.0382	0.5783	6,949.831 4	6,949.831 4	0.1909			6,954.602 8	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.399 7	5,246.399 7	0.2722		5,253.205 1		
Unmitigated	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.399 7	5,246.399 7	0.2722		5,253.205 1		

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	428.24	81.10	41.78	1,249,591	1,249,591	1,249,591	1,249,591
Total	428.24	81.10	41.78	1,249,591	1,249,591	1,249,591	1,249,591

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545462	0.034783	0.175214	0.104547	0.016326	0.005139	0.008963	0.095912	0.001419	0.002092	0.008487	0.000707	0.000948

#### 5.0 Energy Detail

Historical Energy Use: N

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

## 5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0506	0.4601	0.3865	2.7600e-003			0.0350	0.0350		0.0350	552.1580	552.1580	0.0106	0.0101	555.4392		
NaturalGas Unmitigated	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	643.4120	643.4120	0.0123	0.0118	647.2354		

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
General Light Industry	5469	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	643.4120	643.4120	0.0123	0.0118	647.2354		
Total		0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	643.4120	643.4120	0.0123	0.0118	647.2354		

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4.69334	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101	555.4392	
<b>Total</b>		<b>0.0506</b>	<b>0.4601</b>	<b>0.3865</b>	<b>2.7600e-003</b>		<b>0.0350</b>	<b>0.0350</b>		<b>0.0350</b>	<b>0.0350</b>		<b>552.1580</b>	<b>552.1580</b>	<b>0.0106</b>	<b>0.0101</b>	<b>555.4392</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
Unmitigated	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Summer

**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	0.0780						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.3934</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**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	0.0780						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.3934</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**7.0 Water Detail**

## 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**Lockhart Construction\_only unmitigated**  
Mojave Desert AQMD Air District, Winter**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	61.44	1000sqft	1.41	61,440.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	534	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

**1.3 User Entered Comments & Non-Default Data**

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

Project Characteristics - per 2019 SCE Sustainability Report

Land Use - Per AVEP ESS data, the 375 MW-ac project took up 153600 sqf of floor surface

Construction Phase - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Trips and VMT - per AQ questionnaire

Demolition - per AQ questionnaire

Grading - per AQ Questionnaire

Area Coating - Rule 1113

Energy Use -

Water And Wastewater - During 14-month construction, it will use 240 acre-feet.

$240/14*12=206=67032206$  gallons/year

Construction Off-road Equipment Mitigation - Rule 403

Energy Mitigation - Title 24, 2019 is 30% more efficient than 2016.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	200.00	304.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	4.00	65.00
tblGrading	MaterialExported	0.00	20,000.00

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	17.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblWater	IndoorWaterUseRate	14,208,000.00	0.00
tblWater	OutdoorWaterUseRate	0.00	67,032,206.00

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

## 2.0 Emissions Summary

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### 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					
2022	18.1601	175.5309	178.8562	0.3582	9.4983	8.3182	17.4624	4.0772	7.6794	11.4056	0.0000	34,791.95 87	34,791.95 87	10.3279	0.0000	35,050.15 76	
2023	11.9134	119.6157	130.5473	0.2232	0.3934	5.8686	6.2620	0.1057	5.3991	5.5048	0.0000	21,636.84 94	21,636.84 94	6.8524	0.0000	21,808.15 96	
Maximum	18.1601	175.5309	178.8562	0.3582	9.4983	8.3182	17.4624	4.0772	7.6794	11.4056	0.0000	34,791.95 87	34,791.95 87	10.3279	0.0000	35,050.15 76	

#### 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					
2022	18.1601	175.5309	178.8562	0.3582	5.0126	8.3182	12.9767	1.9172	7.6794	9.2456	0.0000	34,791.95 87	34,791.95 87	10.3279	0.0000	35,050.15 76	
2023	11.9134	119.6157	130.5473	0.2232	0.3934	5.8686	6.2620	0.1057	5.3991	5.5048	0.0000	21,636.84 94	21,636.84 94	6.8524	0.0000	21,808.15 96	
Maximum	18.1601	175.5309	178.8562	0.3582	5.0126	8.3182	12.9767	1.9172	7.6794	9.2456	0.0000	34,791.95 87	34,791.95 87	10.3279	0.0000	35,050.15 76	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

	ROG	NOx	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	45.35	0.00	18.91	51.64	0.00	12.77	0.00	0.00	0.00	0.00	0.00	0.00

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**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	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0590	0.5362	0.4504	3.2200e-003		0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118		647.2354	
Mobile	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.1918	4,791.1918	0.2816			4,798.2326	
Total	2.3118	6.8470	10.2867	0.0500	3.5374	0.0668	3.6042	0.9466	0.0651	1.0117		5,434.6172	5,434.6172	0.2940	0.0118	5,445.4824	

**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	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101		555.4392	
Mobile	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.1918	4,791.1918	0.2816			4,798.2326	
Total	2.3034	6.7710	10.2228	0.0496	3.5374	0.0611	3.5985	0.9466	0.0594	1.0060		5,343.3632	5,343.3632	0.2923	0.0101	5,353.6861	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

	ROG	NOx	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	0.36	1.11	0.62	0.92	0.00	8.65	0.16	0.00	8.87	0.57	0.00	1.68	1.68	0.60	14.24	1.69

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	3/28/2022	5	40	
2	Building Construction	Building Construction	2/1/2022	3/31/2023	5	304	
3	Grading	Grading	5/2/2022	7/29/2022	5	65	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 65

Acres of Paving: 0

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	4	8.00	158	0.38
Demolition	Off-Highway Trucks	5	8.00	402	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Skid Steer Loaders	3	8.00	65	0.37

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	0	0.00	187	0.41
Grading	Graders	2	8.00	187	0.41
Grading	Off-Highway Trucks	1	8.00	402	0.38
Grading	Other Material Handling Equipment	1	8.00	168	0.40
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Excavators	4	8.00	158	0.38
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Off-Highway Tractors	1	8.00	124	0.44
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rough Terrain Forklifts	12	8.00	100	0.40
Building Construction	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	17	8.00	97	0.37
Building Construction	Trenchers	10	8.00	78	0.50
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	16	40.00	0.00	632.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	2,500.00	16.80	6.60	50.00	LD_Mix	HDT_Mix	HHDT
Building Construction	50	26.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4601	0.0000	3.4601	0.5240	0.0000	0.5240			0.0000			0.0000
Off-Road	5.0805	42.0384	45.0341	0.1187		1.7101	1.7101		1.5998	1.5998	11,464.68 47	11,464.68 47	3.3769			11,549.10 73
Total	5.0805	42.0384	45.0341	0.1187	3.4601	1.7101	5.1702	0.5240	1.5998	2.1237	11,464.68 47	11,464.68 47	3.3769			11,549.10 73

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.2 Demolition - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0749	2.9547	0.4412	0.0121	0.2771	6.5400e-003	0.2837	0.0760	6.2600e-003	0.0823	1,263.9759	1,263.9759	0.0818			1,266.0210
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2254	0.1507	1.3814	4.2000e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	418.8910	418.8910	0.0117			419.1839
Total	0.3003	3.1053	1.8226	0.0163	0.7881	9.4200e-003	0.7975	0.2115	8.9200e-003	0.2204	1,682.8669	1,682.8669	0.0935			1,685.2049

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2820	0.0000	1.2820	0.1941	0.0000	0.1941			0.0000			0.0000
Off-Road	5.0805	42.0384	45.0341	0.1187		1.7101	1.7101		1.5998	1.5998	0.0000	11,464.6847	11,464.6847	3.3769		11,549.1073
Total	5.0805	42.0384	45.0341	0.1187	1.2820	1.7101	2.9921	0.1941	1.5998	1.7939	0.0000	11,464.6847	11,464.6847	3.3769		11,549.1073

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.2 Demolition - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0749	2.9547	0.4412	0.0121	0.2771	6.5400e-003	0.2837	0.0760	6.2600e-003	0.0823	1,263.9759	1,263.9759	0.0818			1,266.0210	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2254	0.1507	1.3814	4.2000e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	418.8910	418.8910	0.0117			419.1839	
Total	0.3003	3.1053	1.8226	0.0163	0.7881	9.4200e-003	0.7975	0.2115	8.9200e-003	0.2204		1,682.8669	1,682.8669	0.0935			1,685.2049

**3.3 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	21,097.3627	21,097.3627	6.8233			21,267.9456	
Total	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	21,097.3627	21,097.3627	6.8233			21,267.9456	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.3 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0278	0.8444	0.2136	2.6300e-003	0.0613	1.1300e-003	0.0625	0.0177	1.0800e-003	0.0187	274.7653	274.7653	0.0266			275.4304	
Worker	0.1465	0.0979	0.8979	2.7300e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898	272.2792	272.2792	7.6100e-003			272.4695	
Total	0.1742	0.9424	1.1115	5.3600e-003	0.3934	3.0000e-003	0.3964	0.1057	2.8100e-003	0.1085	547.0444	547.0444	0.0342			547.8999	

**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	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	0.0000	21,097.36 27	21,097.36 27	6.8233		21,267.94 55	
Total	12.6051	129.4448	130.8880	0.2179		6.5956	6.5956		6.0679	6.0679	0.0000	21,097.36 27	21,097.36 27	6.8233		21,267.94 55	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.3 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Vendor	0.0278	0.8444	0.2136	2.6300e-003	0.0613	1.1300e-003	0.0625	0.0177	1.0800e-003	0.0187		274.7653	274.7653	0.0266		275.4304	
Worker	0.1465	0.0979	0.8979	2.7300e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898		272.2792	272.2792	7.6100e-003		272.4695	
Total	0.1742	0.9424	1.1115	5.3600e-003	0.3934	3.0000e-003	0.3964	0.1057	2.8100e-003	0.1085		547.0444	547.0444	0.0342		547.8999	

**3.3 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	11.7542	118.8732	129.5523	0.2180		5.8662	5.8662		5.3969	5.3969		21,106.83 60	21,106.83 60	6.8264		21,277.49 55	
Total	11.7542	118.8732	129.5523	0.2180		5.8662	5.8662		5.3969	5.3969		21,106.83 60	21,106.83 60	6.8264		21,277.49 55	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.3 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Vendor	0.0221	0.6547	0.1795	2.5700e-003	0.0613	5.8000e-004	0.0619	0.0177	5.6000e-004	0.0182		267.9737	267.9737	0.0193		268.4551	
Worker	0.1372	0.0878	0.8156	2.6300e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897		262.0397	262.0397	6.7800e-003		262.2090	
<b>Total</b>	<b>0.1592</b>	<b>0.7425</b>	<b>0.9950</b>	<b>5.2000e-003</b>	<b>0.3934</b>	<b>2.4000e-003</b>	<b>0.3958</b>	<b>0.1057</b>	<b>2.2300e-003</b>	<b>0.1080</b>		<b>530.0133</b>	<b>530.0133</b>	<b>0.0260</b>		<b>530.6641</b>	

**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	11.7542	118.8732	129.5523	0.2180		5.8662	5.8662		5.3969	5.3969	0.0000	21,106.83 60	21,106.83 60	6.8264		21,277.49 55	
<b>Total</b>	<b>11.7542</b>	<b>118.8732</b>	<b>129.5523</b>	<b>0.2180</b>		<b>5.8662</b>	<b>5.8662</b>		<b>5.3969</b>	<b>5.3969</b>	<b>0.0000</b>	<b>21,106.83 60</b>	<b>21,106.83 60</b>	<b>6.8264</b>		<b>21,277.49 55</b>	

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.3 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Vendor	0.0221	0.6547	0.1795	2.5700e-003	0.0613	5.8000e-004	0.0619	0.0177	5.6000e-004	0.0182		267.9737	267.9737	0.0193		268.4551	
Worker	0.1372	0.0878	0.8156	2.6300e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897		262.0397	262.0397	6.7800e-003		262.2090	
Total	0.1592	0.7425	0.9950	5.2000e-003	0.3934	2.4000e-003	0.3958	0.1057	2.2300e-003	0.1080		530.0133	530.0133	0.0260		530.6641	

**3.4 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1258	0.0000	7.1258	3.4313	0.0000	3.4313			0.0000			0.0000
Off-Road	3.1036	31.7756	23.9063	0.0558		1.3253	1.3253		1.2193	1.2193		5,402.7809	5,402.7809	1.7474		5,446.4651
Total	3.1036	31.7756	23.9063	0.0558	7.1258	1.3253	8.4512	3.4313	1.2193	4.6506		5,402.7809	5,402.7809	1.7474		5,446.4651

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.4 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2987	11.2509	1.7924	0.0626	1.6853	0.0385	1.7238	0.4623	0.0369	0.4991	6,560.979 8	6,560.979 8	0.2067			6,566.147 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1296	0.0866	0.7943	2.4200e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	240.8623	240.8623	6.7400e-003			241.0307
Total	<b>0.4283</b>	<b>11.3375</b>	<b>2.5867</b>	<b>0.0650</b>	<b>1.9790</b>	<b>0.0402</b>	<b>2.0192</b>	<b>0.5402</b>	<b>0.0384</b>	<b>0.5785</b>	<b>6,801.842 1</b>	<b>6,801.842 1</b>	<b>0.2135</b>			<b>6,807.178 3</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6401	0.0000	2.6401	1.2713	0.0000	1.2713			0.0000			0.0000
Off-Road	3.1036	31.7756	23.9063	0.0558		1.3253	1.3253		1.2193	1.2193	0.0000	5,402.780 9	5,402.780 9	1.7474		5,446.465 1
Total	<b>3.1036</b>	<b>31.7756</b>	<b>23.9063</b>	<b>0.0558</b>	<b>2.6401</b>	<b>1.3253</b>	<b>3.9655</b>	<b>1.2713</b>	<b>1.2193</b>	<b>2.4906</b>	<b>0.0000</b>	<b>5,402.780 9</b>	<b>5,402.780 9</b>	<b>1.7474</b>		<b>5,446.465 1</b>

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**3.4 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.2987	11.2509	1.7924	0.0626	1.6853	0.0385	1.7238	0.4623	0.0369	0.4991	6,560.979 8	6,560.979 8	0.2067			6,566.147 6	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1296	0.0866	0.7943	2.4200e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	240.8623	240.8623	6.7400e-003			241.0307	
Total	<b>0.4283</b>	<b>11.3375</b>	<b>2.5867</b>	<b>0.0650</b>	<b>1.9790</b>	<b>0.0402</b>	<b>2.0192</b>	<b>0.5402</b>	<b>0.0384</b>	<b>0.5785</b>	<b>6,801.842 1</b>	<b>6,801.842 1</b>	<b>0.2135</b>			<b>6,807.178 3</b>	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.191 8	4,791.191 8	0.2816		4,798.232 6		
Unmitigated	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.191 8	4,791.191 8	0.2816		4,798.232 6		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	428.24	81.10	41.78	1,249,591		1,249,591	
Total	428.24	81.10	41.78	1,249,591		1,249,591	

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545462	0.034783	0.175214	0.104547	0.016326	0.005139	0.008963	0.095912	0.001419	0.002092	0.008487	0.000707	0.000948

**5.0 Energy Detail**

Historical Energy Use: N

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

## 5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0506	0.4601	0.3865	2.7600e-003			0.0350	0.0350		0.0350	552.1580	552.1580	0.0106	0.0101	555.4392		
NaturalGas Unmitigated	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	643.4120	643.4120	0.0123	0.0118	647.2354		

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
General Light Industry	5469	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	643.4120	643.4120	0.0123	0.0118	647.2354		
Total		0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	643.4120	643.4120	0.0123	0.0118	647.2354		

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4.69334	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101	555.4392	
<b>Total</b>		<b>0.0506</b>	<b>0.4601</b>	<b>0.3865</b>	<b>2.7600e-003</b>		<b>0.0350</b>	<b>0.0350</b>		<b>0.0350</b>	<b>0.0350</b>		<b>552.1580</b>	<b>552.1580</b>	<b>0.0106</b>	<b>0.0101</b>	<b>555.4392</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
Unmitigated	1.3934	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143

## Lockhart Construction\_only unmitigated - Mojave Desert AQMD Air District, Winter

**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	0.0780						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.3934</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**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	0.0780						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.3934</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**7.0 Water Detail**

## 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**Lockhart Solar II Construction\_Only Run\_6**  
Mojave Desert AQMD Air District, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	61.44	1000sqft	1.41	61,440.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	534	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

### 1.3 User Entered Comments & Non-Default Data

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

## Project Characteristics - Per SCE 2019 Sustainability Report

Land Use - Per AVEP ESS data, the 375 MW-ac project took up 153600 sqf of floor surface

Construction Phase - per AQ Questionnaire

Off-road Equipment - Per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Grading - Per AQ Questionnaire

Demolition - Per AQ Questionnaire

Trips and VMT - per AQ Questionnaire

Energy Use -

Water And Wastewater - During 14-month construction, there would be 240 acre-feet(af) water usage.

$$240/14*12=206=67032206$$

Construction Off-road Equipment Mitigation - Rule 403

Energy Mitigation - Title 24, 2019 is 30% more efficient than 2016.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
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
tblConstructionPhase	NumDays	200.00	304.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	4.00	65.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

tblConstructionPhase	PhaseEndDate	1/31/2022	3/31/2023
tblConstructionPhase	PhaseEndDate	1/31/2022	3/28/2022
tblConstructionPhase	PhaseEndDate	1/31/2022	7/29/2022
tblConstructionPhase	PhaseStartDate	2/1/2022	5/2/2022
tblGrading	MaterialExported	0.00	20,000.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.44	0.44
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	17.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblWater	IndoorWaterUseRate	14,208,000.00	0.00
tblWater	OutdoorWaterUseRate	0.00	67,032,206.00

## 2.0 Emissions Summary

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## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**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					
2022	18.2051	175.9976	179.8557	0.3608	9.4983	8.3385	17.4754	4.0772	7.6981	11.4176	0.0000	35,047.14 57	35,047.14 57	10.3498	0.0000	35,305.89 01
2023	11.9404	119.8912	131.0912	0.2242	0.3934	5.8828	6.2762	0.1057	5.4122	5.5179	0.0000	21,738.93 24	21,738.93 24	6.8679	0.0000	21,910.62 97
Maximum	18.2051	175.9976	179.8557	0.3608	9.4983	8.3385	17.4754	4.0772	7.6981	11.4176	0.0000	35,047.14 57	35,047.14 57	10.3498	0.0000	35,305.89 01

**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					
2022	4.6575	27.8039	212.7571	0.3608	5.0126	0.5600	5.5035	1.9172	0.5593	2.4061	0.0000	35,047.14 56	35,047.14 56	10.3498	0.0000	35,305.89 00
2023	2.8354	12.3515	146.3979	0.2242	0.3934	0.3592	0.7526	0.1057	0.3590	0.4647	0.0000	21,738.93 24	21,738.93 24	6.8679	0.0000	21,910.62 97
Maximum	4.6575	27.8039	212.7571	0.3608	5.0126	0.5600	5.5035	1.9172	0.5593	2.4061	0.0000	35,047.14 56	35,047.14 56	10.3498	0.0000	35,305.89 00

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	75.14	86.43	-15.50	0.00	45.35	93.54	73.66	51.64	93.00	83.05	0.00	0.00	0.00	0.00	0.00	0.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**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	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0590	0.5362	0.4504	3.2200e-003		0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118		647.2354	
Mobile	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.399 7	5,246.399 7	0.2722			5,253.205 1	
Total	2.7765	6.9225	12.0308	0.0546	3.5374	0.0667	3.6041	0.9466	0.0650	1.0116	5,889.825 1	5,889.825 1	0.2846	0.0118		5,900.454 8	

**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	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101		555.4392	
Mobile	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.399 7	5,246.399 7	0.2722			5,253.205 1	
Total	2.7682	6.8465	11.9669	0.0541	3.5374	0.0609	3.5983	0.9466	0.0593	1.0058	5,798.571 1	5,798.571 1	0.2828	0.0101		5,808.658 6	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

	ROG	NOx	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	0.30	1.10	0.53	0.84	0.00	8.66	0.16	0.00	8.89	0.57	0.00	1.55	1.55	0.61	14.24	1.56

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	3/28/2022	5	40	
2	Grading	Grading	5/2/2022	7/29/2022	5	65	
3	Building Construction	Building Construction	2/1/2022	3/31/2023	5	304	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 65

Acres of Paving: 0

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	4	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Demolition	Off-Highway Trucks	5	8.00	402	0.38

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Skid Steer Loaders	3	8.00	65	0.37
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	17	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Off-Highway Trucks	1	8.00	402	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Other Material Handling Equipment	1	8.00	168	0.40
Grading	Rollers	1	8.00	80	0.38
Building Construction	Welders	0	0.00	46	0.45
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Excavators	4	8.00	158	0.38
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Off-Highway Tractors	1	8.00	124	0.44
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rough Terrain Forklifts	12	8.00	100	0.40
Building Construction	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Scrapers	2	8.00	367	0.48
Building Construction	Trenchers	10	8.00	78	0.50

**Trips and VMT**

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	16	40.00	0.00	632.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	2,500.00	16.80	6.60	50.00	LD_Mix	HDT_Mix	HHDT
Building Construction	50	26.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					3.4601	0.0000	3.4601	0.5240	0.0000	0.5240			0.0000			0.0000	
Off-Road	5.0998	42.1932	45.1816	0.1192		1.7161	1.7161		1.6052	1.6052	11,510.27 91	11,510.27 91	3.3917			11,595.07 03	
Total	5.0998	42.1932	45.1816	0.1192	3.4601	1.7161	5.1762	0.5240	1.6052	2.1292	11,510.27 91	11,510.27 91	3.3917			11,595.07 03	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.2 Demolition - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0696	2.9922	0.3445	0.0125	0.2771	6.4400e-003	0.2836	0.0760	6.1600e-003	0.0822	1,310.9530	1,310.9530	0.0720			1,312.7533
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.2293	0.1468	1.7766	4.7900e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	477.3850	477.3850	0.0138			477.7307
Total	0.2989	3.1390	2.1212	0.0173	0.7881	9.3200e-003	0.7974	0.2115	8.8200e-003	0.2204	1,788.3380	1,788.3380	0.0858			1,790.4840

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust						1.2820	0.0000	1.2820	0.1941	0.0000	0.1941		0.0000			0.0000
Off-Road	1.5080	9.3481	64.1090	0.1192		0.1909	0.1909		0.1909	0.1909	0.0000	11,510.2791	11,510.2791	3.3917		11,595.0703
Total	1.5080	9.3481	64.1090	0.1192	1.2820	0.1909	1.4729	0.1941	0.1909	0.3851	0.0000	11,510.2791	11,510.2791	3.3917		11,595.0703

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.2 Demolition - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0696	2.9922	0.3445	0.0125	0.2771	6.4400e-003	0.2836	0.0760	6.1600e-003	0.0822	1,310.9530	1,310.9530	0.0720			1,312.7533
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.2293	0.1468	1.7766	4.7900e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	477.3850	477.3850	0.0138			477.7307
Total	0.2989	3.1390	2.1212	0.0173	0.7881	9.3200e-003	0.7974	0.2115	8.8200e-003	0.2204	1,788.3380	1,788.3380	0.0858			1,790.4840

**3.3 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					7.1258	0.0000	7.1258	3.4313	0.0000	3.4313			0.0000			0.0000	
Off-Road	3.1028	31.7615	23.8823	0.0558		1.3241	1.3241		1.2182	1.2182	5,403.5776	5,403.5776	1.7476			5,447.2683	
Total	3.1028	31.7615	23.8823	0.0558	7.1258	1.3241	8.4499	3.4313	1.2182	4.6495		5,403.5776	5,403.5776	1.7476			5,447.2683

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.3 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2858	11.1516	1.5613	0.0637	1.6853	0.0383	1.7236	0.4623	0.0366	0.4989	6,675.335 1	6,675.335 1	0.1829			6,679.907 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1319	0.0844	1.0216	2.7600e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	274.4964	274.4964	7.9500e-003			274.6952
Total	<b>0.4177</b>	<b>11.2360</b>	<b>2.5829</b>	<b>0.0664</b>	<b>1.9790</b>	<b>0.0400</b>	<b>2.0190</b>	<b>0.5402</b>	<b>0.0382</b>	<b>0.5783</b>	<b>6,949.831 4</b>	<b>6,949.831 4</b>	<b>0.1909</b>			<b>6,954.602 8</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6401	0.0000	2.6401	1.2713	0.0000	1.2713			0.0000			0.0000
Off-Road	0.7097	4.0133	31.4711	0.0558		0.0913	0.0913		0.0913	0.0913	0.0000	5,403.577 6	5,403.577 6	1.7476		5,447.268 3
Total	<b>0.7097</b>	<b>4.0133</b>	<b>31.4711</b>	<b>0.0558</b>	<b>2.6401</b>	<b>0.0913</b>	<b>2.7314</b>	<b>1.2713</b>	<b>0.0913</b>	<b>1.3625</b>	<b>0.0000</b>	<b>5,403.577 6</b>	<b>5,403.577 6</b>	<b>1.7476</b>		<b>5,447.268 3</b>

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.3 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.2858	11.1516	1.5613	0.0637	1.6853	0.0383	1.7236	0.4623	0.0366	0.4989	6,675.335 1	6,675.335 1	0.1829			6,679.907 7	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1319	0.0844	1.0216	2.7600e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	274.4964	274.4964	7.9500e-003			274.6952	
Total	0.4177	11.2360	2.5829	0.0664	1.9790	0.0400	2.0190	0.5402	0.0382	0.5783	6,949.831 4	6,949.831 4	0.1909			6,954.602 8	

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	12.6315	129.7056	131.2220	0.2184		6.6101	6.6101		6.0813	6.0813	21,148.42 95	21,148.42 95	6.8398			21,319.42 52	
Total	12.6315	129.7056	131.2220	0.2184		6.6101	6.6101		6.0813	6.0813	21,148.42 95	21,148.42 95	6.8398			21,319.42 52	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0258	0.8644	0.1762	2.7700e-003	0.0613	1.0900e-003	0.0624	0.0177	1.0400e-003	0.0187	289.7989	289.7989	0.0235			290.3855	
Worker	0.1491	0.0954	1.1548	3.1200e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898	310.3002	310.3002	8.9900e-003			310.5250	
Total	0.1749	0.9598	1.3310	5.8900e-003	0.3934	2.9600e-003	0.3964	0.1057	2.7700e-003	0.1085	600.0991	600.0991	0.0325			600.9105	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.6757	11.5948	145.1960	0.2184		0.3568	0.3568		0.3568	0.3568	0.0000	21,148.42	21,148.42	6.8398		21,319.42	
Total	2.6757	11.5948	145.1960	0.2184		0.3568	0.3568		0.3568	0.3568	0.0000	21,148.42	21,148.42	6.8398		21,319.42	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0258	0.8644	0.1762	2.7700e-003	0.0613	1.0900e-003	0.0624	0.0177	1.0400e-003	0.0187	289.7989	289.7989	0.0235			290.3855	
Worker	0.1491	0.0954	1.1548	3.1200e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898	310.3002	310.3002	8.9900e-003			310.5250	
Total	0.1749	0.9598	1.3310	5.8900e-003	0.3934	2.9600e-003	0.3964	0.1057	2.7700e-003	0.1085	600.0991	600.0991	0.0325			600.9105	

**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	11.7808	119.1344	129.8893	0.2185		5.8804	5.8804		5.4100	5.4100	21,157.92	21,157.92	6.8429			21,328.99	
Total	11.7808	119.1344	129.8893	0.2185		5.8804	5.8804		5.4100	5.4100	21,157.92	21,157.92	6.8429			21,328.99	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0206	0.6711	0.1514	2.7000e-003	0.0613	5.7000e-004	0.0619	0.0177	5.4000e-004	0.0182	282.3990	282.3990	0.0170	282.8244			
Worker	0.1391	0.0856	1.0505	3.0000e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897	298.6105	298.6105	7.9800e-003	298.8100			
Total	<b>0.1597</b>	<b>0.7568</b>	<b>1.2019</b>	<b>5.7000e-003</b>	<b>0.3934</b>	<b>2.3900e-003</b>	<b>0.3958</b>	<b>0.1057</b>	<b>2.2100e-003</b>	<b>0.1080</b>	<b>581.0095</b>	<b>581.0095</b>	<b>0.0250</b>			<b>581.6343</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.6757	11.5948	145.1960	0.2185			0.3568	0.3568		0.3568	0.0000	21,157.92 29	21,157.92 29	6.8429			21,328.99 54
Total	<b>2.6757</b>	<b>11.5948</b>	<b>145.1960</b>	<b>0.2185</b>			<b>0.3568</b>	<b>0.3568</b>		<b>0.3568</b>	<b>0.0000</b>	<b>21,157.92 29</b>	<b>21,157.92 29</b>	<b>6.8429</b>			<b>21,328.99 54</b>

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0206	0.6711	0.1514	2.7000e-003	0.0613	5.7000e-004	0.0619	0.0177	5.4000e-004	0.0182	282.3990	282.3990	0.0170	282.8244			
Worker	0.1391	0.0856	1.0505	3.0000e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897	298.6105	298.6105	7.9800e-003	298.8100			
Total	0.1597	0.7568	1.2019	5.7000e-003	0.3934	2.3900e-003	0.3958	0.1057	2.2100e-003	0.1080	581.0095	581.0095	0.0250			581.6343	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.399 7	5,246.399 7	0.2722		5,253.205 1		
Unmitigated	1.0121	6.3863	11.5741	0.0514	3.5374	0.0260	3.5633	0.9466	0.0243	0.9709	5,246.399 7	5,246.399 7	0.2722		5,253.205 1		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	428.24	81.10	41.78	1,249,591	1,249,591	1,249,591	1,249,591
Total	428.24	81.10	41.78	1,249,591	1,249,591	1,249,591	1,249,591

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545462	0.034783	0.175214	0.104547	0.016326	0.005139	0.008963	0.095912	0.001419	0.002092	0.008487	0.000707	0.000948

**5.0 Energy Detail**

Historical Energy Use: N

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

## 5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0506	0.4601	0.3865	2.7600e-003			0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101	555.4392
NaturalGas Unmitigated	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118	647.2354

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	5469	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118	647.2354
Total		0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118	647.2354

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4.69334	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101	555.4392	
<b>Total</b>		<b>0.0506</b>	<b>0.4601</b>	<b>0.3865</b>	<b>2.7600e-003</b>		<b>0.0350</b>	<b>0.0350</b>		<b>0.0350</b>	<b>0.0350</b>		<b>552.1580</b>	<b>552.1580</b>	<b>0.0106</b>	<b>0.0101</b>	<b>555.4392</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
Unmitigated	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Summer

**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	0.3901						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.7055</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**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	0.3901						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.7055</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**7.0 Water Detail**

## 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**Lockhart Solar II Construction\_Only Run\_6**  
Mojave Desert AQMD Air District, Winter**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	61.44	1000sqft	1.41	61,440.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	534	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

**1.3 User Entered Comments & Non-Default Data**

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

## Project Characteristics - Per SCE 2019 Sustainability Report

Land Use - Per AVEP ESS data, the 375 MW-ac project took up 153600 sqf of floor surface

Construction Phase - per AQ Questionnaire

Off-road Equipment - Per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Off-road Equipment - per AQ Questionnaire

Grading - Per AQ Questionnaire

Demolition - Per AQ Questionnaire

Trips and VMT - per AQ Questionnaire

Energy Use -

Water And Wastewater - During 14-month construction, there would be 240 acre-feet(af) water usage.

$$240/14*12=206=67032206$$

Construction Off-road Equipment Mitigation - Rule 403

Energy Mitigation - Title 24, 2019 is 30% more efficient than 2016.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
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
tblConstructionPhase	NumDays	200.00	304.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	4.00	65.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

tblConstructionPhase	PhaseEndDate	1/31/2022	3/31/2023
tblConstructionPhase	PhaseEndDate	1/31/2022	3/28/2022
tblConstructionPhase	PhaseEndDate	1/31/2022	7/29/2022
tblConstructionPhase	PhaseStartDate	2/1/2022	5/2/2022
tblGrading	MaterialExported	0.00	20,000.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.44	0.44
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	17.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblWater	IndoorWaterUseRate	14,208,000.00	0.00
tblWater	OutdoorWaterUseRate	0.00	67,032,206.00

## 2.0 Emissions Summary

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## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**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					
2022	18.2058	175.9465	179.3377	0.3592	9.4983	8.3386	17.4757	4.0772	7.6983	11.4178	0.0000	34,888.61 99	34,888.61 99	10.3592	0.0000	35,147.60 03
2023	11.9400	119.8769	130.8843	0.2237	0.3934	5.8828	6.2762	0.1057	5.4122	5.5179	0.0000	21,687.93 62	21,687.93 62	6.8689	0.0000	21,859.65 95
Maximum	18.2058	175.9465	179.3377	0.3592	9.4983	8.3386	17.4757	4.0772	7.6983	11.4178	0.0000	34,888.61 99	34,888.61 99	10.3592	0.0000	35,147.60 03

**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					
2022	4.6582	27.8879	212.2391	0.3592	5.0126	0.5601	5.5038	1.9172	0.5594	2.4064	0.0000	34,888.61 99	34,888.61 99	10.3592	0.0000	35,147.60 03
2023	2.8350	12.3372	146.1910	0.2237	0.3934	0.3592	0.7526	0.1057	0.3590	0.4647	0.0000	21,687.93 62	21,687.93 62	6.8689	0.0000	21,859.65 95
Maximum	4.6582	27.8879	212.2391	0.3592	5.0126	0.5601	5.5038	1.9172	0.5594	2.4064	0.0000	34,888.61 99	34,888.61 99	10.3592	0.0000	35,147.60 03

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	75.14	86.40	-15.54	0.00	45.35	93.54	73.66	51.64	92.99	83.05	0.00	0.00	0.00	0.00	0.00	0.00

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**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	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0590	0.5362	0.4504	3.2200e-003		0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118		647.2354	
Mobile	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.1918	4,791.1918	0.2816			4,798.2326	
Total	2.6238	6.8470	10.2867	0.0500	3.5374	0.0668	3.6042	0.9466	0.0651	1.0117	5,434.6172	5,434.6172	0.2940	0.0118		5,445.4824	

**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	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0135	0.0135	4.0000e-005			0.0143	
Energy	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101		555.4392	
Mobile	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.1918	4,791.1918	0.2816			4,798.2326	
Total	2.6155	6.7710	10.2228	0.0496	3.5374	0.0611	3.5985	0.9466	0.0594	1.0060	5,343.3632	5,343.3632	0.2923	0.0101		5,353.6861	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

	ROG	NOx	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	0.32	1.11	0.62	0.92	0.00	8.65	0.16	0.00	8.87	0.57	0.00	1.68	1.68	0.60	14.24	1.69

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	3/28/2022	5	40	
2	Grading	Grading	5/2/2022	7/29/2022	5	65	
3	Building Construction	Building Construction	2/1/2022	3/31/2023	5	304	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 65

Acres of Paving: 0

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	4	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Demolition	Off-Highway Trucks	5	8.00	402	0.38

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Skid Steer Loaders	3	8.00	65	0.37
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	17	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Off-Highway Trucks	1	8.00	402	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Other Material Handling Equipment	1	8.00	168	0.40
Grading	Rollers	1	8.00	80	0.38
Building Construction	Welders	0	0.00	46	0.45
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Excavators	4	8.00	158	0.38
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Off-Highway Tractors	1	8.00	124	0.44
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rough Terrain Forklifts	12	8.00	100	0.40
Building Construction	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Scrapers	2	8.00	367	0.48
Building Construction	Trenchers	10	8.00	78	0.50

**Trips and VMT**

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	16	40.00	0.00	632.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	2,500.00	16.80	6.60	50.00	LD_Mix	HDT_Mix	HHDT
Building Construction	50	26.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					3.4601	0.0000	3.4601	0.5240	0.0000	0.5240			0.0000			0.0000	
Off-Road	5.0998	42.1932	45.1816	0.1192		1.7161	1.7161		1.6052	1.6052	11,510.27 91	11,510.27 91	3.3917			11,595.07 03	
Total	5.0998	42.1932	45.1816	0.1192	3.4601	1.7161	5.1762	0.5240	1.6052	2.1292	11,510.27 91	11,510.27 91	3.3917			11,595.07 03	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.2 Demolition - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0749	2.9547	0.4412	0.0121	0.2771	6.5400e-003	0.2837	0.0760	6.2600e-003	0.0823	1,263.975	1,263.975	0.0818			1,266.021
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2254	0.1507	1.3814	4.2000e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	418.8910	418.8910	0.0117			419.1839
Total	0.3003	3.1053	1.8226	0.0163	0.7881	9.4200e-003	0.7975	0.2115	8.9200e-003	0.2204	1,682.866	1,682.866	0.0935			1,685.204

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust						1.2820	0.0000	1.2820	0.1941	0.0000	0.1941		0.0000			0.0000
Off-Road	1.5080	9.3481	64.1090	0.1192		0.1909	0.1909		0.1909	0.1909	0.0000	11,510.27	11,510.27	3.3917		11,595.07
Total	1.5080	9.3481	64.1090	0.1192	1.2820	0.1909	1.4729	0.1941	0.1909	0.3851	0.0000	11,510.27	11,510.27	3.3917		11,595.07

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.2 Demolition - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0749	2.9547	0.4412	0.0121	0.2771	6.5400e-003	0.2837	0.0760	6.2600e-003	0.0823	1,263.975	1,263.975	0.0818			1,266.021
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2254	0.1507	1.3814	4.2000e-003	0.5109	2.8800e-003	0.5138	0.1355	2.6600e-003	0.1382	418.8910	418.8910	0.0117			419.1839
Total	0.3003	3.1053	1.8226	0.0163	0.7881	9.4200e-003	0.7975	0.2115	8.9200e-003	0.2204	1,682.866	1,682.866	0.0935			1,685.204

**3.3 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1258	0.0000	7.1258	3.4313	0.0000	3.4313			0.0000			0.0000
Off-Road	3.1028	31.7615	23.8823	0.0558		1.3241	1.3241		1.2182	1.2182	5,403.577	5,403.577	1.7476			5,447.268
Total	3.1028	31.7615	23.8823	0.0558	7.1258	1.3241	8.4499	3.4313	1.2182	4.6495	5,403.577	5,403.577	1.7476			5,447.268

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.3 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2987	11.2509	1.7924	0.0626	1.6853	0.0385	1.7238	0.4623	0.0369	0.4991	6,560.979 8	6,560.979 8	0.2067			6,566.147 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1296	0.0866	0.7943	2.4200e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	240.8623	240.8623	6.7400e-003			241.0307
Total	<b>0.4283</b>	<b>11.3375</b>	<b>2.5867</b>	<b>0.0650</b>	<b>1.9790</b>	<b>0.0402</b>	<b>2.0192</b>	<b>0.5402</b>	<b>0.0384</b>	<b>0.5785</b>	<b>6,801.842 1</b>	<b>6,801.842 1</b>	<b>0.2135</b>			<b>6,807.178 3</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6401	0.0000	2.6401	1.2713	0.0000	1.2713			0.0000			0.0000
Off-Road	0.7097	4.0133	31.4711	0.0558		0.0913	0.0913		0.0913	0.0913	0.0000	5,403.577 6	5,403.577 6	1.7476		5,447.268 3
Total	<b>0.7097</b>	<b>4.0133</b>	<b>31.4711</b>	<b>0.0558</b>	<b>2.6401</b>	<b>0.0913</b>	<b>2.7314</b>	<b>1.2713</b>	<b>0.0913</b>	<b>1.3625</b>	<b>0.0000</b>	<b>5,403.577 6</b>	<b>5,403.577 6</b>	<b>1.7476</b>		<b>5,447.268 3</b>

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.3 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.2987	11.2509	1.7924	0.0626	1.6853	0.0385	1.7238	0.4623	0.0369	0.4991	6,560.979 8	6,560.979 8	0.2067			6,566.147 6	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1296	0.0866	0.7943	2.4200e-003	0.2938	1.6600e-003	0.2954	0.0779	1.5300e-003	0.0794	240.8623	240.8623	6.7400e-003			241.0307	
Total	0.4283	11.3375	2.5867	0.0650	1.9790	0.0402	2.0192	0.5402	0.0384	0.5785	6,801.842 1	6,801.842 1	0.2135			6,807.178 3	

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	12.6315	129.7056	131.2220	0.2184		6.6101	6.6101		6.0813	6.0813	21,148.42 95	21,148.42 95	6.8398			21,319.42 52	
Total	12.6315	129.7056	131.2220	0.2184		6.6101	6.6101		6.0813	6.0813	21,148.42 95	21,148.42 95	6.8398			21,319.42 52	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0278	0.8444	0.2136	2.6300e-003	0.0613	1.1300e-003	0.0625	0.0177	1.0800e-003	0.0187	274.7653	274.7653	0.0266			275.4304	
Worker	0.1465	0.0979	0.8979	2.7300e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898	272.2792	272.2792	7.6100e-003			272.4695	
Total	0.1742	0.9424	1.1115	5.3600e-003	0.3934	3.0000e-003	0.3964	0.1057	2.8100e-003	0.1085	547.0444	547.0444	0.0342			547.8999	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.6757	11.5948	145.1960	0.2184		0.3568	0.3568		0.3568	0.3568	0.0000	21,148.42 95	21,148.42 95	6.8398		21,319.42 52	
Total	2.6757	11.5948	145.1960	0.2184		0.3568	0.3568		0.3568	0.3568	0.0000	21,148.42 95	21,148.42 95	6.8398		21,319.42 52	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0278	0.8444	0.2136	2.6300e-003	0.0613	1.1300e-003	0.0625	0.0177	1.0800e-003	0.0187	274.7653	274.7653	0.0266			275.4304	
Worker	0.1465	0.0979	0.8979	2.7300e-003	0.3321	1.8700e-003	0.3340	0.0881	1.7300e-003	0.0898	272.2792	272.2792	7.6100e-003			272.4695	
Total	0.1742	0.9424	1.1115	5.3600e-003	0.3934	3.0000e-003	0.3964	0.1057	2.8100e-003	0.1085	547.0444	547.0444	0.0342			547.8999	

**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	11.7808	119.1344	129.8893	0.2185		5.8804	5.8804		5.4100	5.4100	21,157.92 29	21,157.92 29	6.8429			21,328.99 54	
Total	11.7808	119.1344	129.8893	0.2185		5.8804	5.8804		5.4100	5.4100	21,157.92 29	21,157.92 29	6.8429			21,328.99 54	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0221	0.6547	0.1795	2.5700e-003	0.0613	5.8000e-004	0.0619	0.0177	5.6000e-004	0.0182	267.9737	267.9737	0.0193			268.4551	
Worker	0.1372	0.0878	0.8156	2.6300e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897	262.0397	262.0397	6.7800e-003			262.2090	
Total	0.1592	0.7425	0.9950	5.2000e-003	0.3934	2.4000e-003	0.3958	0.1057	2.2300e-003	0.1080		530.0133	530.0133	0.0260			530.6641

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.6757	11.5948	145.1960	0.2185		0.3568	0.3568		0.3568	0.3568	0.0000	21,157.92 29	21,157.92 29	6.8429		21,328.99 54	
Total	2.6757	11.5948	145.1960	0.2185		0.3568	0.3568		0.3568	0.3568	0.0000	21,157.92 29	21,157.92 29	6.8429		21,328.99 54	

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0221	0.6547	0.1795	2.5700e-003	0.0613	5.8000e-004	0.0619	0.0177	5.6000e-004	0.0182	267.9737	267.9737	0.0193			268.4551	
Worker	0.1372	0.0878	0.8156	2.6300e-003	0.3321	1.8200e-003	0.3339	0.0881	1.6700e-003	0.0897	262.0397	262.0397	6.7800e-003			262.2090	
Total	0.1592	0.7425	0.9950	5.2000e-003	0.3934	2.4000e-003	0.3958	0.1057	2.2300e-003	0.1080		530.0133	530.0133	0.0260		530.6641	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.191 8	4,791.191 8	0.2816		4,798.232 6		
Unmitigated	0.8594	6.3108	9.8300	0.0468	3.5374	0.0261	3.5635	0.9466	0.0244	0.9710	4,791.191 8	4,791.191 8	0.2816		4,798.232 6		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	428.24	81.10	41.78	1,249,591	1,249,591	1,249,591	1,249,591
Total	428.24	81.10	41.78	1,249,591	1,249,591	1,249,591	1,249,591

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545462	0.034783	0.175214	0.104547	0.016326	0.005139	0.008963	0.095912	0.001419	0.002092	0.008487	0.000707	0.000948

**5.0 Energy Detail**

Historical Energy Use: N

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

## 5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0506	0.4601	0.3865	2.7600e-003			0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101	555.4392
NaturalGas Unmitigated	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118	647.2354

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	5469	0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118	647.2354
Total		0.0590	0.5362	0.4504	3.2200e-003			0.0408	0.0408		0.0408	0.0408	643.4120	643.4120	0.0123	0.0118	647.2354

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4.69334	0.0506	0.4601	0.3865	2.7600e-003		0.0350	0.0350		0.0350	0.0350	552.1580	552.1580	0.0106	0.0101	555.4392	
<b>Total</b>		<b>0.0506</b>	<b>0.4601</b>	<b>0.3865</b>	<b>2.7600e-003</b>		<b>0.0350</b>	<b>0.0350</b>		<b>0.0350</b>	<b>0.0350</b>		<b>552.1580</b>	<b>552.1580</b>	<b>0.0106</b>	<b>0.0101</b>	<b>555.4392</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
Unmitigated	1.7055	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143

## Lockhart Solar II Construction\_Only Run\_6 - Mojave Desert AQMD Air District, Winter

**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	0.3901						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.7055</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**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	0.3901						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	1.3148						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.2700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0135	0.0135	4.0000e-005		0.0143
<b>Total</b>	<b>1.7055</b>	<b>6.0000e-005</b>	<b>6.2700e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>0.0135</b>	<b>0.0135</b>	<b>4.0000e-005</b>		<b>0.0143</b>

**7.0 Water Detail**

## 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

**Lockhart Solar Project II Operation\_Only**  
**Mojave Desert AQMD Air District, Summer**

## 1.0 Project Characteristics

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### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	534	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

### 1.3 User Entered Comments & Non-Default Data

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

## Project Characteristics - PER SCE 2019 Sustainability Report

Land Use -

Construction Phase - operation run

Off-road Equipment - operation run

Grading - operation run

Trips and VMT - operation run

On-road Fugitive Dust - operation run

Vehicle Trips - Total 40 trips per year

Vehicle Emission Factors - EMFAC 2017

Vehicle Emission Factors - EMFAC 2017

Vehicle Emission Factors - EMFAC 2017

Energy Use - No energy use

Water And Wastewater - 4.5 af = 1466329.5 gallon

Solid Waste - no solid waste

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	0.00
tblConstructionPhase	PhaseEndDate	3/8/2022	3/7/2022
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialMoistureContentBulldozing	7.90	0.00
tblGrading	MaterialMoistureContentTruckLoading	12.00	0.00
tblGrading	MaterialSiltContent	6.90	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblVehicleEF	HHD	1.43	0.03
tblVehicleEF	HHD	2.4200e-003	0.06
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	2.97	8.67
tblVehicleEF	HHD	0.26	0.33
tblVehicleEF	HHD	1.20	2.3220e-003
tblVehicleEF	HHD	9,146.03	1,424.58
tblVehicleEF	HHD	1,337.11	1,311.47
tblVehicleEF	HHD	3.58	0.02
tblVehicleEF	HHD	24.65	7.12
tblVehicleEF	HHD	0.75	2.15
tblVehicleEF	HHD	20.43	2.33
tblVehicleEF	HHD	3.4380e-003	3.0350e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	4.8050e-003	0.03
tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	3.2900e-003	2.9040e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9670e-003	8.9160e-003
tblVehicleEF	HHD	4.5970e-003	0.02
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	1.9530e-003	8.8000e-005
tblVehicleEF	HHD	0.80	0.58
tblVehicleEF	HHD	3.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	1.1200e-004	3.6000e-005
tblVehicleEF	HHD	0.03	1.0000e-006
tblVehicleEF	HHD	0.09	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	5.6000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	1.9530e-003	8.8000e-005
tblVehicleEF	HHD	0.92	0.67
tblVehicleEF	HHD	3.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.04	0.08
tblVehicleEF	HHD	1.1200e-004	3.6000e-005
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.35	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	HHD	2.4330e-003	0.06
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.16	8.55
tblVehicleEF	HHD	0.26	0.33
tblVehicleEF	HHD	1.11	2.1790e-003
tblVehicleEF	HHD	9,689.41	1,406.97
tblVehicleEF	HHD	1,337.11	1,311.48
tblVehicleEF	HHD	3.58	0.02
tblVehicleEF	HHD	25.44	6.79
tblVehicleEF	HHD	0.70	2.03
tblVehicleEF	HHD	20.43	2.33
tblVehicleEF	HHD	2.8990e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	4.8050e-003	0.03
tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	2.7740e-003	2.5570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9670e-003	8.9160e-003
tblVehicleEF	HHD	4.5970e-003	0.02
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	1.2100e-004	6.0000e-006
tblVehicleEF	HHD	2.3300e-003	1.0300e-004
tblVehicleEF	HHD	0.76	0.62
tblVehicleEF	HHD	8.4000e-005	4.0000e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	1.1600e-004	3.7000e-005

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	HHD	0.03	1.0000e-006
tblVehicleEF	HHD	0.09	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	5.4000e-005	0.00
tblVehicleEF	HHD	1.2100e-004	6.0000e-006
tblVehicleEF	HHD	2.3300e-003	1.0300e-004
tblVehicleEF	HHD	0.86	0.71
tblVehicleEF	HHD	8.4000e-005	4.0000e-006
tblVehicleEF	HHD	0.04	0.08
tblVehicleEF	HHD	1.1600e-004	3.7000e-005
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.54	0.03
tblVehicleEF	HHD	2.4220e-003	0.06
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	4.09	8.83
tblVehicleEF	HHD	0.26	0.33
tblVehicleEF	HHD	1.17	2.2920e-003
tblVehicleEF	HHD	8,395.65	1,448.88
tblVehicleEF	HHD	1,337.11	1,311.47
tblVehicleEF	HHD	3.58	0.02
tblVehicleEF	HHD	23.56	7.59
tblVehicleEF	HHD	0.74	2.12
tblVehicleEF	HHD	20.43	2.33
tblVehicleEF	HHD	4.1830e-003	3.5360e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	4.8050e-003	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	4.0020e-003	3.3830e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9670e-003	8.9160e-003
tblVehicleEF	HHD	4.5970e-003	0.02
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	5.8000e-005	3.0000e-006
tblVehicleEF	HHD	2.1540e-003	1.0400e-004
tblVehicleEF	HHD	0.87	0.54
tblVehicleEF	HHD	2.8000e-005	2.0000e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	1.2000e-004	3.8000e-005
tblVehicleEF	HHD	0.03	1.0000e-006
tblVehicleEF	HHD	0.08	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	5.5000e-005	0.00
tblVehicleEF	HHD	5.8000e-005	3.0000e-006
tblVehicleEF	HHD	2.1540e-003	1.0400e-004
tblVehicleEF	HHD	0.99	0.62
tblVehicleEF	HHD	2.8000e-005	2.0000e-006
tblVehicleEF	HHD	0.04	0.08
tblVehicleEF	HHD	1.2000e-004	3.8000e-005
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.8420e-003	2.1370e-003
tblVehicleEF	LDA	5.4110e-003	0.05
tblVehicleEF	LDA	0.52	0.60
tblVehicleEF	LDA	1.18	2.09

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDA	236.14	256.62
tblVehicleEF	LDA	54.91	52.89
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.08	0.17
tblVehicleEF	LDA	1.5110e-003	1.3790e-003
tblVehicleEF	LDA	2.2680e-003	1.7810e-003
tblVehicleEF	LDA	1.3920e-003	1.2700e-003
tblVehicleEF	LDA	2.0860e-003	1.6370e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.6430e-003	8.0160e-003
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3650e-003	2.5070e-003
tblVehicleEF	LDA	5.6900e-004	5.1700e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	4.4780e-003	2.4510e-003
tblVehicleEF	LDA	4.4060e-003	0.04
tblVehicleEF	LDA	0.66	0.74
tblVehicleEF	LDA	0.97	1.74
tblVehicleEF	LDA	261.78	280.21

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDA	54.91	52.21
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.5110e-003	1.3790e-003
tblVehicleEF	LDA	2.2680e-003	1.7810e-003
tblVehicleEF	LDA	1.3920e-003	1.2700e-003
tblVehicleEF	LDA	2.0860e-003	1.6370e-003
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.01	9.0940e-003
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.6230e-003	2.7380e-003
tblVehicleEF	LDA	5.6500e-004	5.1000e-004
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	3.7040e-003	2.0850e-003
tblVehicleEF	LDA	5.2730e-003	0.05
tblVehicleEF	LDA	0.48	0.57
tblVehicleEF	LDA	1.13	2.06
tblVehicleEF	LDA	228.76	251.09
tblVehicleEF	LDA	54.91	52.83

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.08	0.17
tblVehicleEF	LDA	1.5110e-003	1.3790e-003
tblVehicleEF	LDA	2.2680e-003	1.7810e-003
tblVehicleEF	LDA	1.3920e-003	1.2700e-003
tblVehicleEF	LDA	2.0860e-003	1.6370e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	9.3000e-003	7.8090e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.2900e-003	2.4530e-003
tblVehicleEF	LDA	5.6800e-004	5.1600e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDT1	0.01	6.0730e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.40	1.27
tblVehicleEF	LDT1	3.66	2.35
tblVehicleEF	LDT1	296.40	304.65
tblVehicleEF	LDT1	69.01	64.36
tblVehicleEF	LDT1	0.17	0.11

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDT1	0.22	0.28
tblVehicleEF	LDT1	2.2950e-003	2.0140e-003
tblVehicleEF	LDT1	3.5260e-003	2.6470e-003
tblVehicleEF	LDT1	2.1140e-003	1.8530e-003
tblVehicleEF	LDT1	3.2420e-003	2.4340e-003
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.26	0.39
tblVehicleEF	LDT1	2.9820e-003	2.9770e-003
tblVehicleEF	LDT1	7.5500e-004	6.2900e-004
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.28	0.43
tblVehicleEF	LDT1	0.02	6.8930e-003
tblVehicleEF	LDT1	0.02	0.06
tblVehicleEF	LDT1	1.73	1.54
tblVehicleEF	LDT1	3.00	1.95
tblVehicleEF	LDT1	327.18	329.24
tblVehicleEF	LDT1	69.01	63.50
tblVehicleEF	LDT1	0.15	0.10
tblVehicleEF	LDT1	0.21	0.26

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDT1	2.2950e-003	2.0140e-003
tblVehicleEF	LDT1	3.5260e-003	2.6470e-003
tblVehicleEF	LDT1	2.1140e-003	1.8530e-003
tblVehicleEF	LDT1	3.2420e-003	2.4340e-003
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.42	0.30
tblVehicleEF	LDT1	0.30	0.27
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.21	0.33
tblVehicleEF	LDT1	3.2950e-003	3.2180e-003
tblVehicleEF	LDT1	7.4300e-004	6.2100e-004
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.42	0.30
tblVehicleEF	LDT1	0.30	0.27
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.23	0.36
tblVehicleEF	LDT1	0.01	5.9330e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.31	1.21
tblVehicleEF	LDT1	3.50	2.31
tblVehicleEF	LDT1	287.55	298.83
tblVehicleEF	LDT1	69.01	64.28
tblVehicleEF	LDT1	0.16	0.10
tblVehicleEF	LDT1	0.22	0.27
tblVehicleEF	LDT1	2.2950e-003	2.0140e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDT1	3.5260e-003	2.6470e-003
tblVehicleEF	LDT1	2.1140e-003	1.8530e-003
tblVehicleEF	LDT1	3.2420e-003	2.4340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.37	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	0.12
tblVehicleEF	LDT1	0.25	0.39
tblVehicleEF	LDT1	2.8920e-003	2.9200e-003
tblVehicleEF	LDT1	7.5200e-004	6.2800e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.37	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.23	0.12
tblVehicleEF	LDT1	0.27	0.42
tblVehicleEF	LDT2	5.9250e-003	3.7960e-003
tblVehicleEF	LDT2	8.2720e-003	0.07
tblVehicleEF	LDT2	0.73	0.89
tblVehicleEF	LDT2	1.69	2.69
tblVehicleEF	LDT2	331.93	323.22
tblVehicleEF	LDT2	76.99	68.56
tblVehicleEF	LDT2	0.09	0.08
tblVehicleEF	LDT2	0.15	0.28
tblVehicleEF	LDT2	1.5700e-003	1.4520e-003
tblVehicleEF	LDT2	2.4400e-003	1.8710e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDT2	1.4430e-003	1.3370e-003
tblVehicleEF	LDT2	2.2430e-003	1.7200e-003
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.11	0.32
tblVehicleEF	LDT2	3.3250e-003	3.1580e-003
tblVehicleEF	LDT2	7.9900e-004	6.7000e-004
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.12	0.35
tblVehicleEF	LDT2	6.8820e-003	4.3360e-003
tblVehicleEF	LDT2	6.7320e-003	0.06
tblVehicleEF	LDT2	0.92	1.08
tblVehicleEF	LDT2	1.39	2.22
tblVehicleEF	LDT2	367.14	346.91
tblVehicleEF	LDT2	76.99	67.64
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.14	0.26
tblVehicleEF	LDT2	1.5700e-003	1.4520e-003
tblVehicleEF	LDT2	2.4400e-003	1.8710e-003
tblVehicleEF	LDT2	1.4430e-003	1.3370e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDT2	2.2430e-003	1.7200e-003
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.13	0.17
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.09	0.27
tblVehicleEF	LDT2	3.6800e-003	3.3900e-003
tblVehicleEF	LDT2	7.9300e-004	6.6100e-004
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.13	0.17
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.10	0.29
tblVehicleEF	LDT2	5.7150e-003	3.7060e-003
tblVehicleEF	LDT2	8.0550e-003	0.07
tblVehicleEF	LDT2	0.67	0.84
tblVehicleEF	LDT2	1.62	2.64
tblVehicleEF	LDT2	321.80	317.60
tblVehicleEF	LDT2	76.99	68.48
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.14	0.28
tblVehicleEF	LDT2	1.5700e-003	1.4520e-003
tblVehicleEF	LDT2	2.4400e-003	1.8710e-003
tblVehicleEF	LDT2	1.4430e-003	1.3370e-003
tblVehicleEF	LDT2	2.2430e-003	1.7200e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.11	0.32
tblVehicleEF	LDT2	3.2230e-003	3.1030e-003
tblVehicleEF	LDT2	7.9700e-004	6.6900e-004
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.12	0.35
tblVehicleEF	LHD1	4.8410e-003	4.7400e-003
tblVehicleEF	LHD1	0.01	5.8910e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.16	0.80
tblVehicleEF	LHD1	2.52	1.00
tblVehicleEF	LHD1	9.34	9.29
tblVehicleEF	LHD1	604.29	639.64
tblVehicleEF	LHD1	28.15	10.59
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.38	1.40
tblVehicleEF	LHD1	0.93	0.30
tblVehicleEF	LHD1	1.0450e-003	9.6300e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD1	0.01	9.9840e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.2500e-004	2.5100e-004
tblVehicleEF	LHD1	1.0000e-003	9.2200e-004
tblVehicleEF	LHD1	2.5730e-003	2.4960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.5000e-004	2.3100e-004
tblVehicleEF	LHD1	3.8990e-003	3.0110e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7570e-003	1.4760e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.38	0.23
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.3000e-005	9.0000e-005
tblVehicleEF	LHD1	5.9200e-003	6.2250e-003
tblVehicleEF	LHD1	3.2900e-004	1.0500e-004
tblVehicleEF	LHD1	3.8990e-003	3.0110e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7570e-003	1.4760e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.38	0.23
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	4.8410e-003	4.7550e-003
tblVehicleEF	LHD1	0.01	6.0290e-003
tblVehicleEF	LHD1	0.02	0.01

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.18	0.82
tblVehicleEF	LHD1	2.33	0.93
tblVehicleEF	LHD1	9.34	9.29
tblVehicleEF	LHD1	604.29	639.67
tblVehicleEF	LHD1	28.15	10.48
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.23	1.31
tblVehicleEF	LHD1	0.88	0.28
tblVehicleEF	LHD1	1.0450e-003	9.6300e-004
tblVehicleEF	LHD1	0.01	9.9840e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.2500e-004	2.5100e-004
tblVehicleEF	LHD1	1.0000e-003	9.2200e-004
tblVehicleEF	LHD1	2.5730e-003	2.4960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.5000e-004	2.3100e-004
tblVehicleEF	LHD1	8.4080e-003	5.9530e-003
tblVehicleEF	LHD1	0.14	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	4.6370e-003	3.3570e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.39	0.23
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.3000e-005	9.0000e-005
tblVehicleEF	LHD1	5.9210e-003	6.2250e-003
tblVehicleEF	LHD1	3.2500e-004	1.0400e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD1	8.4080e-003	5.9530e-003
tblVehicleEF	LHD1	0.14	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	4.6370e-003	3.3570e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.39	0.23
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	4.8410e-003	4.7430e-003
tblVehicleEF	LHD1	0.01	5.9060e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.17	0.80
tblVehicleEF	LHD1	2.45	0.98
tblVehicleEF	LHD1	9.34	9.29
tblVehicleEF	LHD1	604.29	639.64
tblVehicleEF	LHD1	28.15	10.56
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.34	1.37
tblVehicleEF	LHD1	0.91	0.29
tblVehicleEF	LHD1	1.0450e-003	9.6300e-004
tblVehicleEF	LHD1	0.01	9.9840e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.2500e-004	2.5100e-004
tblVehicleEF	LHD1	1.0000e-003	9.2200e-004
tblVehicleEF	LHD1	2.5730e-003	2.4960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.5000e-004	2.3100e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD1	4.4590e-003	3.3060e-003
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6670e-003	1.4540e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.41	0.25
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.3000e-005	9.0000e-005
tblVehicleEF	LHD1	5.9200e-003	6.2250e-003
tblVehicleEF	LHD1	3.2800e-004	1.0500e-004
tblVehicleEF	LHD1	4.4590e-003	3.3060e-003
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6670e-003	1.4540e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.41	0.25
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.0870e-003	3.2120e-003
tblVehicleEF	LHD2	3.9950e-003	3.8080e-003
tblVehicleEF	LHD2	6.5230e-003	8.8900e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.51
tblVehicleEF	LHD2	1.03	0.59
tblVehicleEF	LHD2	14.62	14.47
tblVehicleEF	LHD2	590.32	639.77
tblVehicleEF	LHD2	21.16	7.60
tblVehicleEF	LHD2	0.12	0.11

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD2	1.56	1.50
tblVehicleEF	LHD2	0.43	0.19
tblVehicleEF	LHD2	1.3500e-003	1.4160e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5400e-004	1.2000e-004
tblVehicleEF	LHD2	1.2920e-003	1.3540e-003
tblVehicleEF	LHD2	2.7200e-003	2.6970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.2500e-004	1.1000e-004
tblVehicleEF	LHD2	1.1090e-003	1.4710e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.5100e-004	7.7000e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.4200e-004	1.3800e-004
tblVehicleEF	LHD2	5.7320e-003	6.1710e-003
tblVehicleEF	LHD2	2.3000e-004	7.5000e-005
tblVehicleEF	LHD2	1.1090e-003	1.4710e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.5100e-004	7.7000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.10	0.05

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD2	3.0870e-003	3.2210e-003
tblVehicleEF	LHD2	4.0530e-003	3.8460e-003
tblVehicleEF	LHD2	6.1740e-003	8.4910e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.51	0.51
tblVehicleEF	LHD2	0.95	0.55
tblVehicleEF	LHD2	14.62	14.47
tblVehicleEF	LHD2	590.32	639.78
tblVehicleEF	LHD2	21.16	7.54
tblVehicleEF	LHD2	0.12	0.11
tblVehicleEF	LHD2	1.47	1.41
tblVehicleEF	LHD2	0.41	0.18
tblVehicleEF	LHD2	1.3500e-003	1.4160e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5400e-004	1.2000e-004
tblVehicleEF	LHD2	1.2920e-003	1.3540e-003
tblVehicleEF	LHD2	2.7200e-003	2.6970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.2500e-004	1.1000e-004
tblVehicleEF	LHD2	2.3660e-003	2.8510e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4270e-003	1.6830e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.08	0.04

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD2	1.4200e-004	1.3800e-004
tblVehicleEF	LHD2	5.7320e-003	6.1710e-003
tblVehicleEF	LHD2	2.2900e-004	7.5000e-005
tblVehicleEF	LHD2	2.3660e-003	2.8510e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4270e-003	1.6830e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	3.0870e-003	3.2130e-003
tblVehicleEF	LHD2	4.0040e-003	3.8130e-003
tblVehicleEF	LHD2	6.4260e-003	8.8150e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.51
tblVehicleEF	LHD2	1.00	0.58
tblVehicleEF	LHD2	14.62	14.47
tblVehicleEF	LHD2	590.32	639.77
tblVehicleEF	LHD2	21.16	7.59
tblVehicleEF	LHD2	0.12	0.11
tblVehicleEF	LHD2	1.54	1.47
tblVehicleEF	LHD2	0.42	0.19
tblVehicleEF	LHD2	1.3500e-003	1.4160e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5400e-004	1.2000e-004
tblVehicleEF	LHD2	1.2920e-003	1.3540e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	LHD2	2.7200e-003	2.6970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.2500e-004	1.1000e-004
tblVehicleEF	LHD2	1.1910e-003	1.5290e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1400e-004	7.5000e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.08	0.11
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.4200e-004	1.3800e-004
tblVehicleEF	LHD2	5.7320e-003	6.1710e-003
tblVehicleEF	LHD2	2.3000e-004	7.5000e-005
tblVehicleEF	LHD2	1.1910e-003	1.5290e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1400e-004	7.5000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.11
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	MCY	0.41	0.33
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	20.89	20.35
tblVehicleEF	MCY	10.17	8.81
tblVehicleEF	MCY	165.43	210.81
tblVehicleEF	MCY	46.38	61.22
tblVehicleEF	MCY	1.18	1.16

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	1.8100e-003	1.8550e-003
tblVehicleEF	MCY	3.6520e-003	2.9310e-003
tblVehicleEF	MCY	1.6940e-003	1.7350e-003
tblVehicleEF	MCY	3.4440e-003	2.7590e-003
tblVehicleEF	MCY	1.52	1.45
tblVehicleEF	MCY	0.88	0.83
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	2.14	2.21
tblVehicleEF	MCY	0.38	0.41
tblVehicleEF	MCY	2.21	1.89
tblVehicleEF	MCY	2.0560e-003	2.0860e-003
tblVehicleEF	MCY	6.9500e-004	6.0600e-004
tblVehicleEF	MCY	1.52	1.45
tblVehicleEF	MCY	0.88	0.83
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	2.63	2.72
tblVehicleEF	MCY	0.38	0.41
tblVehicleEF	MCY	2.41	2.06
tblVehicleEF	MCY	0.40	0.32
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	21.16	20.49
tblVehicleEF	MCY	9.15	7.97
tblVehicleEF	MCY	165.43	210.83
tblVehicleEF	MCY	46.38	58.99
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MCY	1.8100e-003	1.8550e-003
tblVehicleEF	MCY	3.6520e-003	2.9310e-003
tblVehicleEF	MCY	1.6940e-003	1.7350e-003
tblVehicleEF	MCY	3.4440e-003	2.7590e-003
tblVehicleEF	MCY	3.66	3.14
tblVehicleEF	MCY	1.46	1.27
tblVehicleEF	MCY	2.58	2.11
tblVehicleEF	MCY	2.09	2.16
tblVehicleEF	MCY	0.39	0.41
tblVehicleEF	MCY	1.87	1.62
tblVehicleEF	MCY	2.0590e-003	2.0860e-003
tblVehicleEF	MCY	6.6800e-004	5.8400e-004
tblVehicleEF	MCY	3.66	3.14
tblVehicleEF	MCY	1.46	1.27
tblVehicleEF	MCY	2.58	2.11
tblVehicleEF	MCY	2.56	2.65
tblVehicleEF	MCY	0.39	0.41
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.40	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.73	19.44
tblVehicleEF	MCY	9.54	8.46
tblVehicleEF	MCY	165.43	209.24
tblVehicleEF	MCY	46.38	60.43
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8100e-003	1.8550e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MCY	3.6520e-003	2.9310e-003
tblVehicleEF	MCY	1.6940e-003	1.7350e-003
tblVehicleEF	MCY	3.4440e-003	2.7590e-003
tblVehicleEF	MCY	1.91	1.70
tblVehicleEF	MCY	1.20	1.11
tblVehicleEF	MCY	0.71	0.71
tblVehicleEF	MCY	2.10	2.18
tblVehicleEF	MCY	0.44	0.47
tblVehicleEF	MCY	2.08	1.82
tblVehicleEF	MCY	2.0370e-003	2.0710e-003
tblVehicleEF	MCY	6.8100e-004	5.9800e-004
tblVehicleEF	MCY	1.91	1.70
tblVehicleEF	MCY	1.20	1.11
tblVehicleEF	MCY	0.71	0.71
tblVehicleEF	MCY	2.58	2.68
tblVehicleEF	MCY	0.44	0.47
tblVehicleEF	MCY	2.27	1.98
tblVehicleEF	MDV	0.01	4.8920e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.25	1.03
tblVehicleEF	MDV	3.24	3.16
tblVehicleEF	MDV	460.86	403.07
tblVehicleEF	MDV	104.76	85.11
tblVehicleEF	MDV	0.19	0.10
tblVehicleEF	MDV	0.34	0.35
tblVehicleEF	MDV	1.6900e-003	1.5480e-003
tblVehicleEF	MDV	2.5080e-003	1.9490e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MDV	1.5590e-003	1.4280e-003
tblVehicleEF	MDV	2.3060e-003	1.7920e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.17
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.25	0.41
tblVehicleEF	MDV	4.6180e-003	3.9360e-003
tblVehicleEF	MDV	1.1050e-003	8.3200e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.17
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.27	0.45
tblVehicleEF	MDV	0.01	5.5990e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.57	1.25
tblVehicleEF	MDV	2.66	2.61
tblVehicleEF	MDV	508.28	428.20
tblVehicleEF	MDV	104.76	84.00
tblVehicleEF	MDV	0.17	0.09
tblVehicleEF	MDV	0.32	0.33
tblVehicleEF	MDV	1.6900e-003	1.5480e-003
tblVehicleEF	MDV	2.5080e-003	1.9490e-003
tblVehicleEF	MDV	1.5590e-003	1.4280e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MDV	2.3060e-003	1.7920e-003
tblVehicleEF	MDV	0.23	0.23
tblVehicleEF	MDV	0.24	0.19
tblVehicleEF	MDV	0.20	0.21
tblVehicleEF	MDV	0.04	0.02
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.20	0.35
tblVehicleEF	MDV	5.0960e-003	4.1820e-003
tblVehicleEF	MDV	1.0940e-003	8.2100e-004
tblVehicleEF	MDV	0.23	0.23
tblVehicleEF	MDV	0.24	0.19
tblVehicleEF	MDV	0.20	0.21
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.22	0.38
tblVehicleEF	MDV	0.01	4.7660e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.16	0.97
tblVehicleEF	MDV	3.09	3.11
tblVehicleEF	MDV	447.25	397.12
tblVehicleEF	MDV	104.76	85.02
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.33	0.35
tblVehicleEF	MDV	1.6900e-003	1.5480e-003
tblVehicleEF	MDV	2.5080e-003	1.9490e-003
tblVehicleEF	MDV	1.5590e-003	1.4280e-003
tblVehicleEF	MDV	2.3060e-003	1.7920e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.14	0.07
tblVehicleEF	MDV	0.24	0.41
tblVehicleEF	MDV	4.4800e-003	3.8780e-003
tblVehicleEF	MDV	1.1020e-003	8.3100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.14	0.07
tblVehicleEF	MDV	0.26	0.45
tblVehicleEF	MH	0.03	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	3.22	1.31
tblVehicleEF	MH	6.46	2.12
tblVehicleEF	MH	971.20	1,476.34
tblVehicleEF	MH	59.05	18.76
tblVehicleEF	MH	1.56	1.55
tblVehicleEF	MH	0.93	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.1810e-003	2.5200e-004
tblVehicleEF	MH	3.2260e-003	3.2820e-003
tblVehicleEF	MH	0.04	0.04

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MH	1.0860e-003	2.3200e-004
tblVehicleEF	MH	1.55	1.13
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.37	0.10
tblVehicleEF	MH	9.6550e-003	0.01
tblVehicleEF	MH	7.0300e-004	1.8600e-004
tblVehicleEF	MH	1.55	1.13
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.14	0.08
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.41	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	3.36	1.36
tblVehicleEF	MH	5.78	1.94
tblVehicleEF	MH	971.20	1,476.41
tblVehicleEF	MH	59.05	18.45
tblVehicleEF	MH	1.42	1.43
tblVehicleEF	MH	0.88	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.1810e-003	2.5200e-004
tblVehicleEF	MH	3.2260e-003	3.2820e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.0860e-003	2.3200e-004
tblVehicleEF	MH	3.36	2.24
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.37	0.95
tblVehicleEF	MH	0.11	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.34	0.09
tblVehicleEF	MH	9.6580e-003	0.01
tblVehicleEF	MH	6.9100e-004	1.8300e-004
tblVehicleEF	MH	3.36	2.24
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.37	0.95
tblVehicleEF	MH	0.15	0.09
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.38	0.10
tblVehicleEF	MH	0.03	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	3.24	1.32
tblVehicleEF	MH	6.30	2.10
tblVehicleEF	MH	971.20	1,476.34
tblVehicleEF	MH	59.05	18.73
tblVehicleEF	MH	1.52	1.52
tblVehicleEF	MH	0.91	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.1810e-003	2.5200e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MH	3.2260e-003	3.2820e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.0860e-003	2.3200e-004
tblVehicleEF	MH	1.91	1.31
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.37	0.10
tblVehicleEF	MH	9.6560e-003	0.01
tblVehicleEF	MH	7.0000e-004	1.8500e-004
tblVehicleEF	MH	1.91	1.31
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.14	0.08
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.40	0.11
tblVehicleEF	MHD	0.02	3.1530e-003
tblVehicleEF	MHD	4.3060e-003	1.3810e-003
tblVehicleEF	MHD	0.05	8.3340e-003
tblVehicleEF	MHD	0.42	0.34
tblVehicleEF	MHD	0.29	0.18
tblVehicleEF	MHD	7.01	0.93
tblVehicleEF	MHD	105.80	65.85
tblVehicleEF	MHD	1,012.07	964.19
tblVehicleEF	MHD	74.31	8.18
tblVehicleEF	MHD	0.27	0.37

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MHD	0.34	0.98
tblVehicleEF	MHD	7.99	1.74
tblVehicleEF	MHD	9.3000e-005	3.3600e-004
tblVehicleEF	MHD	2.2990e-003	7.7530e-003
tblVehicleEF	MHD	1.0510e-003	9.6000e-005
tblVehicleEF	MHD	8.9000e-005	3.2200e-004
tblVehicleEF	MHD	2.1910e-003	7.4140e-003
tblVehicleEF	MHD	9.6600e-004	8.9000e-005
tblVehicleEF	MHD	1.7710e-003	5.4500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.4400e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.42	0.04
tblVehicleEF	MHD	1.0240e-003	6.2500e-004
tblVehicleEF	MHD	9.7600e-003	9.1890e-003
tblVehicleEF	MHD	8.6600e-004	8.1000e-005
tblVehicleEF	MHD	1.7710e-003	5.4500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.4400e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.46	0.05
tblVehicleEF	MHD	0.01	3.0020e-003
tblVehicleEF	MHD	4.4380e-003	1.4140e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MHD	0.04	7.9510e-003
tblVehicleEF	MHD	0.31	0.30
tblVehicleEF	MHD	0.29	0.19
tblVehicleEF	MHD	6.47	0.87
tblVehicleEF	MHD	112.04	65.73
tblVehicleEF	MHD	1,012.07	964.20
tblVehicleEF	MHD	74.31	8.08
tblVehicleEF	MHD	0.28	0.36
tblVehicleEF	MHD	0.31	0.92
tblVehicleEF	MHD	7.93	1.74
tblVehicleEF	MHD	7.9000e-005	2.8600e-004
tblVehicleEF	MHD	2.2990e-003	7.7530e-003
tblVehicleEF	MHD	1.0510e-003	9.6000e-005
tblVehicleEF	MHD	7.5000e-005	2.7400e-004
tblVehicleEF	MHD	2.1910e-003	7.4140e-003
tblVehicleEF	MHD	9.6600e-004	8.9000e-005
tblVehicleEF	MHD	3.8440e-003	1.0730e-003
tblVehicleEF	MHD	0.07	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	2.2730e-003	6.4100e-004
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	1.0830e-003	6.2400e-004
tblVehicleEF	MHD	9.7600e-003	9.1890e-003
tblVehicleEF	MHD	8.5700e-004	8.0000e-005
tblVehicleEF	MHD	3.8440e-003	1.0730e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MHD	0.07	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	2.2730e-003	6.4100e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.44	0.04
tblVehicleEF	MHD	0.02	3.3770e-003
tblVehicleEF	MHD	4.3290e-003	1.3840e-003
tblVehicleEF	MHD	0.05	8.2380e-003
tblVehicleEF	MHD	0.58	0.41
tblVehicleEF	MHD	0.29	0.18
tblVehicleEF	MHD	6.81	0.92
tblVehicleEF	MHD	97.16	66.01
tblVehicleEF	MHD	1,012.07	964.19
tblVehicleEF	MHD	74.31	8.16
tblVehicleEF	MHD	0.26	0.38
tblVehicleEF	MHD	0.34	0.96
tblVehicleEF	MHD	7.97	1.74
tblVehicleEF	MHD	1.1400e-004	4.0500e-004
tblVehicleEF	MHD	2.2990e-003	7.7530e-003
tblVehicleEF	MHD	1.0510e-003	9.6000e-005
tblVehicleEF	MHD	1.0900e-004	3.8700e-004
tblVehicleEF	MHD	2.1910e-003	7.4140e-003
tblVehicleEF	MHD	9.6600e-004	8.9000e-005
tblVehicleEF	MHD	1.9880e-003	5.8500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	MHD	7.8900e-004	2.7500e-004
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.42	0.04
tblVehicleEF	MHD	9.4400e-004	6.2600e-004
tblVehicleEF	MHD	9.7600e-003	9.1890e-003
tblVehicleEF	MHD	8.6200e-004	8.1000e-005
tblVehicleEF	MHD	1.9880e-003	5.8500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	7.8900e-004	2.7500e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.46	0.05
tblVehicleEF	OBUS	0.01	9.0500e-003
tblVehicleEF	OBUS	9.3640e-003	7.0260e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.25	0.49
tblVehicleEF	OBUS	0.55	0.84
tblVehicleEF	OBUS	6.11	2.67
tblVehicleEF	OBUS	46.32	64.20
tblVehicleEF	OBUS	1,007.78	1,447.03
tblVehicleEF	OBUS	72.05	21.60
tblVehicleEF	OBUS	0.07	0.22
tblVehicleEF	OBUS	0.28	0.89
tblVehicleEF	OBUS	1.51	0.65
tblVehicleEF	OBUS	7.0000e-006	7.5000e-005

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	OBUS	1.3370e-003	6.2060e-003
tblVehicleEF	OBUS	9.1200e-004	2.3200e-004
tblVehicleEF	OBUS	6.0000e-006	7.2000e-005
tblVehicleEF	OBUS	1.2540e-003	5.9170e-003
tblVehicleEF	OBUS	8.3800e-004	2.1400e-004
tblVehicleEF	OBUS	2.2600e-003	2.7710e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.8300e-004	1.1450e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.38	0.13
tblVehicleEF	OBUS	4.5500e-004	6.1300e-004
tblVehicleEF	OBUS	9.9630e-003	0.01
tblVehicleEF	OBUS	8.2800e-004	2.1400e-004
tblVehicleEF	OBUS	2.2600e-003	2.7710e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	8.8300e-004	1.1450e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.41	0.14
tblVehicleEF	OBUS	0.01	9.1220e-003
tblVehicleEF	OBUS	9.6740e-003	7.2340e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.49
tblVehicleEF	OBUS	0.57	0.86

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	OBUS	5.51	2.45
tblVehicleEF	OBUS	48.02	63.54
tblVehicleEF	OBUS	1,007.78	1,447.07
tblVehicleEF	OBUS	72.05	21.23
tblVehicleEF	OBUS	0.08	0.21
tblVehicleEF	OBUS	0.25	0.81
tblVehicleEF	OBUS	1.45	0.64
tblVehicleEF	OBUS	6.0000e-006	6.7000e-005
tblVehicleEF	OBUS	1.3370e-003	6.2060e-003
tblVehicleEF	OBUS	9.1200e-004	2.3200e-004
tblVehicleEF	OBUS	5.0000e-006	6.4000e-005
tblVehicleEF	OBUS	1.2540e-003	5.9170e-003
tblVehicleEF	OBUS	8.3800e-004	2.1400e-004
tblVehicleEF	OBUS	4.8050e-003	5.3950e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	2.3390e-003	2.6270e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.35	0.12
tblVehicleEF	OBUS	4.7100e-004	6.0700e-004
tblVehicleEF	OBUS	9.9630e-003	0.01
tblVehicleEF	OBUS	8.1700e-004	2.1000e-004
tblVehicleEF	OBUS	4.8050e-003	5.3950e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	2.3390e-003	2.6270e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	0.01	8.9910e-003
tblVehicleEF	OBUS	9.4210e-003	7.0490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.50
tblVehicleEF	OBUS	0.55	0.84
tblVehicleEF	OBUS	5.98	2.65
tblVehicleEF	OBUS	43.97	65.11
tblVehicleEF	OBUS	1,007.78	1,447.04
tblVehicleEF	OBUS	72.05	21.57
tblVehicleEF	OBUS	0.07	0.24
tblVehicleEF	OBUS	0.27	0.87
tblVehicleEF	OBUS	1.49	0.65
tblVehicleEF	OBUS	8.0000e-006	8.7000e-005
tblVehicleEF	OBUS	1.3370e-003	6.2060e-003
tblVehicleEF	OBUS	9.1200e-004	2.3200e-004
tblVehicleEF	OBUS	8.0000e-006	8.3000e-005
tblVehicleEF	OBUS	1.2540e-003	5.9170e-003
tblVehicleEF	OBUS	8.3800e-004	2.1400e-004
tblVehicleEF	OBUS	2.3740e-003	2.9680e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.4200e-004	1.1520e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.06	0.09

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	4.3200e-004	6.2200e-004
tblVehicleEF	OBUS	9.9630e-003	0.01
tblVehicleEF	OBUS	8.2500e-004	2.1300e-004
tblVehicleEF	OBUS	2.3740e-003	2.9680e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	8.4200e-004	1.1520e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.06	0.09
tblVehicleEF	OBUS	0.41	0.14
tblVehicleEF	SBUS	0.85	0.04
tblVehicleEF	SBUS	0.01	6.3500e-003
tblVehicleEF	SBUS	0.07	4.2050e-003
tblVehicleEF	SBUS	6.27	1.97
tblVehicleEF	SBUS	0.67	0.53
tblVehicleEF	SBUS	5.99	0.56
tblVehicleEF	SBUS	1,224.98	335.22
tblVehicleEF	SBUS	1,087.63	1,114.40
tblVehicleEF	SBUS	40.86	3.30
tblVehicleEF	SBUS	10.83	3.25
tblVehicleEF	SBUS	4.17	4.79
tblVehicleEF	SBUS	14.36	1.01
tblVehicleEF	SBUS	0.01	3.6370e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.4200e-004	3.1000e-005

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	SBUS	0.01	3.4800e-003
tblVehicleEF	SBUS	2.6840e-003	2.7580e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	5.9000e-004	2.8000e-005
tblVehicleEF	SBUS	3.1500e-003	7.0200e-004
tblVehicleEF	SBUS	0.02	5.3270e-003
tblVehicleEF	SBUS	0.75	0.21
tblVehicleEF	SBUS	1.2590e-003	3.4700e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	9.1520e-003	9.2300e-003
tblVehicleEF	SBUS	0.30	0.02
tblVehicleEF	SBUS	0.01	3.1870e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.1200e-004	3.3000e-005
tblVehicleEF	SBUS	3.1500e-003	7.0200e-004
tblVehicleEF	SBUS	0.02	5.3270e-003
tblVehicleEF	SBUS	1.07	0.29
tblVehicleEF	SBUS	1.2590e-003	3.4700e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	9.1520e-003	9.2300e-003
tblVehicleEF	SBUS	0.33	0.03
tblVehicleEF	SBUS	0.85	0.04
tblVehicleEF	SBUS	0.01	6.4280e-003
tblVehicleEF	SBUS	0.05	3.4810e-003
tblVehicleEF	SBUS	6.13	1.93
tblVehicleEF	SBUS	0.68	0.54
tblVehicleEF	SBUS	3.77	0.40

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	SBUS	1,285.78	342.54
tblVehicleEF	SBUS	1,087.63	1,114.41
tblVehicleEF	SBUS	40.86	3.03
tblVehicleEF	SBUS	11.18	3.32
tblVehicleEF	SBUS	3.89	4.49
tblVehicleEF	SBUS	14.32	1.01
tblVehicleEF	SBUS	8.8440e-003	3.0750e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.4200e-004	3.1000e-005
tblVehicleEF	SBUS	8.4620e-003	2.9420e-003
tblVehicleEF	SBUS	2.6840e-003	2.7580e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	5.9000e-004	2.8000e-005
tblVehicleEF	SBUS	6.6930e-003	1.2680e-003
tblVehicleEF	SBUS	0.02	5.5830e-003
tblVehicleEF	SBUS	0.75	0.21
tblVehicleEF	SBUS	3.3830e-003	6.7000e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	8.4100e-003	8.4450e-003
tblVehicleEF	SBUS	0.23	0.02
tblVehicleEF	SBUS	0.01	3.2560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7500e-004	3.0000e-005
tblVehicleEF	SBUS	6.6930e-003	1.2680e-003
tblVehicleEF	SBUS	0.02	5.5830e-003
tblVehicleEF	SBUS	1.07	0.29

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	SBUS	3.3830e-003	6.7000e-004
tblVehicleEF	SBUS	0.13	0.11
tblVehicleEF	SBUS	8.4100e-003	8.4450e-003
tblVehicleEF	SBUS	0.25	0.02
tblVehicleEF	SBUS	0.85	0.04
tblVehicleEF	SBUS	0.01	6.3460e-003
tblVehicleEF	SBUS	0.07	4.3050e-003
tblVehicleEF	SBUS	6.46	2.02
tblVehicleEF	SBUS	0.67	0.53
tblVehicleEF	SBUS	5.70	0.58
tblVehicleEF	SBUS	1,141.01	325.10
tblVehicleEF	SBUS	1,087.63	1,114.40
tblVehicleEF	SBUS	40.86	3.33
tblVehicleEF	SBUS	10.35	3.17
tblVehicleEF	SBUS	4.11	4.72
tblVehicleEF	SBUS	14.36	1.01
tblVehicleEF	SBUS	0.01	4.4140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.4200e-004	3.1000e-005
tblVehicleEF	SBUS	0.01	4.2230e-003
tblVehicleEF	SBUS	2.6840e-003	2.7580e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	5.9000e-004	2.8000e-005
tblVehicleEF	SBUS	3.2650e-003	6.6500e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	0.75	0.21

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	SBUS	1.1670e-003	3.4800e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.29	0.02
tblVehicleEF	SBUS	0.01	3.0910e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.0700e-004	3.3000e-005
tblVehicleEF	SBUS	3.2650e-003	6.6500e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	1.08	0.29
tblVehicleEF	SBUS	1.1670e-003	3.4800e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.32	0.03
tblVehicleEF	UBUS	1.78	4.19
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	9.01	32.68
tblVehicleEF	UBUS	13.70	1.41
tblVehicleEF	UBUS	1,833.84	1,722.05
tblVehicleEF	UBUS	130.67	16.73
tblVehicleEF	UBUS	5.34	0.37
tblVehicleEF	UBUS	13.69	0.16
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.6960e-003
tblVehicleEF	UBUS	1.2770e-003	1.9800e-004
tblVehicleEF	UBUS	0.22	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	UBUS	3.0000e-003	6.3130e-003
tblVehicleEF	UBUS	0.05	2.5630e-003
tblVehicleEF	UBUS	1.1750e-003	1.8200e-004
tblVehicleEF	UBUS	7.9640e-003	1.1340e-003
tblVehicleEF	UBUS	0.10	8.4390e-003
tblVehicleEF	UBUS	3.5410e-003	6.6300e-004
tblVehicleEF	UBUS	0.61	0.06
tblVehicleEF	UBUS	0.02	1.0620e-003
tblVehicleEF	UBUS	1.02	0.06
tblVehicleEF	UBUS	9.9530e-003	3.8500e-003
tblVehicleEF	UBUS	1.5530e-003	1.6600e-004
tblVehicleEF	UBUS	7.9640e-003	1.1340e-003
tblVehicleEF	UBUS	0.10	8.4390e-003
tblVehicleEF	UBUS	3.5410e-003	6.6300e-004
tblVehicleEF	UBUS	2.44	4.28
tblVehicleEF	UBUS	0.02	1.0620e-003
tblVehicleEF	UBUS	1.12	0.07
tblVehicleEF	UBUS	1.78	4.19
tblVehicleEF	UBUS	0.07	0.01
tblVehicleEF	UBUS	9.12	32.68
tblVehicleEF	UBUS	10.81	1.16
tblVehicleEF	UBUS	1,833.84	1,722.05
tblVehicleEF	UBUS	130.67	16.31
tblVehicleEF	UBUS	4.94	0.37
tblVehicleEF	UBUS	13.57	0.15
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	UBUS	0.06	2.6960e-003
tblVehicleEF	UBUS	1.2770e-003	1.9800e-004
tblVehicleEF	UBUS	0.22	0.03
tblVehicleEF	UBUS	3.0000e-003	6.3130e-003
tblVehicleEF	UBUS	0.05	2.5630e-003
tblVehicleEF	UBUS	1.1750e-003	1.8200e-004
tblVehicleEF	UBUS	0.02	2.1510e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	9.9070e-003	1.5020e-003
tblVehicleEF	UBUS	0.62	0.06
tblVehicleEF	UBUS	0.02	1.0390e-003
tblVehicleEF	UBUS	0.89	0.06
tblVehicleEF	UBUS	9.9550e-003	3.8500e-003
tblVehicleEF	UBUS	1.5030e-003	1.6100e-004
tblVehicleEF	UBUS	0.02	2.1510e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	9.9070e-003	1.5020e-003
tblVehicleEF	UBUS	2.47	4.28
tblVehicleEF	UBUS	0.02	1.0390e-003
tblVehicleEF	UBUS	0.97	0.06
tblVehicleEF	UBUS	1.78	4.19
tblVehicleEF	UBUS	0.07	0.02
tblVehicleEF	UBUS	9.02	32.68
tblVehicleEF	UBUS	12.84	1.37
tblVehicleEF	UBUS	1,833.84	1,722.05
tblVehicleEF	UBUS	130.67	16.68
tblVehicleEF	UBUS	5.24	0.37

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblVehicleEF	UBUS	13.66	0.16
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.6960e-003
tblVehicleEF	UBUS	1.2770e-003	1.9800e-004
tblVehicleEF	UBUS	0.22	0.03
tblVehicleEF	UBUS	3.0000e-003	6.3130e-003
tblVehicleEF	UBUS	0.05	2.5630e-003
tblVehicleEF	UBUS	1.1750e-003	1.8200e-004
tblVehicleEF	UBUS	9.4500e-003	1.1960e-003
tblVehicleEF	UBUS	0.13	9.6290e-003
tblVehicleEF	UBUS	3.5160e-003	6.5800e-004
tblVehicleEF	UBUS	0.61	0.06
tblVehicleEF	UBUS	0.02	1.2250e-003
tblVehicleEF	UBUS	0.99	0.06
tblVehicleEF	UBUS	9.9530e-003	3.8500e-003
tblVehicleEF	UBUS	1.5390e-003	1.6500e-004
tblVehicleEF	UBUS	9.4500e-003	1.1960e-003
tblVehicleEF	UBUS	0.13	9.6290e-003
tblVehicleEF	UBUS	3.5160e-003	6.5800e-004
tblVehicleEF	UBUS	2.45	4.28
tblVehicleEF	UBUS	0.02	1.2250e-003
tblVehicleEF	UBUS	1.08	0.07
tblVehicleTrips	ST_TR	1.32	0.11
tblVehicleTrips	SU_TR	0.68	0.11
tblVehicleTrips	WD_TR	6.97	0.11
tblWater	IndoorWaterUseRate	231,250.00	0.00

Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

tblWater	OutdoorWaterUseRate	0.00	1,466,329.50
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## 2.0 Emissions Summary

### **2.1 Overall Construction (Maximum Daily Emission)**

## **Unmitigated Construction**

## **Mitigated Construction**

Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004	
Energy	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	2.6000e-004	1.0000e-003	3.3800e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.1421	1.1421	6.0000e-005		1.1437	
Total	0.0280	1.0000e-003	3.4800e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.1423	1.1423	6.0000e-005	0.0000	1.1439	

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004	
Energy	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	2.6000e-004	1.0000e-003	3.3800e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.1421	1.1421	6.0000e-005		1.1437	
Total	0.0280	1.0000e-003	3.4800e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.1423	1.1423	6.0000e-005	0.0000	1.1439	

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

	ROG	NOx	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	Site Preparation	Site Preparation	3/8/2022	3/7/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

#### 3.1 Mitigation Measures Construction

Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

### **3.2 Site Preparation - 2022**

### **Unmitigated Construction On-Site**

## **Unmitigated Construction Off-Site**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

**3.2 Site Preparation - 2022****Mitigated Construction On-Site**

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

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

#### 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	2.6000e-004	1.0000e-003	3.3800e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	1.1421	1.1421	6.0000e-005			1.1437	
Unmitigated	2.6000e-004	1.0000e-003	3.3800e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	1.1421	1.1421	6.0000e-005			1.1437	

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	0.11	0.11	0.11	423		423	
Total	0.11	0.11	0.11	423		423	

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545462	0.034783	0.175214	0.104547	0.016326	0.005139	0.008963	0.095912	0.001419	0.002092	0.008487	0.000707	0.000948

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

## 5.0 Energy Detail

## Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

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

**Mitigated**

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

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	
Unmitigated	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day											lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000	
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000	
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	
<b>Total</b>	<b>0.0278</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>			<b>2.3000e-004</b>	

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

**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	6.3500e-003						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.0214						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>0.0278</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>			<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**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
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Summer

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

**Lockhart Solar Project II Operation\_Only**  
**Mojave Desert AQMD Air District, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	534	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

### 1.3 User Entered Comments & Non-Default Data

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

## Project Characteristics - PER SCE 2019 Sustainability Report

Land Use -

Construction Phase - operation run

Off-road Equipment - operation run

Grading - operation run

Trips and VMT - operation run

On-road Fugitive Dust - operation run

Vehicle Trips - Total 40 trips per year

Vehicle Emission Factors - EMFAC 2017

Vehicle Emission Factors - EMFAC 2017

Vehicle Emission Factors - EMFAC 2017

Energy Use - No energy use

Water And Wastewater - 4.5 af = 1466329.5 gallon

Solid Waste - no solid waste

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	0.00
tblConstructionPhase	PhaseEndDate	3/8/2022	3/7/2022
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialMoistureContentBulldozing	7.90	0.00
tblGrading	MaterialMoistureContentTruckLoading	12.00	0.00
tblGrading	MaterialSiltContent	6.90	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	534
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblVehicleEF	HHD	1.43	0.03
tblVehicleEF	HHD	2.4200e-003	0.06
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	2.97	8.67
tblVehicleEF	HHD	0.26	0.33
tblVehicleEF	HHD	1.20	2.3220e-003
tblVehicleEF	HHD	9,146.03	1,424.58
tblVehicleEF	HHD	1,337.11	1,311.47
tblVehicleEF	HHD	3.58	0.02
tblVehicleEF	HHD	24.65	7.12
tblVehicleEF	HHD	0.75	2.15
tblVehicleEF	HHD	20.43	2.33
tblVehicleEF	HHD	3.4380e-003	3.0350e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	4.8050e-003	0.03
tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	3.2900e-003	2.9040e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9670e-003	8.9160e-003
tblVehicleEF	HHD	4.5970e-003	0.02
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	1.9530e-003	8.8000e-005
tblVehicleEF	HHD	0.80	0.58
tblVehicleEF	HHD	3.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	1.1200e-004	3.6000e-005
tblVehicleEF	HHD	0.03	1.0000e-006
tblVehicleEF	HHD	0.09	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	5.6000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	1.9530e-003	8.8000e-005
tblVehicleEF	HHD	0.92	0.67
tblVehicleEF	HHD	3.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.04	0.08
tblVehicleEF	HHD	1.1200e-004	3.6000e-005
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.35	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	HHD	2.4330e-003	0.06
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.16	8.55
tblVehicleEF	HHD	0.26	0.33
tblVehicleEF	HHD	1.11	2.1790e-003
tblVehicleEF	HHD	9,689.41	1,406.97
tblVehicleEF	HHD	1,337.11	1,311.48
tblVehicleEF	HHD	3.58	0.02
tblVehicleEF	HHD	25.44	6.79
tblVehicleEF	HHD	0.70	2.03
tblVehicleEF	HHD	20.43	2.33
tblVehicleEF	HHD	2.8990e-003	2.6730e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	4.8050e-003	0.03
tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	2.7740e-003	2.5570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9670e-003	8.9160e-003
tblVehicleEF	HHD	4.5970e-003	0.02
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	1.2100e-004	6.0000e-006
tblVehicleEF	HHD	2.3300e-003	1.0300e-004
tblVehicleEF	HHD	0.76	0.62
tblVehicleEF	HHD	8.4000e-005	4.0000e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	1.1600e-004	3.7000e-005

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	HHD	0.03	1.0000e-006
tblVehicleEF	HHD	0.09	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	5.4000e-005	0.00
tblVehicleEF	HHD	1.2100e-004	6.0000e-006
tblVehicleEF	HHD	2.3300e-003	1.0300e-004
tblVehicleEF	HHD	0.86	0.71
tblVehicleEF	HHD	8.4000e-005	4.0000e-006
tblVehicleEF	HHD	0.04	0.08
tblVehicleEF	HHD	1.1600e-004	3.7000e-005
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	1.54	0.03
tblVehicleEF	HHD	2.4220e-003	0.06
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	4.09	8.83
tblVehicleEF	HHD	0.26	0.33
tblVehicleEF	HHD	1.17	2.2920e-003
tblVehicleEF	HHD	8,395.65	1,448.88
tblVehicleEF	HHD	1,337.11	1,311.47
tblVehicleEF	HHD	3.58	0.02
tblVehicleEF	HHD	23.56	7.59
tblVehicleEF	HHD	0.74	2.12
tblVehicleEF	HHD	20.43	2.33
tblVehicleEF	HHD	4.1830e-003	3.5360e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	4.8050e-003	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	4.0020e-003	3.3830e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9670e-003	8.9160e-003
tblVehicleEF	HHD	4.5970e-003	0.02
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	5.8000e-005	3.0000e-006
tblVehicleEF	HHD	2.1540e-003	1.0400e-004
tblVehicleEF	HHD	0.87	0.54
tblVehicleEF	HHD	2.8000e-005	2.0000e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	1.2000e-004	3.8000e-005
tblVehicleEF	HHD	0.03	1.0000e-006
tblVehicleEF	HHD	0.08	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	5.5000e-005	0.00
tblVehicleEF	HHD	5.8000e-005	3.0000e-006
tblVehicleEF	HHD	2.1540e-003	1.0400e-004
tblVehicleEF	HHD	0.99	0.62
tblVehicleEF	HHD	2.8000e-005	2.0000e-006
tblVehicleEF	HHD	0.04	0.08
tblVehicleEF	HHD	1.2000e-004	3.8000e-005
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.8420e-003	2.1370e-003
tblVehicleEF	LDA	5.4110e-003	0.05
tblVehicleEF	LDA	0.52	0.60
tblVehicleEF	LDA	1.18	2.09

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDA	236.14	256.62
tblVehicleEF	LDA	54.91	52.89
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.08	0.17
tblVehicleEF	LDA	1.5110e-003	1.3790e-003
tblVehicleEF	LDA	2.2680e-003	1.7810e-003
tblVehicleEF	LDA	1.3920e-003	1.2700e-003
tblVehicleEF	LDA	2.0860e-003	1.6370e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.6430e-003	8.0160e-003
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3650e-003	2.5070e-003
tblVehicleEF	LDA	5.6900e-004	5.1700e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	4.4780e-003	2.4510e-003
tblVehicleEF	LDA	4.4060e-003	0.04
tblVehicleEF	LDA	0.66	0.74
tblVehicleEF	LDA	0.97	1.74
tblVehicleEF	LDA	261.78	280.21

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDA	54.91	52.21
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.5110e-003	1.3790e-003
tblVehicleEF	LDA	2.2680e-003	1.7810e-003
tblVehicleEF	LDA	1.3920e-003	1.2700e-003
tblVehicleEF	LDA	2.0860e-003	1.6370e-003
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.01	9.0940e-003
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.6230e-003	2.7380e-003
tblVehicleEF	LDA	5.6500e-004	5.1000e-004
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	3.7040e-003	2.0850e-003
tblVehicleEF	LDA	5.2730e-003	0.05
tblVehicleEF	LDA	0.48	0.57
tblVehicleEF	LDA	1.13	2.06
tblVehicleEF	LDA	228.76	251.09
tblVehicleEF	LDA	54.91	52.83

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.08	0.17
tblVehicleEF	LDA	1.5110e-003	1.3790e-003
tblVehicleEF	LDA	2.2680e-003	1.7810e-003
tblVehicleEF	LDA	1.3920e-003	1.2700e-003
tblVehicleEF	LDA	2.0860e-003	1.6370e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	9.3000e-003	7.8090e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.2900e-003	2.4530e-003
tblVehicleEF	LDA	5.6800e-004	5.1600e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDT1	0.01	6.0730e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.40	1.27
tblVehicleEF	LDT1	3.66	2.35
tblVehicleEF	LDT1	296.40	304.65
tblVehicleEF	LDT1	69.01	64.36
tblVehicleEF	LDT1	0.17	0.11

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDT1	0.22	0.28
tblVehicleEF	LDT1	2.2950e-003	2.0140e-003
tblVehicleEF	LDT1	3.5260e-003	2.6470e-003
tblVehicleEF	LDT1	2.1140e-003	1.8530e-003
tblVehicleEF	LDT1	3.2420e-003	2.4340e-003
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.26	0.39
tblVehicleEF	LDT1	2.9820e-003	2.9770e-003
tblVehicleEF	LDT1	7.5500e-004	6.2900e-004
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.28	0.43
tblVehicleEF	LDT1	0.02	6.8930e-003
tblVehicleEF	LDT1	0.02	0.06
tblVehicleEF	LDT1	1.73	1.54
tblVehicleEF	LDT1	3.00	1.95
tblVehicleEF	LDT1	327.18	329.24
tblVehicleEF	LDT1	69.01	63.50
tblVehicleEF	LDT1	0.15	0.10
tblVehicleEF	LDT1	0.21	0.26

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDT1	2.2950e-003	2.0140e-003
tblVehicleEF	LDT1	3.5260e-003	2.6470e-003
tblVehicleEF	LDT1	2.1140e-003	1.8530e-003
tblVehicleEF	LDT1	3.2420e-003	2.4340e-003
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.42	0.30
tblVehicleEF	LDT1	0.30	0.27
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.21	0.33
tblVehicleEF	LDT1	3.2950e-003	3.2180e-003
tblVehicleEF	LDT1	7.4300e-004	6.2100e-004
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.42	0.30
tblVehicleEF	LDT1	0.30	0.27
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.20	0.10
tblVehicleEF	LDT1	0.23	0.36
tblVehicleEF	LDT1	0.01	5.9330e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.31	1.21
tblVehicleEF	LDT1	3.50	2.31
tblVehicleEF	LDT1	287.55	298.83
tblVehicleEF	LDT1	69.01	64.28
tblVehicleEF	LDT1	0.16	0.10
tblVehicleEF	LDT1	0.22	0.27
tblVehicleEF	LDT1	2.2950e-003	2.0140e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDT1	3.5260e-003	2.6470e-003
tblVehicleEF	LDT1	2.1140e-003	1.8530e-003
tblVehicleEF	LDT1	3.2420e-003	2.4340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.37	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	0.12
tblVehicleEF	LDT1	0.25	0.39
tblVehicleEF	LDT1	2.8920e-003	2.9200e-003
tblVehicleEF	LDT1	7.5200e-004	6.2800e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.37	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.23	0.12
tblVehicleEF	LDT1	0.27	0.42
tblVehicleEF	LDT2	5.9250e-003	3.7960e-003
tblVehicleEF	LDT2	8.2720e-003	0.07
tblVehicleEF	LDT2	0.73	0.89
tblVehicleEF	LDT2	1.69	2.69
tblVehicleEF	LDT2	331.93	323.22
tblVehicleEF	LDT2	76.99	68.56
tblVehicleEF	LDT2	0.09	0.08
tblVehicleEF	LDT2	0.15	0.28
tblVehicleEF	LDT2	1.5700e-003	1.4520e-003
tblVehicleEF	LDT2	2.4400e-003	1.8710e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDT2	1.4430e-003	1.3370e-003
tblVehicleEF	LDT2	2.2430e-003	1.7200e-003
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.11	0.32
tblVehicleEF	LDT2	3.3250e-003	3.1580e-003
tblVehicleEF	LDT2	7.9900e-004	6.7000e-004
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.12	0.35
tblVehicleEF	LDT2	6.8820e-003	4.3360e-003
tblVehicleEF	LDT2	6.7320e-003	0.06
tblVehicleEF	LDT2	0.92	1.08
tblVehicleEF	LDT2	1.39	2.22
tblVehicleEF	LDT2	367.14	346.91
tblVehicleEF	LDT2	76.99	67.64
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.14	0.26
tblVehicleEF	LDT2	1.5700e-003	1.4520e-003
tblVehicleEF	LDT2	2.4400e-003	1.8710e-003
tblVehicleEF	LDT2	1.4430e-003	1.3370e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDT2	2.2430e-003	1.7200e-003
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.13	0.17
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.09	0.27
tblVehicleEF	LDT2	3.6800e-003	3.3900e-003
tblVehicleEF	LDT2	7.9300e-004	6.6100e-004
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.13	0.17
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.10	0.29
tblVehicleEF	LDT2	5.7150e-003	3.7060e-003
tblVehicleEF	LDT2	8.0550e-003	0.07
tblVehicleEF	LDT2	0.67	0.84
tblVehicleEF	LDT2	1.62	2.64
tblVehicleEF	LDT2	321.80	317.60
tblVehicleEF	LDT2	76.99	68.48
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.14	0.28
tblVehicleEF	LDT2	1.5700e-003	1.4520e-003
tblVehicleEF	LDT2	2.4400e-003	1.8710e-003
tblVehicleEF	LDT2	1.4430e-003	1.3370e-003
tblVehicleEF	LDT2	2.2430e-003	1.7200e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.11	0.32
tblVehicleEF	LDT2	3.2230e-003	3.1030e-003
tblVehicleEF	LDT2	7.9700e-004	6.6900e-004
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.12	0.35
tblVehicleEF	LHD1	4.8410e-003	4.7400e-003
tblVehicleEF	LHD1	0.01	5.8910e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.16	0.80
tblVehicleEF	LHD1	2.52	1.00
tblVehicleEF	LHD1	9.34	9.29
tblVehicleEF	LHD1	604.29	639.64
tblVehicleEF	LHD1	28.15	10.59
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.38	1.40
tblVehicleEF	LHD1	0.93	0.30
tblVehicleEF	LHD1	1.0450e-003	9.6300e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD1	0.01	9.9840e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.2500e-004	2.5100e-004
tblVehicleEF	LHD1	1.0000e-003	9.2200e-004
tblVehicleEF	LHD1	2.5730e-003	2.4960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.5000e-004	2.3100e-004
tblVehicleEF	LHD1	3.8990e-003	3.0110e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7570e-003	1.4760e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.38	0.23
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.3000e-005	9.0000e-005
tblVehicleEF	LHD1	5.9200e-003	6.2250e-003
tblVehicleEF	LHD1	3.2900e-004	1.0500e-004
tblVehicleEF	LHD1	3.8990e-003	3.0110e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7570e-003	1.4760e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.38	0.23
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	4.8410e-003	4.7550e-003
tblVehicleEF	LHD1	0.01	6.0290e-003
tblVehicleEF	LHD1	0.02	0.01

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.18	0.82
tblVehicleEF	LHD1	2.33	0.93
tblVehicleEF	LHD1	9.34	9.29
tblVehicleEF	LHD1	604.29	639.67
tblVehicleEF	LHD1	28.15	10.48
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.23	1.31
tblVehicleEF	LHD1	0.88	0.28
tblVehicleEF	LHD1	1.0450e-003	9.6300e-004
tblVehicleEF	LHD1	0.01	9.9840e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.2500e-004	2.5100e-004
tblVehicleEF	LHD1	1.0000e-003	9.2200e-004
tblVehicleEF	LHD1	2.5730e-003	2.4960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.5000e-004	2.3100e-004
tblVehicleEF	LHD1	8.4080e-003	5.9530e-003
tblVehicleEF	LHD1	0.14	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	4.6370e-003	3.3570e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.39	0.23
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.3000e-005	9.0000e-005
tblVehicleEF	LHD1	5.9210e-003	6.2250e-003
tblVehicleEF	LHD1	3.2500e-004	1.0400e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD1	8.4080e-003	5.9530e-003
tblVehicleEF	LHD1	0.14	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	4.6370e-003	3.3570e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.39	0.23
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	4.8410e-003	4.7430e-003
tblVehicleEF	LHD1	0.01	5.9060e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.17	0.80
tblVehicleEF	LHD1	2.45	0.98
tblVehicleEF	LHD1	9.34	9.29
tblVehicleEF	LHD1	604.29	639.64
tblVehicleEF	LHD1	28.15	10.56
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.34	1.37
tblVehicleEF	LHD1	0.91	0.29
tblVehicleEF	LHD1	1.0450e-003	9.6300e-004
tblVehicleEF	LHD1	0.01	9.9840e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.2500e-004	2.5100e-004
tblVehicleEF	LHD1	1.0000e-003	9.2200e-004
tblVehicleEF	LHD1	2.5730e-003	2.4960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.5000e-004	2.3100e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD1	4.4590e-003	3.3060e-003
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6670e-003	1.4540e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.41	0.25
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.3000e-005	9.0000e-005
tblVehicleEF	LHD1	5.9200e-003	6.2250e-003
tblVehicleEF	LHD1	3.2800e-004	1.0500e-004
tblVehicleEF	LHD1	4.4590e-003	3.3060e-003
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6670e-003	1.4540e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.41	0.25
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.0870e-003	3.2120e-003
tblVehicleEF	LHD2	3.9950e-003	3.8080e-003
tblVehicleEF	LHD2	6.5230e-003	8.8900e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.51
tblVehicleEF	LHD2	1.03	0.59
tblVehicleEF	LHD2	14.62	14.47
tblVehicleEF	LHD2	590.32	639.77
tblVehicleEF	LHD2	21.16	7.60
tblVehicleEF	LHD2	0.12	0.11

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD2	1.56	1.50
tblVehicleEF	LHD2	0.43	0.19
tblVehicleEF	LHD2	1.3500e-003	1.4160e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5400e-004	1.2000e-004
tblVehicleEF	LHD2	1.2920e-003	1.3540e-003
tblVehicleEF	LHD2	2.7200e-003	2.6970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.2500e-004	1.1000e-004
tblVehicleEF	LHD2	1.1090e-003	1.4710e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.5100e-004	7.7000e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.4200e-004	1.3800e-004
tblVehicleEF	LHD2	5.7320e-003	6.1710e-003
tblVehicleEF	LHD2	2.3000e-004	7.5000e-005
tblVehicleEF	LHD2	1.1090e-003	1.4710e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.5100e-004	7.7000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.10	0.05

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD2	3.0870e-003	3.2210e-003
tblVehicleEF	LHD2	4.0530e-003	3.8460e-003
tblVehicleEF	LHD2	6.1740e-003	8.4910e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.51	0.51
tblVehicleEF	LHD2	0.95	0.55
tblVehicleEF	LHD2	14.62	14.47
tblVehicleEF	LHD2	590.32	639.78
tblVehicleEF	LHD2	21.16	7.54
tblVehicleEF	LHD2	0.12	0.11
tblVehicleEF	LHD2	1.47	1.41
tblVehicleEF	LHD2	0.41	0.18
tblVehicleEF	LHD2	1.3500e-003	1.4160e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5400e-004	1.2000e-004
tblVehicleEF	LHD2	1.2920e-003	1.3540e-003
tblVehicleEF	LHD2	2.7200e-003	2.6970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.2500e-004	1.1000e-004
tblVehicleEF	LHD2	2.3660e-003	2.8510e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4270e-003	1.6830e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.08	0.04

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD2	1.4200e-004	1.3800e-004
tblVehicleEF	LHD2	5.7320e-003	6.1710e-003
tblVehicleEF	LHD2	2.2900e-004	7.5000e-005
tblVehicleEF	LHD2	2.3660e-003	2.8510e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4270e-003	1.6830e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	3.0870e-003	3.2130e-003
tblVehicleEF	LHD2	4.0040e-003	3.8130e-003
tblVehicleEF	LHD2	6.4260e-003	8.8150e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.51
tblVehicleEF	LHD2	1.00	0.58
tblVehicleEF	LHD2	14.62	14.47
tblVehicleEF	LHD2	590.32	639.77
tblVehicleEF	LHD2	21.16	7.59
tblVehicleEF	LHD2	0.12	0.11
tblVehicleEF	LHD2	1.54	1.47
tblVehicleEF	LHD2	0.42	0.19
tblVehicleEF	LHD2	1.3500e-003	1.4160e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5400e-004	1.2000e-004
tblVehicleEF	LHD2	1.2920e-003	1.3540e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	LHD2	2.7200e-003	2.6970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.2500e-004	1.1000e-004
tblVehicleEF	LHD2	1.1910e-003	1.5290e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1400e-004	7.5000e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.08	0.11
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.4200e-004	1.3800e-004
tblVehicleEF	LHD2	5.7320e-003	6.1710e-003
tblVehicleEF	LHD2	2.3000e-004	7.5000e-005
tblVehicleEF	LHD2	1.1910e-003	1.5290e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1400e-004	7.5000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.11
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	MCY	0.41	0.33
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	20.89	20.35
tblVehicleEF	MCY	10.17	8.81
tblVehicleEF	MCY	165.43	210.81
tblVehicleEF	MCY	46.38	61.22
tblVehicleEF	MCY	1.18	1.16

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	1.8100e-003	1.8550e-003
tblVehicleEF	MCY	3.6520e-003	2.9310e-003
tblVehicleEF	MCY	1.6940e-003	1.7350e-003
tblVehicleEF	MCY	3.4440e-003	2.7590e-003
tblVehicleEF	MCY	1.52	1.45
tblVehicleEF	MCY	0.88	0.83
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	2.14	2.21
tblVehicleEF	MCY	0.38	0.41
tblVehicleEF	MCY	2.21	1.89
tblVehicleEF	MCY	2.0560e-003	2.0860e-003
tblVehicleEF	MCY	6.9500e-004	6.0600e-004
tblVehicleEF	MCY	1.52	1.45
tblVehicleEF	MCY	0.88	0.83
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	2.63	2.72
tblVehicleEF	MCY	0.38	0.41
tblVehicleEF	MCY	2.41	2.06
tblVehicleEF	MCY	0.40	0.32
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	21.16	20.49
tblVehicleEF	MCY	9.15	7.97
tblVehicleEF	MCY	165.43	210.83
tblVehicleEF	MCY	46.38	58.99
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MCY	1.8100e-003	1.8550e-003
tblVehicleEF	MCY	3.6520e-003	2.9310e-003
tblVehicleEF	MCY	1.6940e-003	1.7350e-003
tblVehicleEF	MCY	3.4440e-003	2.7590e-003
tblVehicleEF	MCY	3.66	3.14
tblVehicleEF	MCY	1.46	1.27
tblVehicleEF	MCY	2.58	2.11
tblVehicleEF	MCY	2.09	2.16
tblVehicleEF	MCY	0.39	0.41
tblVehicleEF	MCY	1.87	1.62
tblVehicleEF	MCY	2.0590e-003	2.0860e-003
tblVehicleEF	MCY	6.6800e-004	5.8400e-004
tblVehicleEF	MCY	3.66	3.14
tblVehicleEF	MCY	1.46	1.27
tblVehicleEF	MCY	2.58	2.11
tblVehicleEF	MCY	2.56	2.65
tblVehicleEF	MCY	0.39	0.41
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.40	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.73	19.44
tblVehicleEF	MCY	9.54	8.46
tblVehicleEF	MCY	165.43	209.24
tblVehicleEF	MCY	46.38	60.43
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	1.8100e-003	1.8550e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MCY	3.6520e-003	2.9310e-003
tblVehicleEF	MCY	1.6940e-003	1.7350e-003
tblVehicleEF	MCY	3.4440e-003	2.7590e-003
tblVehicleEF	MCY	1.91	1.70
tblVehicleEF	MCY	1.20	1.11
tblVehicleEF	MCY	0.71	0.71
tblVehicleEF	MCY	2.10	2.18
tblVehicleEF	MCY	0.44	0.47
tblVehicleEF	MCY	2.08	1.82
tblVehicleEF	MCY	2.0370e-003	2.0710e-003
tblVehicleEF	MCY	6.8100e-004	5.9800e-004
tblVehicleEF	MCY	1.91	1.70
tblVehicleEF	MCY	1.20	1.11
tblVehicleEF	MCY	0.71	0.71
tblVehicleEF	MCY	2.58	2.68
tblVehicleEF	MCY	0.44	0.47
tblVehicleEF	MCY	2.27	1.98
tblVehicleEF	MDV	0.01	4.8920e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.25	1.03
tblVehicleEF	MDV	3.24	3.16
tblVehicleEF	MDV	460.86	403.07
tblVehicleEF	MDV	104.76	85.11
tblVehicleEF	MDV	0.19	0.10
tblVehicleEF	MDV	0.34	0.35
tblVehicleEF	MDV	1.6900e-003	1.5480e-003
tblVehicleEF	MDV	2.5080e-003	1.9490e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MDV	1.5590e-003	1.4280e-003
tblVehicleEF	MDV	2.3060e-003	1.7920e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.17
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.25	0.41
tblVehicleEF	MDV	4.6180e-003	3.9360e-003
tblVehicleEF	MDV	1.1050e-003	8.3200e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.17
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.27	0.45
tblVehicleEF	MDV	0.01	5.5990e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.57	1.25
tblVehicleEF	MDV	2.66	2.61
tblVehicleEF	MDV	508.28	428.20
tblVehicleEF	MDV	104.76	84.00
tblVehicleEF	MDV	0.17	0.09
tblVehicleEF	MDV	0.32	0.33
tblVehicleEF	MDV	1.6900e-003	1.5480e-003
tblVehicleEF	MDV	2.5080e-003	1.9490e-003
tblVehicleEF	MDV	1.5590e-003	1.4280e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MDV	2.3060e-003	1.7920e-003
tblVehicleEF	MDV	0.23	0.23
tblVehicleEF	MDV	0.24	0.19
tblVehicleEF	MDV	0.20	0.21
tblVehicleEF	MDV	0.04	0.02
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.20	0.35
tblVehicleEF	MDV	5.0960e-003	4.1820e-003
tblVehicleEF	MDV	1.0940e-003	8.2100e-004
tblVehicleEF	MDV	0.23	0.23
tblVehicleEF	MDV	0.24	0.19
tblVehicleEF	MDV	0.20	0.21
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.22	0.38
tblVehicleEF	MDV	0.01	4.7660e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.16	0.97
tblVehicleEF	MDV	3.09	3.11
tblVehicleEF	MDV	447.25	397.12
tblVehicleEF	MDV	104.76	85.02
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.33	0.35
tblVehicleEF	MDV	1.6900e-003	1.5480e-003
tblVehicleEF	MDV	2.5080e-003	1.9490e-003
tblVehicleEF	MDV	1.5590e-003	1.4280e-003
tblVehicleEF	MDV	2.3060e-003	1.7920e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.14	0.07
tblVehicleEF	MDV	0.24	0.41
tblVehicleEF	MDV	4.4800e-003	3.8780e-003
tblVehicleEF	MDV	1.1020e-003	8.3100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.14	0.07
tblVehicleEF	MDV	0.26	0.45
tblVehicleEF	MH	0.03	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	3.22	1.31
tblVehicleEF	MH	6.46	2.12
tblVehicleEF	MH	971.20	1,476.34
tblVehicleEF	MH	59.05	18.76
tblVehicleEF	MH	1.56	1.55
tblVehicleEF	MH	0.93	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.1810e-003	2.5200e-004
tblVehicleEF	MH	3.2260e-003	3.2820e-003
tblVehicleEF	MH	0.04	0.04

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MH	1.0860e-003	2.3200e-004
tblVehicleEF	MH	1.55	1.13
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.37	0.10
tblVehicleEF	MH	9.6550e-003	0.01
tblVehicleEF	MH	7.0300e-004	1.8600e-004
tblVehicleEF	MH	1.55	1.13
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.14	0.08
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.41	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	3.36	1.36
tblVehicleEF	MH	5.78	1.94
tblVehicleEF	MH	971.20	1,476.41
tblVehicleEF	MH	59.05	18.45
tblVehicleEF	MH	1.42	1.43
tblVehicleEF	MH	0.88	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.1810e-003	2.5200e-004
tblVehicleEF	MH	3.2260e-003	3.2820e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.0860e-003	2.3200e-004
tblVehicleEF	MH	3.36	2.24
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.37	0.95
tblVehicleEF	MH	0.11	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.34	0.09
tblVehicleEF	MH	9.6580e-003	0.01
tblVehicleEF	MH	6.9100e-004	1.8300e-004
tblVehicleEF	MH	3.36	2.24
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.37	0.95
tblVehicleEF	MH	0.15	0.09
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.38	0.10
tblVehicleEF	MH	0.03	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	3.24	1.32
tblVehicleEF	MH	6.30	2.10
tblVehicleEF	MH	971.20	1,476.34
tblVehicleEF	MH	59.05	18.73
tblVehicleEF	MH	1.52	1.52
tblVehicleEF	MH	0.91	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.1810e-003	2.5200e-004

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MH	3.2260e-003	3.2820e-003
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	1.0860e-003	2.3200e-004
tblVehicleEF	MH	1.91	1.31
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.37	0.10
tblVehicleEF	MH	9.6560e-003	0.01
tblVehicleEF	MH	7.0000e-004	1.8500e-004
tblVehicleEF	MH	1.91	1.31
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.49	0.40
tblVehicleEF	MH	0.14	0.08
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	0.40	0.11
tblVehicleEF	MHD	0.02	3.1530e-003
tblVehicleEF	MHD	4.3060e-003	1.3810e-003
tblVehicleEF	MHD	0.05	8.3340e-003
tblVehicleEF	MHD	0.42	0.34
tblVehicleEF	MHD	0.29	0.18
tblVehicleEF	MHD	7.01	0.93
tblVehicleEF	MHD	105.80	65.85
tblVehicleEF	MHD	1,012.07	964.19
tblVehicleEF	MHD	74.31	8.18
tblVehicleEF	MHD	0.27	0.37

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MHD	0.34	0.98
tblVehicleEF	MHD	7.99	1.74
tblVehicleEF	MHD	9.3000e-005	3.3600e-004
tblVehicleEF	MHD	2.2990e-003	7.7530e-003
tblVehicleEF	MHD	1.0510e-003	9.6000e-005
tblVehicleEF	MHD	8.9000e-005	3.2200e-004
tblVehicleEF	MHD	2.1910e-003	7.4140e-003
tblVehicleEF	MHD	9.6600e-004	8.9000e-005
tblVehicleEF	MHD	1.7710e-003	5.4500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.4400e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.42	0.04
tblVehicleEF	MHD	1.0240e-003	6.2500e-004
tblVehicleEF	MHD	9.7600e-003	9.1890e-003
tblVehicleEF	MHD	8.6600e-004	8.1000e-005
tblVehicleEF	MHD	1.7710e-003	5.4500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.4400e-004	2.8100e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.46	0.05
tblVehicleEF	MHD	0.01	3.0020e-003
tblVehicleEF	MHD	4.4380e-003	1.4140e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MHD	0.04	7.9510e-003
tblVehicleEF	MHD	0.31	0.30
tblVehicleEF	MHD	0.29	0.19
tblVehicleEF	MHD	6.47	0.87
tblVehicleEF	MHD	112.04	65.73
tblVehicleEF	MHD	1,012.07	964.20
tblVehicleEF	MHD	74.31	8.08
tblVehicleEF	MHD	0.28	0.36
tblVehicleEF	MHD	0.31	0.92
tblVehicleEF	MHD	7.93	1.74
tblVehicleEF	MHD	7.9000e-005	2.8600e-004
tblVehicleEF	MHD	2.2990e-003	7.7530e-003
tblVehicleEF	MHD	1.0510e-003	9.6000e-005
tblVehicleEF	MHD	7.5000e-005	2.7400e-004
tblVehicleEF	MHD	2.1910e-003	7.4140e-003
tblVehicleEF	MHD	9.6600e-004	8.9000e-005
tblVehicleEF	MHD	3.8440e-003	1.0730e-003
tblVehicleEF	MHD	0.07	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	2.2730e-003	6.4100e-004
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	1.0830e-003	6.2400e-004
tblVehicleEF	MHD	9.7600e-003	9.1890e-003
tblVehicleEF	MHD	8.5700e-004	8.0000e-005
tblVehicleEF	MHD	3.8440e-003	1.0730e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MHD	0.07	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	2.2730e-003	6.4100e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.44	0.04
tblVehicleEF	MHD	0.02	3.3770e-003
tblVehicleEF	MHD	4.3290e-003	1.3840e-003
tblVehicleEF	MHD	0.05	8.2380e-003
tblVehicleEF	MHD	0.58	0.41
tblVehicleEF	MHD	0.29	0.18
tblVehicleEF	MHD	6.81	0.92
tblVehicleEF	MHD	97.16	66.01
tblVehicleEF	MHD	1,012.07	964.19
tblVehicleEF	MHD	74.31	8.16
tblVehicleEF	MHD	0.26	0.38
tblVehicleEF	MHD	0.34	0.96
tblVehicleEF	MHD	7.97	1.74
tblVehicleEF	MHD	1.1400e-004	4.0500e-004
tblVehicleEF	MHD	2.2990e-003	7.7530e-003
tblVehicleEF	MHD	1.0510e-003	9.6000e-005
tblVehicleEF	MHD	1.0900e-004	3.8700e-004
tblVehicleEF	MHD	2.1910e-003	7.4140e-003
tblVehicleEF	MHD	9.6600e-004	8.9000e-005
tblVehicleEF	MHD	1.9880e-003	5.8500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	MHD	7.8900e-004	2.7500e-004
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.42	0.04
tblVehicleEF	MHD	9.4400e-004	6.2600e-004
tblVehicleEF	MHD	9.7600e-003	9.1890e-003
tblVehicleEF	MHD	8.6200e-004	8.1000e-005
tblVehicleEF	MHD	1.9880e-003	5.8500e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	7.8900e-004	2.7500e-004
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.46	0.05
tblVehicleEF	OBUS	0.01	9.0500e-003
tblVehicleEF	OBUS	9.3640e-003	7.0260e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.25	0.49
tblVehicleEF	OBUS	0.55	0.84
tblVehicleEF	OBUS	6.11	2.67
tblVehicleEF	OBUS	46.32	64.20
tblVehicleEF	OBUS	1,007.78	1,447.03
tblVehicleEF	OBUS	72.05	21.60
tblVehicleEF	OBUS	0.07	0.22
tblVehicleEF	OBUS	0.28	0.89
tblVehicleEF	OBUS	1.51	0.65
tblVehicleEF	OBUS	7.0000e-006	7.5000e-005

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	OBUS	1.3370e-003	6.2060e-003
tblVehicleEF	OBUS	9.1200e-004	2.3200e-004
tblVehicleEF	OBUS	6.0000e-006	7.2000e-005
tblVehicleEF	OBUS	1.2540e-003	5.9170e-003
tblVehicleEF	OBUS	8.3800e-004	2.1400e-004
tblVehicleEF	OBUS	2.2600e-003	2.7710e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.8300e-004	1.1450e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.38	0.13
tblVehicleEF	OBUS	4.5500e-004	6.1300e-004
tblVehicleEF	OBUS	9.9630e-003	0.01
tblVehicleEF	OBUS	8.2800e-004	2.1400e-004
tblVehicleEF	OBUS	2.2600e-003	2.7710e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	8.8300e-004	1.1450e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.41	0.14
tblVehicleEF	OBUS	0.01	9.1220e-003
tblVehicleEF	OBUS	9.6740e-003	7.2340e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.49
tblVehicleEF	OBUS	0.57	0.86

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	OBUS	5.51	2.45
tblVehicleEF	OBUS	48.02	63.54
tblVehicleEF	OBUS	1,007.78	1,447.07
tblVehicleEF	OBUS	72.05	21.23
tblVehicleEF	OBUS	0.08	0.21
tblVehicleEF	OBUS	0.25	0.81
tblVehicleEF	OBUS	1.45	0.64
tblVehicleEF	OBUS	6.0000e-006	6.7000e-005
tblVehicleEF	OBUS	1.3370e-003	6.2060e-003
tblVehicleEF	OBUS	9.1200e-004	2.3200e-004
tblVehicleEF	OBUS	5.0000e-006	6.4000e-005
tblVehicleEF	OBUS	1.2540e-003	5.9170e-003
tblVehicleEF	OBUS	8.3800e-004	2.1400e-004
tblVehicleEF	OBUS	4.8050e-003	5.3950e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	2.3390e-003	2.6270e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.35	0.12
tblVehicleEF	OBUS	4.7100e-004	6.0700e-004
tblVehicleEF	OBUS	9.9630e-003	0.01
tblVehicleEF	OBUS	8.1700e-004	2.1000e-004
tblVehicleEF	OBUS	4.8050e-003	5.3950e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	2.3390e-003	2.6270e-003

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	0.01	8.9910e-003
tblVehicleEF	OBUS	9.4210e-003	7.0490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.50
tblVehicleEF	OBUS	0.55	0.84
tblVehicleEF	OBUS	5.98	2.65
tblVehicleEF	OBUS	43.97	65.11
tblVehicleEF	OBUS	1,007.78	1,447.04
tblVehicleEF	OBUS	72.05	21.57
tblVehicleEF	OBUS	0.07	0.24
tblVehicleEF	OBUS	0.27	0.87
tblVehicleEF	OBUS	1.49	0.65
tblVehicleEF	OBUS	8.0000e-006	8.7000e-005
tblVehicleEF	OBUS	1.3370e-003	6.2060e-003
tblVehicleEF	OBUS	9.1200e-004	2.3200e-004
tblVehicleEF	OBUS	8.0000e-006	8.3000e-005
tblVehicleEF	OBUS	1.2540e-003	5.9170e-003
tblVehicleEF	OBUS	8.3800e-004	2.1400e-004
tblVehicleEF	OBUS	2.3740e-003	2.9680e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.4200e-004	1.1520e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.06	0.09

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	4.3200e-004	6.2200e-004
tblVehicleEF	OBUS	9.9630e-003	0.01
tblVehicleEF	OBUS	8.2500e-004	2.1300e-004
tblVehicleEF	OBUS	2.3740e-003	2.9680e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	8.4200e-004	1.1520e-003
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.06	0.09
tblVehicleEF	OBUS	0.41	0.14
tblVehicleEF	SBUS	0.85	0.04
tblVehicleEF	SBUS	0.01	6.3500e-003
tblVehicleEF	SBUS	0.07	4.2050e-003
tblVehicleEF	SBUS	6.27	1.97
tblVehicleEF	SBUS	0.67	0.53
tblVehicleEF	SBUS	5.99	0.56
tblVehicleEF	SBUS	1,224.98	335.22
tblVehicleEF	SBUS	1,087.63	1,114.40
tblVehicleEF	SBUS	40.86	3.30
tblVehicleEF	SBUS	10.83	3.25
tblVehicleEF	SBUS	4.17	4.79
tblVehicleEF	SBUS	14.36	1.01
tblVehicleEF	SBUS	0.01	3.6370e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.4200e-004	3.1000e-005

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	SBUS	0.01	3.4800e-003
tblVehicleEF	SBUS	2.6840e-003	2.7580e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	5.9000e-004	2.8000e-005
tblVehicleEF	SBUS	3.1500e-003	7.0200e-004
tblVehicleEF	SBUS	0.02	5.3270e-003
tblVehicleEF	SBUS	0.75	0.21
tblVehicleEF	SBUS	1.2590e-003	3.4700e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	9.1520e-003	9.2300e-003
tblVehicleEF	SBUS	0.30	0.02
tblVehicleEF	SBUS	0.01	3.1870e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.1200e-004	3.3000e-005
tblVehicleEF	SBUS	3.1500e-003	7.0200e-004
tblVehicleEF	SBUS	0.02	5.3270e-003
tblVehicleEF	SBUS	1.07	0.29
tblVehicleEF	SBUS	1.2590e-003	3.4700e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	9.1520e-003	9.2300e-003
tblVehicleEF	SBUS	0.33	0.03
tblVehicleEF	SBUS	0.85	0.04
tblVehicleEF	SBUS	0.01	6.4280e-003
tblVehicleEF	SBUS	0.05	3.4810e-003
tblVehicleEF	SBUS	6.13	1.93
tblVehicleEF	SBUS	0.68	0.54
tblVehicleEF	SBUS	3.77	0.40

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	SBUS	1,285.78	342.54
tblVehicleEF	SBUS	1,087.63	1,114.41
tblVehicleEF	SBUS	40.86	3.03
tblVehicleEF	SBUS	11.18	3.32
tblVehicleEF	SBUS	3.89	4.49
tblVehicleEF	SBUS	14.32	1.01
tblVehicleEF	SBUS	8.8440e-003	3.0750e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.4200e-004	3.1000e-005
tblVehicleEF	SBUS	8.4620e-003	2.9420e-003
tblVehicleEF	SBUS	2.6840e-003	2.7580e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	5.9000e-004	2.8000e-005
tblVehicleEF	SBUS	6.6930e-003	1.2680e-003
tblVehicleEF	SBUS	0.02	5.5830e-003
tblVehicleEF	SBUS	0.75	0.21
tblVehicleEF	SBUS	3.3830e-003	6.7000e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	8.4100e-003	8.4450e-003
tblVehicleEF	SBUS	0.23	0.02
tblVehicleEF	SBUS	0.01	3.2560e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.7500e-004	3.0000e-005
tblVehicleEF	SBUS	6.6930e-003	1.2680e-003
tblVehicleEF	SBUS	0.02	5.5830e-003
tblVehicleEF	SBUS	1.07	0.29

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	SBUS	3.3830e-003	6.7000e-004
tblVehicleEF	SBUS	0.13	0.11
tblVehicleEF	SBUS	8.4100e-003	8.4450e-003
tblVehicleEF	SBUS	0.25	0.02
tblVehicleEF	SBUS	0.85	0.04
tblVehicleEF	SBUS	0.01	6.3460e-003
tblVehicleEF	SBUS	0.07	4.3050e-003
tblVehicleEF	SBUS	6.46	2.02
tblVehicleEF	SBUS	0.67	0.53
tblVehicleEF	SBUS	5.70	0.58
tblVehicleEF	SBUS	1,141.01	325.10
tblVehicleEF	SBUS	1,087.63	1,114.40
tblVehicleEF	SBUS	40.86	3.33
tblVehicleEF	SBUS	10.35	3.17
tblVehicleEF	SBUS	4.11	4.72
tblVehicleEF	SBUS	14.36	1.01
tblVehicleEF	SBUS	0.01	4.4140e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.4200e-004	3.1000e-005
tblVehicleEF	SBUS	0.01	4.2230e-003
tblVehicleEF	SBUS	2.6840e-003	2.7580e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	5.9000e-004	2.8000e-005
tblVehicleEF	SBUS	3.2650e-003	6.6500e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	0.75	0.21

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	SBUS	1.1670e-003	3.4800e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.29	0.02
tblVehicleEF	SBUS	0.01	3.0910e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.0700e-004	3.3000e-005
tblVehicleEF	SBUS	3.2650e-003	6.6500e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	1.08	0.29
tblVehicleEF	SBUS	1.1670e-003	3.4800e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.32	0.03
tblVehicleEF	UBUS	1.78	4.19
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	9.01	32.68
tblVehicleEF	UBUS	13.70	1.41
tblVehicleEF	UBUS	1,833.84	1,722.05
tblVehicleEF	UBUS	130.67	16.73
tblVehicleEF	UBUS	5.34	0.37
tblVehicleEF	UBUS	13.69	0.16
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.6960e-003
tblVehicleEF	UBUS	1.2770e-003	1.9800e-004
tblVehicleEF	UBUS	0.22	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	UBUS	3.0000e-003	6.3130e-003
tblVehicleEF	UBUS	0.05	2.5630e-003
tblVehicleEF	UBUS	1.1750e-003	1.8200e-004
tblVehicleEF	UBUS	7.9640e-003	1.1340e-003
tblVehicleEF	UBUS	0.10	8.4390e-003
tblVehicleEF	UBUS	3.5410e-003	6.6300e-004
tblVehicleEF	UBUS	0.61	0.06
tblVehicleEF	UBUS	0.02	1.0620e-003
tblVehicleEF	UBUS	1.02	0.06
tblVehicleEF	UBUS	9.9530e-003	3.8500e-003
tblVehicleEF	UBUS	1.5530e-003	1.6600e-004
tblVehicleEF	UBUS	7.9640e-003	1.1340e-003
tblVehicleEF	UBUS	0.10	8.4390e-003
tblVehicleEF	UBUS	3.5410e-003	6.6300e-004
tblVehicleEF	UBUS	2.44	4.28
tblVehicleEF	UBUS	0.02	1.0620e-003
tblVehicleEF	UBUS	1.12	0.07
tblVehicleEF	UBUS	1.78	4.19
tblVehicleEF	UBUS	0.07	0.01
tblVehicleEF	UBUS	9.12	32.68
tblVehicleEF	UBUS	10.81	1.16
tblVehicleEF	UBUS	1,833.84	1,722.05
tblVehicleEF	UBUS	130.67	16.31
tblVehicleEF	UBUS	4.94	0.37
tblVehicleEF	UBUS	13.57	0.15
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	UBUS	0.06	2.6960e-003
tblVehicleEF	UBUS	1.2770e-003	1.9800e-004
tblVehicleEF	UBUS	0.22	0.03
tblVehicleEF	UBUS	3.0000e-003	6.3130e-003
tblVehicleEF	UBUS	0.05	2.5630e-003
tblVehicleEF	UBUS	1.1750e-003	1.8200e-004
tblVehicleEF	UBUS	0.02	2.1510e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	9.9070e-003	1.5020e-003
tblVehicleEF	UBUS	0.62	0.06
tblVehicleEF	UBUS	0.02	1.0390e-003
tblVehicleEF	UBUS	0.89	0.06
tblVehicleEF	UBUS	9.9550e-003	3.8500e-003
tblVehicleEF	UBUS	1.5030e-003	1.6100e-004
tblVehicleEF	UBUS	0.02	2.1510e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	9.9070e-003	1.5020e-003
tblVehicleEF	UBUS	2.47	4.28
tblVehicleEF	UBUS	0.02	1.0390e-003
tblVehicleEF	UBUS	0.97	0.06
tblVehicleEF	UBUS	1.78	4.19
tblVehicleEF	UBUS	0.07	0.02
tblVehicleEF	UBUS	9.02	32.68
tblVehicleEF	UBUS	12.84	1.37
tblVehicleEF	UBUS	1,833.84	1,722.05
tblVehicleEF	UBUS	130.67	16.68
tblVehicleEF	UBUS	5.24	0.37

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblVehicleEF	UBUS	13.66	0.16
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.6960e-003
tblVehicleEF	UBUS	1.2770e-003	1.9800e-004
tblVehicleEF	UBUS	0.22	0.03
tblVehicleEF	UBUS	3.0000e-003	6.3130e-003
tblVehicleEF	UBUS	0.05	2.5630e-003
tblVehicleEF	UBUS	1.1750e-003	1.8200e-004
tblVehicleEF	UBUS	9.4500e-003	1.1960e-003
tblVehicleEF	UBUS	0.13	9.6290e-003
tblVehicleEF	UBUS	3.5160e-003	6.5800e-004
tblVehicleEF	UBUS	0.61	0.06
tblVehicleEF	UBUS	0.02	1.2250e-003
tblVehicleEF	UBUS	0.99	0.06
tblVehicleEF	UBUS	9.9530e-003	3.8500e-003
tblVehicleEF	UBUS	1.5390e-003	1.6500e-004
tblVehicleEF	UBUS	9.4500e-003	1.1960e-003
tblVehicleEF	UBUS	0.13	9.6290e-003
tblVehicleEF	UBUS	3.5160e-003	6.5800e-004
tblVehicleEF	UBUS	2.45	4.28
tblVehicleEF	UBUS	0.02	1.2250e-003
tblVehicleEF	UBUS	1.08	0.07
tblVehicleTrips	ST_TR	1.32	0.11
tblVehicleTrips	SU_TR	0.68	0.11
tblVehicleTrips	WD_TR	6.97	0.11
tblWater	IndoorWaterUseRate	231,250.00	0.00

Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

tblWater	OutdoorWaterUseRate	0.00	1,466,329.50
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## 2.0 Emissions Summary

### **2.1 Overall Construction (Maximum Daily Emission)**

## **Unmitigated Construction**

### **Mitigated Construction**

Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004	
Energy	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	2.3000e-004	1.0600e-003	2.9900e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.0783	1.0783	6.0000e-005		1.0798	
Total	0.0280	1.0600e-003	3.0900e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.0785	1.0785	6.0000e-005	0.0000	1.0801	

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004	
Energy	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	2.3000e-004	1.0600e-003	2.9900e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.0783	1.0783	6.0000e-005		1.0798	
Total	0.0280	1.0600e-003	3.0900e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004		1.0785	1.0785	6.0000e-005	0.0000	1.0801	

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

	ROG	NOx	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	Site Preparation	Site Preparation	3/8/2022	3/7/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

#### 3.1 Mitigation Measures Construction

Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

### **3.2 Site Preparation - 2022**

## **Unmitigated Construction On-Site**

## **Unmitigated Construction Off-Site**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

**3.2 Site Preparation - 2022****Mitigated Construction On-Site**

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

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

**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	2.3000e-004	1.0600e-003	2.9900e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	1.0783	1.0783	6.0000e-005			1.0798	
Unmitigated	2.3000e-004	1.0600e-003	2.9900e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	1.0783	1.0783	6.0000e-005			1.0798	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	0.11	0.11	0.11	423	423	423	423
Total	0.11	0.11	0.11	423	423	423	423

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.545462	0.034783	0.175214	0.104547	0.016326	0.005139	0.008963	0.095912	0.001419	0.002092	0.008487	0.000707	0.000948

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

## 5.0 Energy Detail

## Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

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

**Mitigated**

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

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	
Unmitigated	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day											lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000	
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000	
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	
<b>Total</b>	<b>0.0278</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>			<b>2.3000e-004</b>	

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

**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	6.3500e-003						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.0214						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0278	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Lockhart Solar Project II Operation\_Only - Mojave Desert AQMD Air District, Winter

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# DEMOLITION DETAILS

Project: Lockhart Solar II

## DEMOLITION

Units	Type of Equipment
1	Bore/Drill Rigs
1	Concrete/Industrial Saws
1	Crane
1	Crawler Tractors
4	Crushing/Processing Equip.
4	Excavators
5	Graders
5	Off-Highway Tractors
5	Off-Highway Trucks
	Other Equipment
	Pavers
	Paving Equipment
	Rollers
	Rough Terrain Forklifts
2	Rubber Tired Dozers
2	Rubber Tired Loaders
3	Scrapers
3	Signal Boards
3	Skid Steer Loaders
	Surfacing Equipment
	Tractors/Loaders/Backhoes
	Trenchers

## BUILDING DEMOLITION

Structure Dimensions

or

Tons of Demolished Material

Width	Length	Height
50	300	3
50	100	3

6,388

## Haul Truck Data:

Number of Trips/Day:

14

(miles)

Round Trip to Disposal Site:

50

Approx. Tons per Truck

10

## Asbestos Containing Material:

(Check One)

Known to be Present?

Yes

No

## Underground Storage Tanks (UST):

(Check One)

Known to be Present?

Yes

No

## RELATED ADDITIONAL INFORMATION:

Two building pads demolished to 3 feet below grade plus 200 drilled shaft concrete foundations

Total cubic yards = ~3,194 CY

At 2 tons/cubic yard, total material = ~6,388 tons

At 10 tons per truckload = 638 truckloads = ~ 14 trucks per day for 2 months

# GRADING EQUIPMENT / DUST CONTROL DETAILS

Project: Lockhart Solar II (The equipment listed here is for dust control)

## GRADING

Units	Type of Equipment
	Bore/Drill Rigs
	Concrete/Industrial Saws
	Crane
	Crawler Tractors
2	Crushing/Processing Equip.
2	Excavators
2	Graders
1	Off-Highway Tractors
1	Off-Highway Trucks
1 (water truck)	Other Equipment
	Pavers
	Paving Equipment
	Pile Drivers
1	Rollers
	Rough Terrain Forklifts
1	Rubber Tired Dozers
	Rubber Tired Loaders
	Scrapers
	Signal Boards
1	Skid Steer Loaders
	Surfacing Equipment
	Tractors/Loaders/Backhoes
	Trenchers

## DUST CONTROL

Will Haul Roads be paved? (Check One)

Yes   
No

How will dust be controlled?

(Check One)

Water?	<input checked="" type="checkbox"/>	(Recommended)
Chemical?	<input type="checkbox"/>	
Other?	<input checked="" type="checkbox"/>	Specify: Soil binder as needed

How often will the control method be applied? (Check One)

> 3 Times / Day	<input checked="" type="checkbox"/>	(Recommended)
> 1 Time / Day	<input type="checkbox"/>	
Other	<input type="checkbox"/>	

## EARTHWORK

Total Cut	100,000	cubic yards
Total Fill	100,000	cubic yards
Duration	90	days

## SOIL IMPORT / EXPORT INFORMATION

Soil to be imported	<input type="text"/>	cubic yards
Soil to be exported	<input type="text"/>	cubic yards
Hauling Days	<input type="text"/>	(# of days soil will be brought in or out)
Roundtrip Distance	<input type="text"/>	(distance from site to haul/dump site and back)

## RELATED ADDITIONAL INFORMATION:

# CONSTRUCTION, PAVING, AND PAINTING EQUIPMENT DETAILS

Project: Lockhart Solar II

## CONSTRUCTION

Units	Type of Equipment
	Bore/Drill Rigs
	Concrete/Industrial Saws
1	Crane
	Crawler Tractors
	Crushing/Processing Equip.
4	Excavators
1	Graders
1	Off-Highway Tractors
1	Off-Highway Trucks
	Other Equipment
	Pavers
	Paving Equipment
	Pile Drivers
	Rollers
12	Rough Terrain Forklifts
1	Rubber Tired Dozers
	Rubber Tired Loaders
2	Scrapers
	Signal Boards
	Skid Steer Loaders
	Surfacing Equipment
17	Tractors/Loaders/Backhoes
10	Trenchers

## PAVING

Units	Type of Equipment
	Graders
	Off-Highway Trucks
	Other Equipment
	Pavers
	Paving Equipment
	Rollers
	Rubber Tired Loaders
	Signal Boards
	Surfacing Equipment
	Tractors/Loaders/Backhoes

## BUILDING INSULATION – TITLE 24

Will structures MEET

**MEET**

Title 24 requirements?

Will structures EXCEED

**EXCEED**

If they EXCEED Title 24 requirements – by what percentage?

Check: 10%

20%

30%

Other:  (Fill in %)

## PAVING AREA (Includes existing street widening/excludes concreted areas)

Total Acres Paved: **No Paving** (estimate)

(Please note that “paving” does NOT include concreted areas.)

Please describe any structures/buildings will be pre-coated or painted (please provide square footages as well):

**Assume 20,000 cubic yards (200 truckloads @ 10 tons/truck) of import of engineered materials (road base, cement stabilization materials, rock surfacing, riprap, engineered trench backfill, etc.)**