3.3 Air Quality

This section includes an overview of the existing air quality within the VEGA 6 project area and Ramon Substation expansion area and identifies applicable local, state, and federal policies related to air quality. The impact assessment for the VEGA 6 project provides an evaluation of potential adverse effects on air quality based on criteria derived from the CEQA Guidelines and Imperial County Air Pollution Control District's (ICAPCD) Air Quality Handbook in conjunction with actions proposed in Chapter 2, Project Description, of this EIR. Information contained in this section for the VEGA 6 project is summarized from the *Air Quality and Greenhouse Gas Assessment for the VEGA SES 6 Solar and Battery Storage Project* prepared by ECORP Consulting, Inc. This report is included in Appendix C1 of this EIR.

The impact assessment for the proposed Ramon Substation expansion provides an evaluation of potential adverse effects on air quality based on criteria derived from the CEQA Guidelines and South Coast Air Quality Management District's CEQA Air Quality Significance Thresholds in conjunction with actions proposed in Chapter 2, Project Description, of this EIR. Air quality emissions for the proposed Ramon Substation expansion were estimated using CalEEMod, version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to model emissions for land use development projects, based on typical construction requirements. The CalEEMod worksheets generated for the proposed Ramon Substation expansion are contained in Appendix C2 of this EIR.

3.3.1 Existing Conditions

Regional Setting

VEGA 6

The VEGA 6 project is located in Imperial County within the Salton Sea Air Basin (SSAB). The SSAB consists of all of Imperial County and a portion of Riverside County. Both the ICAPCD and South Coast Air Quality Management District (SCAQMD) have jurisdiction within the SSAB. The ICAPCD has full jurisdiction within all Imperial County and SCAQMD only has jurisdiction within Riverside County.

The climate of Imperial County is governed by the large-scale sinking and warming of air in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The high-pressure ridge blocks out most mid-latitude storms, except in the winter, when it is weakest and located farthest south. The coastal mountains prevent the intrusion of any cool, damp air found in California coastal areas. Because of the barrier and weakened storms, Imperial County experiences clear skies, extremely hot summers, mild winters, and little rainfall. The sun shines, on the average, more in Imperial County than anywhere else in the United States.

The lack of clouds and atmospheric moisture creates strong diurnal and seasonal temperature variations ranging from an average summer maximum of 108 degrees Fahrenheit (° F) down to a winter morning minimum of 38° F. The most pleasant weather occurs from about mid-October to early May when daily highs are in the 70s and 80s with very infrequent cloudiness or rainfall. Imperial County experiences rainfall on an average of only four times per year (>0.10 inches in 24 hours). The local area usually has three days of rain in winter and one thunderstorm day in August. The annual rainfall in this region is less than three inches per year (Appendix C1 of this EIR).

Humidity is low throughout the year, ranging from an average of 28 percent in summer to 52 percent in winter. The large daily oscillation of temperature produces a corresponding large variation in the relative humidity. Nocturnal humidity rises to 50 to 60 percent but drops to about 10 percent during the day.

The wind in Imperial County follows two general patterns. Wind statistics indicate prevailing winds are from the west-northwest through southwest; a secondary flow maximum from the southeast is also evident. The prevailing winds from the west and northwest occur seasonally from fall through spring and are known to be from the Los Angeles area. Occasionally, Imperial County experiences periods of extremely high wind speeds. Wind speeds can exceed 31 miles per hour (mph), and this occurs most frequently during the months of April and May. However, speeds of less than 6.8 mph account for more than one-half of the observed wind measurements.

Ramon Substation Expansion

The Ramon Substation expansion area is located in the Riverside County portion of the SSAB. Air quality conditions in this portion of Riverside County are administered by SCAQMD. During the summer, the SSAB is generally influenced by a Pacific Subtropical High Cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The SSAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these 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 SSAB averages between three and seven inches of precipitation per year (County of San Bernardino 2018).

Major Air Pollutants

Criteria Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone, coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 3.3-1.

Table 3.3-1. Criteria Air Pollutants – Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health and Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.

Pollutant	Major Manmade Sources	Human Health and Welfare Effects
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N_2O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM_{10} and $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, woodburning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: Appendix C1 of this EIR

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death (Appendix C1 of this EIR).

Attainment Status

The U.S. Environmental Protection Agency (EPA) and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than ozone [O_3], PM_{10} and $PM_{2.5}$ and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3,

PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period.

Imperial County Portion of the Salton Sea Air Basin

The attainment status for the portion of the SSAB encompassing the project site is shown in Table 3.3-2. As shown, the Imperial County portion of the SSAB is currently designated as nonattainment for O_3 and PM_{10} under State standards. Under federal standards, the Imperial County portion of the SSAB is in nonattainment for O_3, PM_{10}, and $PM_{2.5}$. The area is currently in attainment or unclassified status for CO, NO_2, and SO_2.

Table 3.3-2. Attainment Status of Criteria Pollutants in the Imperial County Portion of the Salton Sea Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
CO	Attainment	Unclassified/attainment
NO_2	Attainment	Unclassified/attainment
SO_2	Attainment	Unclassified/attainment

Source: Appendix C1 of this EIR

Riverside County Portion of the Salton Sea Air Basin

The attainment status for the portion of the SSAB encompassing the Ramon Substation expansion area is shown in Table 3.3-3. As shown, the Riverside County portion of the SSAB is currently designated as nonattainment for O_3 and PM_{10} under State standards. Under federal standards, the Riverside County portion of the SSAB is in nonattainment for O_3 and PM_{10}. The area is currently in attainment or unclassified status for CO, NO_2, SO_2, and $PM_{2.5}$.

Table 3.3-3. Attainment Status of Criteria Pollutants in the Riverside County Portion of the Salton Sea Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Attainment	Unclassified/attainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment

Source: County of Riverside 2018

Local Ambient Air Quality

VEGA 6

Ambient air quality at the project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. The ICAPCD operates a network of monitoring stations throughout Imperial County that continuously monitor ambient levels of criteria pollutants in compliance with federal monitoring regulations.

Since not all air monitoring stations measure all of the tracked pollutants, the data from the following monitoring stations, listed in the order of proximity to the VEGA 6 project site, have been used: Westmorland Monitoring Station (Westmorland Station), Brawley-220 Main Street Monitoring Station (Brawley Station).

The Westmorland Station is located approximately 4.5 miles northeast of the VEGA 6 project site at 570 Cook Street and the Brawley Station is located approximately 9.4 miles east of the VEGA 6 project site at 220 Main Street. PM_{10} and O_3 was measured at the Westmorland Station and $PM_{2.5}$ was measured at the Brawley Station. It should be noted that due to the air monitoring stations' distances from the VEGA 6 project site, recorded air pollution levels at the air monitoring stations reflect with varying degrees of accuracy local air quality conditions at the VEGA 6 project site. Table 3.3-4 shows the most recent three years of monitoring data from CARB.

Table 3.3-4. Summary of Local Ambient Air Quality Data

Pollutant (Standard)	Year		
	2020	2021	2022
O_3 – Westmorland Station			
Maximum 1-Hour Concentration (ppm)	0.067	0.081	0.085
Days > CAAQS (0.09 ppm)	0	0	0
Maximum 8-Hour Concentration (ppm) (state/federal)	0.059 / 0.059	0.073 / 0.072	0.068 / 0.067
Days > CAAQS (0.070 ppm)	0	1	0
PM_{10} – Westmorland Station			
Maximum 24-Hour concentration (µg/m^3) (state/federal)	297.2 / 286.8	543.1 / 547.1	896.2 / 867.2
Days > CAAQS (150 ug/m^3)	89	104	123
$PM_{2.5}$ – Brawley Station			
Maximum 24-Hour Concentration (µg/m^3) (state/federal)	23.7 / 23.7	24.4 / 24.4	43.2 / 43.2
Days > CAAQS (35 ug/m^3) (federal)	0	0	5

Source: CARB 2023

µg/m^3 – micrograms per cubic meter; ppm = parts per million

* = insufficient data available

Ramon Substation Expansion

The SCAQMD operates a network of monitoring stations throughout Riverside County that continuously monitor ambient levels of criteria pollutants in compliance with federal monitoring regulations.

The nearest air quality monitoring station is the Palm Springs-Fire Station located at 590 E Racquet Club Ave in Palm Springs, CA.

Table 3.3-5. Summary of Local Ambient Air Quality Data

Pollutant (Standard)	Year		
	2020	2021	2022
O_3 – Palm Springs-Fire Station			
Maximum 1-Hour Concentration (ppm)	0.119	0.110	0.106
Days > CAAQS (0.09 ppm)	9	10	7
Maximum 8-Hour Concentration (ppm) (state/federal)	0.094 / 0.094	0.093 / 0.092	0.090 / 0.089
Days > CAAQS (0.070 ppm)	53	38	43
PM_{10} – Palm Springs-Fire Station			
Maximum 24-Hour concentration (µg/m^3) (state/federal)	40.8 / 129.8	34.5 / 35.2	156.3 / 159.5
Days > CAAQS (150 ug/m^3)	0	0	3

Source: CARB 2023
µg/m^3 – micrograms per cubic meter; ppm = parts per million
* = insufficient data available

Sensitive Receptors

High concentrations of air pollutants pose health hazards for the general population, but particularly for the young, the elderly, and the sick. Typical health problems attributed to smog include respiratory ailments, eye and throat irritations, headaches, coughing, and chest discomfort. Certain land uses are considered to be more sensitive to the effects of air pollution. Schools, hospitals, residences, and other facilities where people congregate, especially children, the elderly and infirm, are considered particularly sensitive to air pollutants.

VEGA 6

The nearest sensitive receptor is a single-family residence located 2,725 feet from the northeastern corner of the solar energy facility site. For construction occurring during the gen-tie transmission line route to the IID electrical grid transmission line, the nearest sensitive receptor would be 970 feet away.

Ramon Substation Expansion

The nearest sensitive receptor to the Ramon Substation expansion area are single-family residences located approximately 0.2 miles west along Via Las Palmas.

3.3.2 Regulatory Setting

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

Federal

Clean Air Act

The CAA, passed in 1970 and last amended in 1990, is the primary federal law that governs air quality. The Federal CAA delegates primary responsibility for clean air to the U.S. EPA. The U.S. EPA develops rules and regulations to preserve and improve air quality and delegates specific responsibilities to state and local agencies. Under the act, the U.S. EPA has established the NAAQS for six criteria air pollutants that are pervasive in urban environments and for which state and national health-based ambient air quality standards have been established. Ozone, CO, NO_2, SO_2, Pb, and PM (Including both PM_{10}, and $PM_{2.5}$) are the six criteria air pollutants. Ozone is a secondary pollutant, nitrogen oxides (NO_x) and volatile organic compounds (VOC) are of particular interest as they are precursors to ozone formation. In addition, national standards exist for Pb. The NAAQS standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision.

The Federal CAA requires U.S EPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table 3.3-6.

State

California Clean Air Act

The California Clean Air Act (CCAA) was adopted by CARB in 1988. The CCAA is responsible for meeting the state requirements of the Federal CAA and for establishing the CAAQS. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The CCAA, as amended in 1992, requires all air districts of the state to achieve and maintain the CAAQS by the earliest practical date.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous 3 calendar years. As shown in Table 3.3-6, the CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment.

California State Implementation Plan

The CAA mandates that the state submit and implement a SIP for areas not meeting the NAAQS. These plans must include pollution control measures that demonstrate how the standards will be met. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. The Code of Federal Regulations Title 40, Chapter I, Part 52, Subpart F, Section 52.220 lists all of the items which are included in the California SIP.

Table 3.3-6. Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	National Standard
O_3	1-hour 8-hour	0.09 ppm 0.070 ppm	-- 0.070 ppm
PM_{10}	24-hour Mean	50 µg/m^3 20 µg/m^3	150 µg/m^3 --
$PM_{2.5}$	24-hour Mean	-- 12 µg/m^3	35 µg/m^3 12 µg/m^3
CO	1-hour 8-hour	20 ppm 9 ppm	35 ppm 9 ppm
NO_2	1-hour Mean	0.18 ppm 0.030 ppm	100 ppb 0.053 ppm
SO_2	1-hour 24-hour	0.25 ppm 0.04 ppm	75 ppb --
Pb	30-day Rolling 3-month	1.5 µg/m^3	-- 0.15 µg/m^3
Sulfates	24-hour	25 µg/m^3	No federal standard
Hydrogen Sulfide	1-hour	0.03 ppm	
Vinyl Chloride	24-hour	0.01 ppm	
Visibility-reducing particles	8-hour	Extinction coefficient of 0.23 kilometer, visibility of 10 miles or more because of particles when relative humidity is less than 70 percent	

Source: CARB 2016

Notes:

CO – carbon monoxide; mean – annual arithmetic mean; NO_2 – nitrogen dioxide; O_3 – ozone; Pb – lead; $PM_{2.5}$ – particulate matter less than 2.5 microns in diameter; PM_{10} – particulate matter less than 10 microns in diameter; ppb – parts per billion; ppm – parts per million; SO_2 – sulfur dioxide; µg/m^3 – micrograms per cubic meter

Toxic Air Contaminants Regulation

TAC sources include industrial processes, dry cleaners, gasoline stations, paint and solvent operations, and fossil fuel combustion sources. The TACs that are relevant to the implementation of the project include DPM and airborne asbestos.

In August 1998, CARB identified DPM emissions from diesel-fueled engines as a TAC. In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel fueled engines and vehicles. The goal of the plan is to reduce diesel PM_{10} (inhalable particulate matter) emissions and the associated health risk by 75 percent in 2010 and by 85 percent by 2020. The plan identified 14 measures that target new and existing on-road vehicles (e.g., heavy duty trucks and buses, etc.), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps, etc.), and stationary engines (e.g., stand-by power generators, etc.).

Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act

CARB's Statewide comprehensive air toxics program was established in 1983 with AB 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control

measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by SB 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Regional

Imperial County Air Pollution Control District

The ICAPCD is the agency responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. ICAPCD is responsible for regulating stationary sources of air emissions in Imperial County. Stationary sources that have the potential to emit air pollutants into the ambient air are subject to the Rules and Regulations adopted by ICAPCD. ICAPCD is responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. Monitoring of ambient air quality in Imperial County began in 1976. Since that time, monitoring has been performed by ICAPCD, CARB, and by private industry. There are six monitoring sites in Imperial County from Niland to Calexico. The ICAPCD has developed the following plans to achieve attainment for air quality ambient standards.

- **2009 Imperial County Plan for PM_{10}.** Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. As a result, ICAPCD was required to develop a PM_{10} Attainment Plan. The final plan was adopted by ICAPCD on August 11, 2009 (ICAPCD 2009).
- **2013 Imperial County Plan for 2006 24-hour $PM_{2.5}$ for Moderate Nonattainment Area.** U.S. EPA designated Imperial County as nonattainment for the 2006 24-hr $PM_{2.5}$ standard, effective December 14, 2009. The 2013 $PM_{2.5}$ SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but-for" transport of international emissions from Mexicali, Mexico. The City of Calexico, California shares a border with the City of Mexicali. Effective July 1, 2014, the City of Calexico was designated nonattainment, while the rest of the SSAB was designated attainment (ICAPCD 2014).
- **2017 Imperial County Plan for 2008 8-hour Ozone Standard.** Because of Imperial County's "moderate" nonattainment status for 2008 federal 8-hour O_3 standards, ICAPCD was required to develop an 8-hour Attainment Plan for Ozone (ICAPCD 2017a). The plan includes control measures which are an integral part of how the ICAPCD currently controls the ROG and NO_X emissions within the O_3 nonattainment areas. The overall strategy includes programs and control measures which represent the implementation of Reasonable Available Control Technology (40 CFR 51.912) and the assurance that stationary sources maintain a net decrease in emissions.

- **2018 Imperial County Plan for PM_{10}.** Imperial Valley is classified as nonattainment for federal and state PM_{10} standards. The 2018 SIP maintained previously adopted fugitive dust control measures (Regulation VIII) that were approved in the Imperial County portion of the California SIP in 2013 (see above) (ICAPCD 2018a).
- **2018 Imperial County Plan for $PM_{2.5}$.** U.S. EPA designated Imperial County as nonattainment for the 2018 24-hr $PM_{2.5}$ standard. The 2018 $PM_{2.5}$ SIP concluded that the majority of the $PM_{2.5}$ emissions resulted from transport in nearby Mexico. Specifically, the SIP demonstrates attainment of the 2006 $PM_{2.5}$ NAAQS "but for" transport of international emissions from Mexicali, Mexico. In accordance with the CCAA, the $PM_{2.5}$ SIP satisfies the attainment demonstration requirement satisfying the provisions of the CCAA (ICAPCD 2018b).

In addition to the above plans, the ICAPCD is working cooperatively with counterparts from Mexico to implement emissions reductions strategies and projects for air quality improvements at the border. The two countries strive to achieve these goals through local input from states, county governments, and citizens. Within the Mexicali and Imperial Valley area, the Air Quality Task Force has been organized to address those issues unique to the border region known as the Mexicali/Imperial air shed. The Air Quality Task Force membership includes representatives from federal, State, and local governments from both sides of the border, as well as representatives from academia, environmental organizations, and the public. This group was created to promote regional efforts to improve the air quality monitoring network, emissions inventories, and air pollution transport modeling development, as well as the creation of programs and strategies to improve air quality.

Imperial County Air Pollution Control District Rules and Regulations

ICAPCD has the authority to adopt and enforce regulations dealing with controls for specific types of sources, emissions or hazardous air pollutants, and New Source Review. The ICAPCD Rules and Regulations are part of the SIP and are separately enforceable by the EPA.

Rule 106 – Abatement. The Board may, after notice and a hearing, issue, or provide for the issuance by the Hearing Board, of an order for abatement whenever the District finds that any person is in violation of the rules and regulations limiting the discharge of air contaminants into the atmosphere.

Rule 107 – Land Use. The purpose of this rule is to provide ICAPCD the duty to review and advise the appropriate planning authorities within the District on all new construction or changes in land use which the Air Pollution Control Officer believes could become a source of air pollution problems.

Rule 201 – Permits Required. The construction, installation, modification, replacement, and operation of any equipment which may emit or control Air Contaminants require ICAPCD permits.

Rule 207 – New and Modified Stationary Source Review. Establishes preconstruction review requirements for new and modified stationary sources to ensure the operations of equipment does not interfere with attainment or maintenance of ambient air quality standards.

Rule 208 – Permit to Operate. The ICAPCD would inspect and evaluate the facility to ensure the facility has been constructed or installed and will operate to comply with the provisions of the Authority to Construct permit and comply with all applicable laws, rules, standards, and guidelines.

Rule 310 – Operational Development Fee. The purpose of this rule is to provide ICAPCD with a sound method for mitigating the emissions produced from the operation of new commercial and residential development projects throughout the County of Imperial and incorporated cities. All project proponents have the option to either provide off-site mitigation, pay the operational development fee,

or do a combination of both. This rule will assist ICAPCD in attaining the state and federal ambient air quality standards for PM_{10} and O_3.

Rule 401 – Opacity of Emissions. Sets limits for release or discharge of emissions into the atmosphere, other than uncombined water vapor, that are dark or darker in shade as designated as No.1 on the Ringelmann Chart[1] or obscure an observer's view to a degree equal to or greater than smoke does as compared to No.1 on the Ringelmann Chart, for a period or aggregated period of more than three minutes in any hour.

Rule 403 – General Limitations on the Discharge of Air Contaminants. Rule 403 sets forth limitations on emissions of pollutants, including particulate matter, from individual sources.

Rule 407 – Nuisance. Rule 407 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Rule 801 – Construction and Earthmoving Activities. Rule 801 aims to reduce the amount of PM_{10} entrained in the ambient air as a result of emissions generated from construction and other earthmoving activities by requiring actions to prevent, reduce, or mitigate PM_{10} emissions. This rule applies to any construction and other earthmoving activities, including, but not limited to, land clearing, excavation related to construction, land leveling, grading, cut and fill grading, erection or demolition of any structure, cutting and filling, trenching, loading or unloading of bulk materials, demolishing, drilling, adding to or removing bulk of materials from open storage piles, weed abatement through disking, back filling, travel on-site and travel on access roads to and from the site.

Regulation VIII – Fugitive Dust Rules. Regulation VIII sets forth rules regarding the control of fugitive dust, including fugitive dust from construction activities. The regulation requires implementation of fugitive dust control measures to reduce emissions from earthmoving, unpaved roads, handling of bulk materials, and control of track-out/carry-out dust from active construction sites. Best Available Control Measures to reduce fugitive dust during construction and earthmoving activities include but are not limited to:

- Phasing of work in order to minimize disturbed surface area
- Application of water or chemical stabilizers to disturbed soils
- Construction and maintenance of wind barriers
- Use of a track-out control device or wash down system at access points to paved roads.

Compliance with Regulation VIII is mandatory for all construction sites, regardless of size; however, compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts. In addition, compliance for a project includes: (1) the development of a dust control plan for the construction and operational phase; and (2) notification to the Air District is required 10 days prior to the commencement of any construction activity. Furthermore, any use of engine(s) and/or generator(s) of 50 horsepower or greater may require a permit through ICAPCD.

[1] The Ringelmann scale is a scale for measuring the apparent density or opacity of smoke.

Southern California Association of Governments – 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. CEQA requires that regional agencies like SCAG review projects and plans throughout its jurisdiction. SCAG, as the region's "Clearinghouse," collects information on projects of varying size and scope to provide a central point to monitor regional activity. SCAG has the responsibility of reviewing dozens of projects, plans, and programs every month. Projects and plans that are regionally significant must demonstrate to SCAG their consistency with a range of adopted regional plans and policies.

On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The RTP/SCS or "Connect SoCal" includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the NAAQS as set forth by the federal CAA. The following SCAG goal is applicable to the project:

- Reduce greenhouse gas emissions and improve air quality.

Imperial County General Plan

The Imperial County General Plan serves as the overall guiding policy for the County. The Conservation and Open Space Element includes objectives for helping the County achieve the goal of improving and maintaining the quality of air in the region. Table 3.3-7 summarizes the VEGA 6 project's consistency with the applicable air quality goal and objectives from the Conservation and Open Space Element. While this EIR analyzes the project's consistency with the General Plan pursuant to State CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.3-7. Project Consistency with Applicable General Plan Policies

Applicable Policies	Consistency Determination	Analysis
Conservation and Open Space Element		
Protection of Air Quality and Addressing Climate Change Goal 7: The County shall actively seek to improve the quality of air in the region.	Consistent	The proposed VEGA 6 project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed VEGA 6 project would improve air quality and reduce GHG emissions by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities. Therefore, the proposed VEGA 6 project is consistent with this goal.

Applicable Policies	Consistency Determination	Analysis
Objective 7.1: Ensure that all project and facilities comply with current Federal, State and local requirements for attainment of air quality objectives.	Consistent	The proposed VEGA 6 project would comply with current federal and State requirements for attainment for air quality objectives through conformance with all applicable ICAPCD rules and requirements to reduce fugitive dust and emissions. Further, the VEGA 6 project would comply with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Measures (Mitigation Measure AQ-1). Therefore, the proposed VEGA 6 project is consistent with this objective.
Objective 7.2: Develop management strategies to mitigate fugitive dust. Cooperate with all federal and state agencies in the effort to attain air quality objectives.	Consistent	The Applicant would cooperate with all federal and State agencies in the effort to attain air quality objectives through compliance with the ICAPCD Air Quality CEQA Handbook's Mandatory Standard Measures (Mitigation Measure AQ-1). Therefore, the proposed VEGA 6 project is consistent with this objective.

Source: County of Imperial 2016

South Coast Air Quality Management District Rules

SCAQMD is the regional agency responsible for regulating and enforcing air pollution control regulations within the Riverside portion of the SSAB. The most recent Air Quality Management Plan was developed in 2022 and it focuses on identifying control strategies to attain the 2015 8-hour ozone standards of 70 parts per billion. Rules with applicability to the Ramon Substation expansion are described below.

RULE 402

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Odor Emissions. All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

RULE 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earthmoving and grading activities. More specifically, Rule 403 would require watering disturbed surfaces three times per day during grading activities.

Dust Control, Operations. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the SCAQMD.

County of Riverside General Plan Air Quality Element

The County of Riverside General Plan Air Quality Element identifies goals, policies, and programs that are meant to balance Riverside County's actions regarding land use, circulation, and other issues with their potential effects on air quality. The Air Quality Element addresses ambient air quality standards set forth by the EPA and CARB. The Air Quality Element contains policies designed to establish a regional basis for improving air quality. The following policies from the Air Quality Element are applicable to the Ramon Substation expansion:

- **AQ 1.1:** Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.
- **AQ 1.4:** Coordinate with the SCAQMD and Mojave Desert Air Quality Management District (MDAQMD) to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.
- **AQ 2.1:** The County land use planning efforts shall ensure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.
- **AQ 2.2:** Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.
- **AQ 4.1:** Require the use of all feasible building materials/methods which reduce emissions.
- **AQ 4.6:** Require stationary air pollution sources to comply with applicable air district rules and control measures.
- **AQ 4.7:** To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, Basin, the Environmental Protection Agency, and the California Air Resources Board.
- **AQ 4.9:** Require compliance with SCAQMD Rules 403 and 403.1 and support appropriate future measures to reduce fugitive dust emanating from construction sites.

3.3.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts related to air quality, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to air quality are considered significant if any of the following occur:

- Conflict with or obstruct implementation of the applicable air quality plan

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)
- Expose sensitive receptors to substantial pollutant concentrations
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

Imperial County Air Pollution Control District

ICAPCD amended the Air Quality Handbook: Guidelines for the Implementation of CEQA on December 12, 2017 (ICAPCD 2017b). ICAPCD established significance thresholds based on the state CEQA thresholds. The handbook was used to determine the proper level of analysis for the VEGA 6 project.

OPERATIONS

Air quality analyses should compare all operational emissions of a project, including motor vehicle, area source, and stationary or point sources to the thresholds in Table 3.3-8. Projects can be classified as either Tier 1 or Tier 2 projects, depending on the project's operational emissions. As shown in Table 3.3-8, Tier 1 projects are projects that emit less than 137 pounds per day of nitrogen oxide (NO_x) or reactive organic gases (ROGs); less than 150 pounds per day of PM_{10} or SO_x; or less than 550 pounds per day of CO or $PM_{2.5}$.

Tier 1 projects are not required to develop a Comprehensive Air Quality Analysis Report or an EIR and require the implementation of all feasible mitigation measures listed in Section 7.2 of the ICAPCD's Air Quality Handbook (ICAPCD 2017b). Alternatively, Tier 2 projects are projects that emit 137 pounds per day of NO_x or ROG or greater; 150 pounds per day of PM_{10} or SO_x or greater; or 550 pounds per day of CO or $PM_{2.5}$ or greater. Tier 2 projects are required to develop a Comprehensive Air Quality Analysis Report at a minimum and are required to implement all standard mitigation measures as well as all feasible discretionary mitigation measures listed in Sections 7.2 and 7.3 of the ICAPCD's Air Quality Handbook (ICAPCD 2017b).

Table 3.3-8. Imperial County Air Pollution Control District Significance Thresholds for Operation

Criteria Pollutant	Tier 1 Thresholds	Tier 2 Thresholds
NO_x and ROG	Less than 137 pounds per day	137 pounds per day and greater
PM_{10} and SO_2	Less than 150 pounds per day	150 pounds per day and greater
CO and $PM_{2.5}$	Less than 550 pounds per day	550 pounds per day and greater
Level of Significance	**Less than Significant**	**Significant Impact**

Source: ICAPCD 2017b

CO – carbon monoxide; NO_x – nitrogen oxide; O3 – ozone; Pb – lead; $PM_{2.5}$ – particulate matter less than 2.5 microns in diameter; PM_{10} - particulate matter less than 10 microns in diameter; ROG - reactive organic gas; SOx – sulfur oxide.

CONSTRUCTION

For construction projects, the Air Quality Handbook indicates that the significance threshold for NO_x is 100 pounds per day and for ROG is 75 pounds per day. As discussed in the ICAPCD's Air Quality Handbook, the approach to evaluating construction emissions should be qualitative rather than quantitative. In any case, regardless of the size of the project, the standard mitigation measures for

construction equipment and fugitive PM_{10} must be implemented at all construction sites. The implementation of discretionary mitigation measures, as listed in Section 7.1 of the ICAPCD's Air Quality Handbook, apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. The mitigation measures found in Section 7.1 of the ICAPCD's handbook are intended as a guide of feasible mitigation measures and are not intended to be an all-inclusive comprehensive list of all mitigation measures. Table 3.3-9 presents the construction emission thresholds that are identified by ICAPCD.

Table 3.3-9. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities

Pollutant	Thresholds
PM_{10}	150 pounds per day
ROG	75 pounds per day
NO_x	100 pounds per day
CO	550 pounds per day

Source: ICAPCD 2017b

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

South Coast Air Quality Management District

REGIONAL THRESHOLDS

The SCAQMD has regional significance thresholds for criteria pollutants, as summarized in Table 3.3-10. The SCAQMD's CEQA Air Quality Significance Thresholds (SCAQMD 2023) indicate that any projects in the Basin with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

Table 3.3-10. SCAQMD Maximum Daily Regional Emissions Thresholds

Criteria Pollutant	Regional Construction Threshold (lbs/day)	Regional Operation Thresholds (lbs/day)
NO_x	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_x	150	150
CO	550	550
Pb	3	3

Source: SCAQMD 2023

LOCALIZED SIGNIFICANCE THRESHOLDS

Localized Significance Thresholds (LSTs) were developed by the SCAQMD to analyze localized air quality impacts from a proposed project. Use of LSTs in air quality impact analyses is voluntary and at the discretion of the Lead Agency. LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. LST look up tables (SCAQMD 2009) can be used as a screening tool to identify

potentially significant impacts to nearby sensitive receptors. The LST look up tables consist of both construction and operational LSTs for one-, two-, and five-acre proposed projects emitting CO, NOx, PM2.5, and/or PM_{10} by source receptor area. If these LSTs are exceeded, project-specific modeling may be required. The analysis makes use of methodology included in the *Final LST Methodology* guidance document, published in June 2003 and revised in July 2008, from SCAQMD. For the Ramon substation, localized emissions were evaluated against the LSTs for Source Receptor Area 30 Coachella Valley for a 4-acre site at a 200m receptor distance (nearest receptor is 0.2 miles away but 200m is used to be conservative). The total acreage disturbed would be 4 acres per day rough grading and fine grading activities. It should be noted that since the look-up tables identify thresholds at only 1 acre, 2 acres, and 5 acres, the thresholds were scaled to 4 acres as shown in Table 3.3-11 for this analysis.

Table 3.3-11. LST Construction Thresholds

	NOx	CO	PM10	PM2.5
2 acre threshold	425	7174	89	28
5 acre threshold	547	10178	112	37
Calculated 4 acre threshold	**506**	**9177**	**104**	**34**

Diesel Toxic Air Contaminants Risk Thresholds

There are inherent uncertainties in risk assessment with regard to the identification of compounds as causing cancer or other health effects in humans, the cancer potencies and reference exposure levels of compounds, and the exposure that individuals receive. It is common practice to use conservative (health protective) assumptions with respect to uncertain parameters. The uncertainties and conservative assumptions must be considered when evaluating the results of risk assessments.

There is debate as to the appropriate levels of risk assigned to diesel particulates. The U.S. EPA has not yet declared diesel particulates as a toxic air contaminant. Using the CARB threshold, a risk concentration of one in one million (1:1,000,000) per micrograms per cubic meter ($\mu g/m^3$) of continuous 70-year exposure is considered less than significant.

Methodology

VEGA 6

The analysis criteria for air quality impacts are based on the approach and methods discussed in the ICAPCD's Air Quality Handbook. The proposed VEGA 6 project would result in both short-term and long-term emissions of air pollutants associated with construction and operation of the proposed VEGA 6 project.

Construction emissions would include exhaust from the operation of conventional construction equipment, on-road emissions from employee vehicle trips and haul truck trips, fugitive dust as a result of grading, and vehicle travel on paved and unpaved surfaces.

Once fully constructed, the proposed VEGA 6 project would be operated on an unstaffed basis and be monitored remotely, with periodic on-site personnel visitations for security, maintenance and system monitoring. Therefore, no full-time site personnel would be required on-site during operations and employees would only be on-site up to two times per year to wash the panels. As the project's PV

arrays produce electricity passively, maintenance requirements are anticipated to be very minimal. Any required planned maintenance activities would generally consist of equipment inspection and replacement and would be scheduled to avoid peak load periods. Any unplanned maintenance would be responded to as needed, depending on the event. Operational emissions would include vehicle trips from employees who commute to and from the VEGA 6 project site (i.e., to control site operation and perform equipment maintenance).

The ICAPCD's Air Quality Handbook establishes aggregate emission calculations for determining the potential significance of a project. In the event that the emissions exceed the established thresholds (Table 3.3-8 and Table 3.3-9), air dispersion modeling may be conducted to assess whether the project results in an exceedance of an air quality standard.

The *Air Quality and Greenhouse Gas Assessment for the VEGA SES 6 Solar and Battery Storage Project* was prepared by ECORP Consulting, Inc. (Appendix C1 of this EIR). This report was used in the evaluation of project-related construction and operational air quality impacts. The emissions of criteria air pollutants were estimated using methodologies recommended by the ICAPCD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2.[2] Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Imperial County as well as timing and equipment identified by the project proponent. Operational air pollutant emissions were based on the project site plans. Associated emissions calculations and assumptions are included in Appendix C1 of this EIR.

The air quality impacts are mainly attributable to construction phases of the VEGA 6 project, including site preparation, facility installation, and gen-tie and site restoration. Operational impacts include inspection and maintenance operations, which includes washing of the solar panels.

Ramon Substation Expansion

Similar to VEGA 6, construction emissions would include exhaust from the operation of conventional construction equipment, on-road emissions from employee vehicle trips and truck trips, and fugitive dust as a result of grading and vehicle travel on paved surfaces. It is assumed that there would be no substantial earthmoving activities and that any cut/fill would be balanced on site. Workers would be able to access the project site via paved roads (Ramon Road) and through the existing Ramon Substation. Project work would begin in early 2024 for a total duration of 180 construction working days.

As discussed at the beginning of this Section 3.3, air pollutant emissions for construction for the proposed Ramon Substation expansion were estimated using CalEEMod, version 2020.4.0. Regional air pollutant emissions were compared to SCAQMD daily thresholds for ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ while the on-site localized emissions were compared to the LSTs for NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ consistent with SCAQMD guidance. The CalEEMod assumptions and outputs generated for the proposed Ramon Substation Expansion are contained in Appendix C2 of this EIR.

Once fully constructed, the proposed Ramon Substation Expansion would be operated and maintained together with the existing Ramon Substation and would not require any additional employees. Therefore, no air quality modeling was performed for the operations and maintenance portion of the Ramon Substation Expansion.

[2] CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects.

Impact Analysis

Impact 3.3-1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

VEGA 6

The air quality attainment plan (AQAP) for the SSAB, through the implementation of the air quality management plan (AQMP) (previously AQAP) and SIP for PM_{10}, sets forth a comprehensive program that will lead the SSAB into compliance with all federal and state air quality standards. A consistency determination with the AQMP plays an important role in local agency project review by linking local planning and individual projects to the 2017 Clean Air Plan. The 2017 Clean Air Plan strategy is based on projections from local general plans. Projects that are consistent with the local general plan are considered consistent with the regional air quality plan. In addition, AQMP control measures and related emission reduction estimates are based upon emissions projections for future development scenarios derived from land use, population, and employment characteristics defined in consultation with local governments. Conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections, meeting the land use designation set forth in the local General Plan, and comparing assumed emissions in the AQMP to proposed emissions.

The proposed project must demonstrate compliance with all ICAPCD applicable rules and regulations, as well as local land use plans and population projections. As the project does not contain a residential component, the project would not result in an increase in the regional population. While contributions to energy supply may induce population growth, the proposed solar energy project would not significantly increase employment or growth within the region. Moreover, development of the proposed project would increase the amount of renewable energy and help California meet its RPS.

As shown in Table 3.3-7, the project is consistent with the applicable air quality goal and objectives from the General Plan. The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality by reducing the amount of emissions that would be generated in association with electricity production from fossil fuel burning facilities.

Furthermore, the thresholds of significance adopted by the air district (ICAPCD), determine compliance with the goals of the attainment plans in the region. As such, emissions below the ICAPCD regional mass daily emissions thresholds presented in Table 3.3-8 and Table 3.3-9 would not conflict with or obstruct implementation of the applicable air quality plans. The following analysis is broken out by a discussion of potential impacts during construction of the project followed by a discussion of potential impacts during operation of the project.

Construction Emissions. Air emissions are generated during construction through activities. Two basic sources of short-term emissions will be generated through project construction: operation of heavy-duty equipment (i.e., excavators, loaders, haul trucks) and the creation of fugitive dust during clearing and grading. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Construction emissions vary from day-to-day depending on the number of workers, number, and types of active heavy-duty vehicles and equipment, level of activity, the prevailing meteorological conditions, and the length over which these activities occur.

Project construction is anticipated to last approximately 12 to 18 months. Construction activities would primarily involve demolition and grubbing, grading of the project site to establish access roads and pads for electrical equipment, trenching for underground electrical collection lines, and the installation of solar equipment and security fencing, and the offsite infrastructure work required for the gen-tie transmission line.

Emissions associated with project off-road equipment, worker commute trips, and ground disturbance were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements.

Table 3.3-12 shows the predicted maximum daily emissions attributable to project construction with implementation of ICAPCD Regulation VIII measures (Mitigation Measure AQ-1), which is mandatory for all construction sites, regardless of size. Regulation VIII requires all unpaved roadways, on and off-site, to be conditioned and maintained with soil stabilizers to reduce dust opacity to no more than 20 percent; all unpaved disturbed surfaces, on and off-site, to be stabilized with a dust suppressant, watering, or soil stabilizers to reduce opacity to no greater than 20 percent; and to reduce vehicle speed to no greater than 15 mph on all unpaved surfaces. Construction emissions are short-term and of temporary duration lasting only as long as project construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds ICAPCD thresholds of significance. As shown in Table 3.3-12, the project's daily construction emissions would not exceed the ICAPCD thresholds for ROG, Nox, CO, SO_2 and $PM_{2.5}$. However, the project's daily construction emissions would exceed the ICAPCD threshold for PM_{10}, even with implementation of ICAPCD Regulation VIII (Mitigation Measure AQ-1). This potential impact is considered significant. A predominate source of the project's PM_{10} emissions is workers commuting to and from the project site on unpaved roads. Commuter vehicles traveling over the exposed soils of unpaved roads generates substantial amounts of fugitive PM_{10} emissions. The majority of roadways leading to the project site are paved; however, 1.8 miles of unpaved roadway would be used by commuting workers and vendors. Mitigation Measure AQ-2 is proposed to reduce PM_{10} emissions to levels below the significance threshold. Mitigation Measure AQ-2 would require the project contractor to use soil stabilizers on the 1.8 miles of unpaved roadway used for construction worker access to the project site.

Table 3.3-12. VEGA 6 Project Construction-Generated Emissions (Unmitigated)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Solar Facility and Battery Energy Storage System						
Construction 2022	9.53	97.14	68.64	0.16	310.81	45.44
Construction 2023	6.22	61.93	50.73	0.12	597.59	61.16
ICAPCD Significance Threshold	75	100	550	N/A	150	N/A
Exceed ICAPCD Threshold?	**No**	**No**	**No**	**No**	**Yes**	**No**
Gen-tie Transmission Line						
Construction 2022	8.97	67.76	70.65	0.19	559.07	58.36

Construction Year	Pollutant (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
ICAPCD Significance Threshold	75	100	550	N/A	150	N/A
Exceed ICAPCD Threshold?	**No**	**No**	**No**	**No**	**Yes**	**No**

Source: Appendix C1 of this EIR
Note: Pounds per day taken from the season with the highest output.

As shown in Table 3.3-13, with implementation of Mitigation Measure AQ-2, the project's daily construction emissions of PM_{10} would not exceed the ICAPCD threshold.

In the event that onsite construction was to occur simultaneously as construction of the proposed offsite gen-tie transmission line, ICAPCD significance thresholds of Nox could potentially be exceeded. The project applicant would implement Mitigation Measure AQ-3, which requires the construction equipment list to be submitted periodically to ICAPCD to perform a NO_x analysis to verify that equipment use does not exceed significance thresholds. To further reduce dust emissions during project construction, the project applicant will implement Mitigation Measure AQ-4, which limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less. Implementation of Mitigation Measures AQ-3 and AQ-4 would provide reduction strategies to further improve air quality and ensure that this potential impact would remain less than significant.

Table 3.3-13. Project Construction – Generated Emissions (Mitigated)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Solar Facility and Battery Energy Storage System						
Construction 2022	2.28	11.09	83.73	0.16	57.10	11.02
Construction 2023	1.88	7.28	63.15	0.12	90.87	9.46
ICAPCD Significance Threshold	75	100	550	N/A	150	N/A
Exceed ICAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Gen-tie Transmission Line						
Construction 2022	8.97	67.76	99.88	0.19	85.19	58.36
ICAPCD Significance Threshold	75	100	550	N/A	150	N/A
Exceed ICAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix C1 of this EIR
Note: Pounds per day taken from the season with the highest output.

Operational Emissions. Although limited, project implementation would result in long-term operational emissions of criteria air pollutants such as ROG, NO_x, CO, SO_2, PM_{10}, O_3 and $PM_{2.5}$. Project-generated increases in emissions would be predominately associated with motor vehicle use for routine maintenance work and site security as well as panel upkeep and cleaning. Long-term operational emissions attributable to the project are summarized in Table 3.3-14 and compared to ICAPCD operational significance thresholds.

Table 3.3-14. Operational-Related Emissions – Solar and Battery Storage Facilities

Emission Source	Pollutant (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area	6.53	0.00	0.03	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.02	0.06	0.00	0.24	0.02
Total:	**6.53**	**0.02**	**0.09**	**0.00**	**0.24**	**0.02**
ICAPCD Significance Threshold	137	137	150	550	550	150
Exceed ICAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Area	6.53	0.00	0.03	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.02	0.04	0.00	0.24	0.02
Total:	**6.53**	**0.02**	**0.07**	**0.00**	**0.24**	**0.02**
ICAPCD Significance Threshold	137	137	150	550	550	150
Exceed ICAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix C1 of this EIR

Notes: Operational emissions account for one vehicle trip per day. It is noted that this is a conservative estimate and many days will have no operational related vehicle trips.

As shown in Table 3.3-14, the project's emissions would not exceed any ICAPCD's thresholds for any criteria air pollutants during operation. The proposed project will be required to implement all of the ICAPCD Regulation VIII, fugitive dust control measures during construction and operation of the proposed project. Furthermore, any stationary sources of emissions operated on site will be required to adhere to ICAPCD Rule 207, New and Modified Stationary Source Review and Rule 201 that require permits to construct and operate stationary sources. Although no significant air quality impact would occur during operation, the project applicant is required to submit a Dust Suppression Management Plan for both construction and operation in order to reduce fugitive dust emissions. Implementation of Mitigation Measures AQ-5 through AQ-7 would ensure that a Dust Suppression Management Plan is implemented, thereby ensuring that this potential impact would remain less than significant. To further reduce dust emissions during operation of the project, the project applicant will implement Mitigation

Measure AQ-4, which limits the speed of all vehicles operating onsite on dirt roads to 15 miles per hour or less.

As described above, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections and comparing assumed emissions in the AQMP to proposed emissions. Because the proposed project complies with local land use plans and population projections and would not exceed ICAPCD's regional mass daily emissions thresholds during construction and operation with implementation of mitigation, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. This is considered a less than significant impact.

Ramon Substation Expansion

Construction Emissions. Construction activities associated with the Ramon Substation expansion would result in emissions of ROGs, NOx, SOx, CO, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction activities: site preparation, grading, structural facilities, and paving.

Emissions associated with project off-road equipment, worker commute trips, and ground disturbance were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Table 3.3-15 shows the predicted maximum daily emissions attributable to project construction by construction phase. (Note that none of the construction phases overlap.) As shown in Table 3.3-15, construction of the Ramon Substation expansion would not exceed SCAQMD's thresholds. This is considered a less than significant impact.

Table 3.3-15. Ramon Substation Expansion Construction-Generated Regional Emissions (Unmitigated)

	Pollutant (pounds per day)					
Construction Phase	**ROG**	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation	1.3	11.9	10.7	< 0.1	3.6	2.0
Grading	1.8	18.4	12.4	< 0.1	4.3	2.3
Structural Facilities	1.3	11.0	12.9	< 0.1	1.1	0.6
Paving	1.4	6.9	10.6	< 0.1	0.5	0.4
Daily Maximum	**1.8**	**18.4**	**12.9**	**< 0.1**	**4.3**	**2.3**
SCAQMD Threshold	75	100	550	150	150	55
Exceedance?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix C2 of this EIR

Operational Emissions. The proposed Ramon Substation expansion would not require any long-term employees during operations. There are already existing employees staffed at the existing Ramon Substation. These existing employees are anticipated to perform routine maintenance work and site security for the proposed expansion area. The proposed Ramon Substation expansion would not generate operational emissions and no impact would occur.

Mitigation Measure(s)

VEGA 6

AQ-1 **Fugitive Dust Control.** Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures. ICAPCD will verify implementation and compliance with these measures as part of the grading permit review/approval process.

ICAPCD Standard Measures for Fugitive Dust (PM_{10}) Control

- All disturbed areas, including bulk material storage, which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material, such as vegetative ground cover.
- All on-site and offsite unpaved roads will be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering.
- The transport of bulk materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line.
- The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants, and/or watering.

Standard Mitigation Measures for Construction Combustion Equipment

- Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.

- When commercially available, replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

AQ-2 During construction activities, the construction contractor shall employ the following PM_{10} reducing measures:

- All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. This will be conducted monthly at a rate of 0.1 gallon/ square yard of chemical dust suppressant.
- All vehicles accessing the project site on unpaved roads shall be limited to a speed of 15 miles per hour.

The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-3 **Construction Equipment.** Construction equipment shall be equipped with an engine designation of EPA Tier 2 or better (Tier 2+). A list of the construction equipment, including all off-road equipment utilized at each of the projects by make, model, year, horsepower and expected/actual hours of use, and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. The equipment list shall be submitted periodically to ICAPCD to perform a NO_x analysis. ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds. The Planning and Development Services Department and ICAPCD shall verify implementation of this measure.

AQ-4 **Speed Limit.** During construction and operation of the proposed project, the applicant shall limit the speed of all vehicles operating onsite on unpaved roads to 15 miles per hour or less.

AQ-5 **Dust Suppression.** The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. All unpaved roads associated with construction shall be effectively stabilized of dust emissions using stabilizers/suppressant before the commencement of all construction phases. This will be conducted monthly at a rate of 0.1 gallon/ square yard of chemical dust suppressant. The project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, and Fire Department access/emergency entry/exit points as approved by Fire/Office of Emergency Services [OES] Department).

AQ-6 **Dust Suppression Management Plan.** Prior to any earthmoving activity, the applicant shall submit a construction dust control plan and obtain ICAPCD and Imperial County Planning and Development Services Department (ICPDS) approval.

AQ-7 **Operational Dust Control Plan.** Prior to issuance of a Certificate of Occupancy, the applicant shall submit an operations dust control plan and obtain ICAPCD and ICPDS approval. ICAPCD Rule 301 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed project, ICAPCD shall review the project to determine if Rule 310 fees are applicable to the project.

Ramon Substation Expansion

No mitigation measures are required.

Significance after Mitigation

VEGA 6

Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce the project's PM_{10} emissions during construction to a level below ICAPCD's significance threshold. Implementation of Mitigation Measures AQ-3 and AQ-7 would provide reduction strategies to further improve air quality and ensure that this potential impact would remain less than significant. Given the above, the proposed project would not conflict with implementation of applicable air quality plans, and impacts would be less than significant impact.

Impact 3.3-2 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 (including releasing emissions which exceed quantitative thresholds for O_3 precursors)?

VEGA 6

As shown in Table 3.3-2, the criteria pollutants for which the project area is in State non-attainment under applicable air quality standards are O_3 and PM_{10}. The ICAPCD's application of thresholds of significance for criteria air pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. As discussed above in Impact 3.3-1, the emissions of criteria pollutants from project construction and operation activities would be below the ICAPCD thresholds of significance with implementation of mitigation. Furthermore, the proposed project will be required to implement all of the ICAPCD Regulation VIII, fugitive dust control measures during construction and operation of the proposed project. Furthermore, any stationary sources of emissions operated on site will be required to adhere to ICAPCD Rule 207, New and Modified Stationary Source Review and Rule 201 that require permits to construct and operate stationary sources. Therefore, the project's potential to result in a cumulatively considerable net increase of any criteria pollutant is considered less than significant.

Ramon Substation Expansion

As shown in Table 3.3-3, the criteria pollutants for which the Ramon Substation expansion area is in State non-attainment under applicable air quality standards are O_3 and PM_{10}. The SCAQMD's application of thresholds of significance for criteria air pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. As discussed above in Impact 3.3-1, the emissions of criteria pollutants from construction and operation activities would be below SCAQMD's significance thresholds. Therefore, the proposed Ramon Substation expansion would not result in a cumulatively considerable net increase of any criteria pollutant, and this is considered a less than significant impact.

Mitigation Measure(s)

VEGA 6

No mitigation measures beyond AQ-1 through AQ-7 are required.

Ramon Substation Expansion

No mitigation measures are required.

Impact 3.3-3 Would the project expose sensitive receptors to substantial pollutant concentrations?

VEGA 6

According to the *Air Quality and Greenhouse Gas Assessment for the VEGA SES 6 Solar and Battery Storage Project* (Appendix C1 of this EIR), the nearest existing noise-sensitive land use to the solar energy facility site is a single-family residence located 2,725 feet from the northeastern corner of the site. During construction occurring offsite along the gen-tie transmission line route to the IID electrical grid line, the nearest sensitive receptor would be 970 feet away.

The ICAPCD CEQA Guidelines detail that any development project that is located within close proximity to sensitive receptors and where the proposed project either 1) Has the potential to emit toxic or hazardous pollutant; or 2) Exceeds the ICAPCD criteria pollutant thresholds for construction and operation of the proposed project, must be referred to the ICAPCD for review. In addition, any proposed industrial or commercial project located within 1,000 feet of a school must be referred to the ICAPCD for review.

As discussed above in Impact 3.3-1, the proposed VEGA 6 project would not exceed the ICAPCD criteria pollutant threshold from either construction or operation of the proposed VEGA 6 project with implementation of mitigation. However, construction and operation of the proposed VEGA 6 project would have the potential to emit TAC emissions, which have been analyzed separately below.

Construction-Generated Air Contaminants. Construction of the VEGA 6 project would result in temporary, short-term project-generated emissions of diesel particulate matter (DPM), ROG, NOx, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for project construction; soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SSAB which encompasses the VEGA 6 project area is designated as a nonattainment area for federal O_3, $PM_{2.5}$ and PM_{10} standards and is also a nonattainment area for the state standards for O_3 and PM_{10}. Thus, existing O_3 and PM_{10} levels in the SSAB are at unhealthy levels during certain periods. However, as shown in Table 3.3-13, the VEGA 6 project would not exceed the ICAPCD significance thresholds for construction emissions with implementation of Mitigation Measures AQ-1 and AQ-2.

The health effects associated with O_3 are generally associated with reduced lung function. Because the VEGA 6 project would not involve construction activities that would result in O_3 precursor emissions (ROG or NO_x) in excess of the ICAPCD thresholds, the VEGA 6 project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The VEGA 6 project would not involve activities that would result in CO emissions in excess of the ICAPCD thresholds. Thus, the VEGA 6 project's CO emissions would not contribute to the health effects associated with this pollutant.

PM_{10} and $PM_{2.5}$ contain microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. PM exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms

such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. The potential cancer risk from the inhalation of DPM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions of exhaust PM_{10}, considered a surrogate for DPM and includes emissions of exhaust $PM_{2.5}$, would be 2.89 and 2.03 pounds per day for the solar and battery storage facilities in construction years 2022 and 2023, respectively; and 2.82 pounds per day in 2022 for the gen-tie transmission line (see Appendix C1 of this EIR). PM_{10} exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM. As with O_3 and NO_X, the VEGA 6 project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the ICAPCD's thresholds. Additionally, the VEGA 6 project would be required to comply with ICAPCD's Regulation VIII for fugitive dust control, as described in Mitigation Measure AQ-1, which limit the amount of fugitive dust generated during construction. Accordingly, the VEGA 6 project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. As such, construction of the proposed VEGA 6 project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operational Air Contaminants. Operation of the proposed VEGA 6 project would not result in the development of any substantial sources of air toxics. There would be no stationary sources associated project operations; nor would the VEGA 6 project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors as the predominant operational emissions associated with the proposed VEGA 6 project would be routine maintenance work and site security as well as panel upkeep and cleaning. Therefore, the VEGA 6 project would not be a substantial source of TACs. The project will not result in a high carcinogenic or non-carcinogenic risk during operation. As such, a less than significant TAC impact would occur during the ongoing operations of the project.

CO Hot Spot. A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The Bay Area Air Quality Management District, the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The proposed VEGA 6 project is anticipated to result in no more than one daily operational traffic trip. It is noted that this is a conservative estimate, and many days will have no operational-related vehicle trips. Thus, the VEGA 6 project would not generate traffic volumes at any intersection of more than

100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the project traffic exceeding CO values.

In summary, construction and operation of the proposed VEGA 6 project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Ramon Substation Expansion

Construction. During construction, the proposed Ramon Substation expansion has the potential to expose nearby sensitive receptors to substantial pollutant concentrations. The following provides an analysis of localized construction emissions compared to the applicable LSTs established by the SCAQMD (Table 3.3-16).

As shown in Table 3.3-16**,** localized construction emissions would not exceed the applicable SCAQMD LSTs for any criteria pollutant. Therefore, construction of the Ramon Substation Expansion would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

Table 3.3-16. Localized Construction Emissions

	lbs/day			
	NOx	CO	PM_{10}	$PM_{2.5}$
Maximum on-site emissions	**18.3**	**11.9**	**4.2**	**2.2**
SCAQMD Localized Threshold	506	9,177	104	34
Exceedance?	**No**	**No**	**No**	**No**

Source: Appendix C2 of this EIR

Operation. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Ramon Substation expansion does not include such uses and, thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed. No impact would occur.

CO Hot Spot. The proposed Ramon Substation expansion would not require any long-term employees during operations. There are already existing employees staffed at the existing Ramon Substation. These existing employees are anticipated to perform routine maintenance work and site security for the proposed expansion area. Therefore, the proposed Ramon Substation expansion would not generate operational traffic trips and would not result in a CO Hot Spot impact.

Mitigation Measure(s)

VEGA 6

No mitigation measures are required.

Ramon Substation Expansion

No mitigation measures are required.

Impact 3.3-4 Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?

VEGA 6

An odor impact depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies.

Among possible physical harms is inhalation of VOCs that cause smell sensations in humans. These odors can affect human health in four primary ways:

- The VOCs can produce toxicological effects
- The odorant compounds can cause irritations in the eye, nose, and throat
- The VOCs can stimulated sensory nerves that can cause potentially harmful health effects
- The exposure to perceived unpleasant odors can stimulate negative cognitive and emotional responses based on previous experiences with such odors

Land uses commonly considered to be potential sources of odorous emissions include wastewater treatment plants, sanitary landfills, food processing facilities, chemical manufacturing plants, rendering plants, paint/coating operations, and concentrated agricultural feeding operations and dairies. The construction and operation of a solar facility, BESS, and gen-tie line is not an odor producer.

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. The project would comply with standard construction requirements which include limitations of when construction may occur. Furthermore, the proposed project would be required to adhere to ICAPCD Rule 407 which limits the discharge of any emissions that create odors in quantities that may cause a nuisance or annoyance to any considerable number of persons. As such, the objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Through compliance with the applicable regulations that reduce odors and due to the transitory nature of construction odors, a less than significant odor impact would occur, and no mitigation would be required.

The proposed VEGA 6 project would consist of the development of a solar energy facility, BESS, and gen-tie line which do not include any components that are a known source of odors. Therefore, a less than significant odor impact would occur, and no mitigation would be required.

Ramon Substation Expansion

A substation is not considered a land use that would be an odor producer. The proposed Ramon Substation expansion could produce odors during proposed construction activities resulting from construction equipment exhaust and application of asphalt. However, standard construction practices would minimize the odor emissions and their associated impacts. Furthermore, any odors emitted during construction are temporary, short-term, and intermittent in nature, and would cease upon the completion of construction. Additionally, construction activities would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. The proposed Ramon Substation expansion would not create objectionable odors affecting

a substantial number of people during construction, and short-term impacts would be less than significant.

No objectionable odors affecting a substantial number of people are anticipated during long term operation. The operation of the project does not involve odor-generating uses. A less than significant impact is identified for this issue area.

Mitigation Measure(s)

VEGA 6

No mitigation measures are required.

Ramon Substation Expansion

No mitigation measures are required.

3.3.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Similar to construction activities, decommissioning and restoration of the project site would generate air emissions. A summary of the daily construction emissions for the VEGA 6 project is provided in Table 3.3-12 (unmitigated) and Table 3.3-13 (with mitigation). Solar equipment has a lifespan of approximately 20 to 25 years. The emissions from on- and off-road equipment during decommissioning are expected to be significantly lower than project construction emissions, as the overall activity would be anticipated to be lower than project construction activity. No significant air quality impacts are anticipated during decommissioning and restoration of the VEGA 6 project site. However, all construction projects within Imperial County must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. Furthermore, any stationary sources of emissions operated on site will be required to adhere to ICAPCD Rule 207, New and Modified Stationary Source Review and Rule 201 that require permits to construct and operate stationary sources. Therefore, a less than significant impact is identified during decommissioning and site restoration of the VEGA 6 project site.

Residual

The proposed VEGA 6 project would not result in short-term significant air quality impacts during construction. Operation of the VEGA 6 project, subject to the approval of a CUP, would be consistent with applicable federal, state, regional, and local plans and policies. The VEGA 6 project would not result in any residual operational significant and unavoidable impacts with regards to air quality.

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