

3.1 Air Quality

This section describes effects on air quality from implementation of the proposed Project. The section describes existing environmental conditions in the affected area, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts from the construction, operation, and maintenance of the Project. Existing laws and regulations relevant to air quality are described and how they would be applied to the Project. In some cases, compliance with existing laws and regulations would reduce or avoid impacts that might otherwise occur with implementation of the Project.

During the scoping period for the EIR (February 26 through March 27, 2015), written comments were received from agencies, organizations, and the public. These comments identified various substantive issues and concerns relevant to the EIR analysis. The following substantive issues related to air quality were raised during scoping and are addressed in this section.

- Reactive organic compound and nitrogen oxide emissions should be included in the analysis of Project-related motor vehicles and equipment.
- Cumulative potential net increase for any criteria pollutant should be evaluated.

3.1.1 Environmental Setting

3.1.1.1 Existing Conditions

Regional Climate and Meteorology

The proposed Project is located in unincorporated Ventura County and the City of Oxnard, California within the South Central Coast Air Basin (SCCAB) and under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). Table 3.1-1 presents a monthly climate summary for the City of Oxnard, which is representative of the Project area.

Month	Temperature (°F)		Precipitation
	High	Low	
January	66	45	3.41
February	66	47	3.90
March	65	48	3.04
April	68	50	0.72
May	68	53	0.21
June	70	56	0.05
July	73	59	0.02
August	74	60	0.07
September	74	59	0.36
October	73	55	0.36
November	70	49	1.37
December	66	45	2.11

Source: Intellicast, 2015

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The Project site experiences a mild Mediterranean climate with temperature extremes that are normally buffered by the nearby Pacific Ocean. As shown in Table 3.1-1, average summer (June to September) high and low temperatures in the Project area range from 70°F to 56°F. Average winter (December to March) high and low temperatures range from 66°F to 45°F. The average annual precipitation is 15.6 inches with 80 percent occurring between December and March. Summers are very dry with four straight months, starting in May, averaging less than a quarter of an inch of precipitation. Little precipitation occurs during summer because high-pressure cells block migrating storm systems over the eastern Pacific.

The typical wind speeds and directions for the Project area, as depicted in Figure 3.1-1 using a wind rose from the nearby Oxnard Airport, shows a strong predominant onshore flow from the west and west-northwest, a weaker offshore flow from the northeast and east-northeast, and a large number of calm wind hours. This wind rose is based on data between 2009 and 2013, and the average wind speed during this five-year period was just under seven miles per hour.

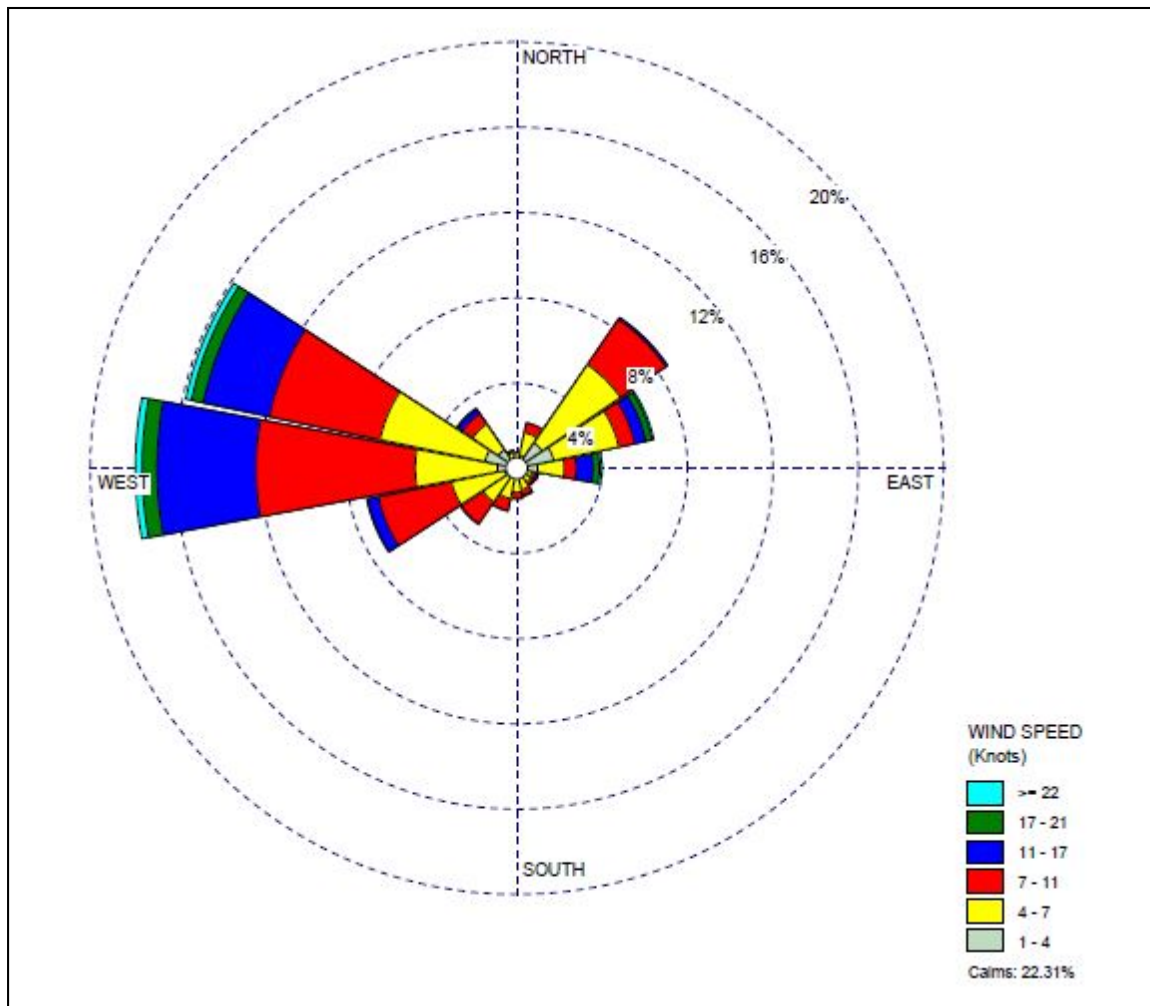


Figure 3.1-1 – Wind Rose from Oxnard Airport (2009 – 2013)

Source: CARB, 2015a

Air Pollutants and Monitoring Data

Air pollutants are defined as two general types: (1) “criteria” pollutants, representing six pollutants for which national and State health- and welfare-based ambient air quality standards have been established; and (2) toxic air contaminants (TACs), which may lead to serious illness or increased mortality even when present at relatively low concentrations. An additional air quality-related concern in the Project area is Valley Fever.

Criteria Pollutants

The United States Environmental Protection Agency (USEPA), California Air Resources Board (CARB), and the local air districts classify an area as attainment, unclassified, or nonattainment depending on whether or not the monitored ambient air quality data shows compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively. The National and California Ambient Air Quality Standards (NAAQS and CAAQS) relevant to the Project are shown in Table 3.1-2.

Pollutant	Averaging Time	California Standards	National Standards	Health Effects
Ozone (O ₃)	1-hour	0.09 ppm	--	Breathing difficulties, lung tissue damage
	8-hour	0.070 ppm	0.070 ppm ¹	
Respirable particulate matter (PM ₁₀)	24-hour	50 µg/m ³	150 µg/m ³	Increased respiratory disease, lung damage, cancer, premature death
	Annual	20 µg/m ³	--	
Fine particulate matter (PM _{2.5})	24-hour ²	--	35 µg/m ³	Increased respiratory disease, lung damage, cancer, premature death
	Annual ³	12 µg/m ³	12 µg/m ³	
Carbon monoxide (CO)	1-hour	20 ppm	35 ppm	Chest pain in heart patients, headaches, reduced mental alertness
	8-hour	9.0 ppm	9 ppm	
Nitrogen dioxide (NO ₂)	1-hour	0.18 ppm	0.100 ppm ⁴	Lung irritation and damage
	Annual	0.030 ppm	0.053 ppm	
Sulfur dioxide (SO ₂)	1-hour	0.25 ppm	0.075 ppm ⁴	Increases lung disease and breathing problems for asthmatics
	3-hour	--	0.5 ppm	
	24-hour	0.04 ppm	--	

Source: CARB, 2001; CARB, 2015b

Notes:

ppm = parts per million; µg/m³ = micrograms per cubic meter; "--" = no standards

- (1) The federal 8-hour ozone standard was lowered from 0.075 to 0.070 ppm on October 1, 2015. The attainment status designation is currently based on the former standard (0.075 ppm).
- (2) The federal 24-hour PM_{2.5} standard is based on the 98th percentile of maximum daily monitored values.
- (3) The federal standard shown is the primary standard, the secondary standard is 15 µg/m³.
- (4) The new federal 1-hour NO₂ and SO₂ standards are based on the 98th and 99th percentile of daily hourly maximum values, respectively.

Table 3.1-3 summarizes the federal and State attainment status of criteria pollutants for the Ventura County portion of the SCCAB based on the NAAQS and CAAQS, respectively. For simplification, if the federal attainment status is identified as unclassifiable/attainment or some similar status that is not either nonattainment or attainment/maintenance, it is noted as attainment in the table.

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Table 3.1-3. Attainment Status for the Ventura County portion of the SCCAB

Pollutant	Attainment Status	
	Federal	State
O ₃	Serious Nonattainment	Nonattainment
PM10	Attainment	Nonattainment
PM2.5	Attainment	Attainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment

Source: CARB, 2015c; USEPA, 2015

Table 3.1-4 summarizes the historical air quality data for the Project area collected at the nearest representative air quality monitoring station in Ventura County. The air monitoring station used to provide ozone, PM10, PM2.5, and NO₂ concentrations is located at the El Rio-Rio Mesa School #2 monitoring station, which is located a few miles east-northeast of the Project area. This monitoring station is the only monitoring station currently operating within the coastal plain of Ventura County, and so is the only monitoring station that would be representative of the Project area. Carbon monoxide and sulfur dioxide are not monitored within Ventura County. Table 3.1-4 presents the maximum pollutant levels measured from the El Rio-Rio Mesa School #2 monitoring station from 2012 through 2014.

Table 3.1-4. Background Ambient Air Quality Data

Pollutant	Averaging Time	Maximum Concentration (ppm or µg/m ³) ¹		
		2012	2013	2014
O ₃	1-hour	0.082	0.067	0.112
	8-hour	0.065	0.062	0.077
PM10	24-hour	56.9	46.7	--
	Annual	21.0	24.3	--
PM2.5	24-hour 98 th Percentile	17.0	17.7	17.8
	Annual	8.7	9.4	9.3
NO ₂	1-hour	0.057	0.040	0.039
	1-hour 98 th Percentile	0.033	0.033	0.030
	Annual	0.007	0.007	0.006

Source: CARB, 2015d

Notes:

ppm = parts per million; µg/m³ = micrograms per cubic meter; "--" = no data or data is currently incomplete

(1) Gaseous pollutant (ozone and NO₂) concentrations are shown in ppm and particulate (PM10 and PM2.5) concentrations are shown in µg/m³. The values provided may depict either "state" or "federal" values depending on applicable AAQS or to provide complete data where otherwise missing in the "state" or "federal" values provided by the CARB data source.

The ambient air quality data indicate that in the three years of data shown, the Project area has experienced exceedances of the federal and State ozone standards and the State PM10 standards, but experienced no exceedances of any other federal or State standards.

Toxic Air Contaminants

TACs are compounds that are known or suspected to cause adverse long-term (cancer and chronic) and/or short-term (acute) health effects. The Health and Safety Code defines a TAC as an air pollutant which

may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another's. There are almost 200 compounds designated in California regulations as TACs (17 CCR §§ 93000-93001). The list of TACs also includes the substances defined in federal statute as hazardous air pollutants (HAPs) pursuant to Section 112 (b) of the federal Clean Air Act (42 U.S.C. Section 7412(b)). Some of the TACs are groups of compounds which contain many individual substances (e.g., copper compounds, polycyclic aromatic compounds). TACs are emitted from mobile sources, including diesel engines; industrial processes and stationary sources, such as dry cleaners, gasoline stations; paint and solvent operations; and stationary fossil fuel-burning combustion. Ambient TACs concentrations tend to be highest in urbanized and industrial areas near major TACs emissions sources, or near major mobile TACs emissions sources, such as heavily traveled highways or major airports/seaports. Unlike for criteria pollutants, no monitoring studies of ambient TACs concentrations have been performed in Ventura County. Generally, TACs do not have ambient air quality standards. The three TACs that do have State ambient air quality standards (i.e., lead, vinyl chloride, and hydrogen sulfide) are pollutants that are in attainment of the State standards in Ventura County and are not relevant to the emissions sources for this Project.

Valley Fever

Coccidioidomycosis, often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte (an organism, especially a fungus or bacterium, which grows on and derives its nourishment from dead or decaying organic matter) in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who are outdoors and are exposed to wind, dust, and disturbed topsoil are at an elevated risk of contracting Valley Fever (CDPH, 2013).

Most people exposed to the CI spores will not develop the disease and of 100 persons who are infected approximately 60 will have no symptoms, 40 will have some symptoms, and 2 to 4 will have the more serious disseminated forms of the disease (Guevara, 2014). After recovery nearly all, including the asymptomatic, develop a life-long immunity to the disease (Guevara, 2014). African Americans, Asians, women in the third trimester of pregnancy, and persons whose immunity is compromised are most likely to develop the most severe form of the disease (CDC, 2013). In addition to humans, a total of 70 different species are known to be susceptible to Valley Fever infections, including dogs, cats, and horses, with dogs being the most susceptible (LACPH, 2007).

The Project is located in an area designated as suspected endemic for Valley Fever by the Center for Disease Control (CDC, 2013). Annual case reports for 2000 through 2013 from the California Department of Public Health indicate that Ventura County has reported incident rates for Valley Fever ranging from 1.3 to 10.6 cases per year per 100,000 population (CDPH, 2011; CDPH, 2014). The incidence rates for Ventura County during this period have generally been equal to or below the State average incidence rates, and have been well below the worst-case annual rates for other counties

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within the State during this period, which occur within the San Joaquin Valley and during some years have accounted for over 300 cases per 100,000 population.

Sensitive Receptors

The impact of air emissions on sensitive members of the population is a special concern. Sensitive receptor groups include children and infants, pregnant women, the elderly, and the acutely and chronically ill. According to VCAPCD CEQA guidance (VCAPCD, 2003, p. A-7), sensitive receptor locations include schools, hospitals, and daycare centers.

Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Residential areas can also be sensitive to air pollution due to high exposure periods for individuals that do not leave their residences often. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

A land use survey was conducted to identify sensitive receptors (e.g., schools, hospitals, recreational facilities, local residences) in the general vicinity of the proposed Project. The Project area is large and adjoins a diverse group of land uses including recreational (golf courses), agricultural, open space, residential, and commercial/industrial. The nearest school would be the Rio Del Norte Elementary School, which is approximately a quarter mile from the Project area, and is within a residential area adjacent to the southeastern area of the Project alignment. There are several other schools located within a mile of the Project. There are no major hospitals nearby the Project area.

3.1.1.2 Applicable Regulations, Plans, and Standards

Sources of air emissions in the Ventura County portion of the SCCAB are regulated by the USEPA, CARB, and VCAPCD. The role of each regulatory agency is discussed below.

Federal

The federal Clean Air Act (CAA) of 1970 and its subsequent amendments form the basis for the nation's air pollution control effort. The USEPA is responsible for implementing most aspects of the CAA. Basic elements of the act include the establishment of NAAQS for criteria air pollutants (see Section 3.1.1.1), hazardous air pollutant standards, attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The CAA allows the delegation of the enforcement of many of the federal air quality regulations to the states. In California, the CARB is responsible for enforcing air pollution regulations. In the Ventura County portion of the SCCAB, the VCAPCD has this responsibility. In addition, the VCAPCD and the CARB are the responsible agencies for providing attainment plans and meeting attainment with the NAAQS; the USEPA reviews and approves these plans and regulations, which are designed to attain and maintain attainment with the NAAQS.

Specific federal regulations that are applicable to the Project, either directly or indirectly, and that are enforced by federal agencies are listed below.

Emission Standards for Non-Road Diesel Engines

The USEPA has established a series of cleaner emission standards for new off-road diesel engines culminating in the Tier 4 Final Rule of June 2004 (USEPA, 2004a). The Tier 1, Tier 2, Tier 3, and Tier 4 standards require compliance with progressively more stringent emission standards. Tier 1 standards were phased in from 1996 to 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006, and the Tier 3 standards were phased in from 2006 to 2008.

The Tier 4 standards complement the latest 2007 and later on-road heavy-duty engine standards by requiring 90 percent reductions in diesel particulate matter (DPM) and NO_x when compared against current emission levels. The Tier 4 standards are currently being phased in starting with smaller engines in 2008 until all but the very largest diesel engines meet NO_x and PM standards in 2015.

Non-Road Diesel Fuel Rule

In May 2004, the USEPA set sulfur limits for non-road diesel fuel. Under this rule, sulfur levels in non-road diesel fuel would be limited to 500 parts per million (ppm) starting in 2007 and 15 ppm starting in 2010 (USEPA, 2004b), at which time it would be equivalent to sulfur content restrictions of the California Diesel Fuel Regulations (described below).

Emission Standards for On-Road Trucks

To reduce emissions from on-road, heavy-duty diesel trucks, the USEPA established a series of cleaner emission standards for new engines, starting in 1988. These emission standards regulations have been revised over time. The latest effective regulation, the 2007 Heavy-Duty Highway Rule, provides for reductions in PM, NO_x, and non-methane hydrocarbon emissions that were phased in during the model years 2007 through 2010 (USEPA, 2000).

State

California Clean Air Act

In California, the CARB is designated as the responsible agency for all air quality regulations. The CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for implementing the requirements of the federal CAA, regulating emissions from motor vehicles and consumer products, and implementing the California Clean Air Act of 1988 (CCAA). The CCAA outlines a program to attain the CAAQS for ozone, NO₂, SO₂, and CO by the earliest practical date. Since the CAAQS are often more stringent than the NAAQS, attainment of the CAAQS will require more emission reductions than what is required to demonstrate attainment of the NAAQS. Similar to the federal requirements, the State requirements and compliance dates are based on the severity of the ambient air quality standard violation within a region. Additional information regarding the CAAQS that are relevant to the Project is provided in Section 3.1.1.1.

Other CARB regulations promulgated under the authority of the CCAA that are relevant, directly or indirectly, to the Project are as follows:

California Diesel Risk Reduction Plan

The CARB has adopted several regulations that are meant to reduce the health risk associated with on- and off-road and stationary diesel engine operation. This plan recommends many control measures

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with the goal of an 85 percent reduction in DPM emissions by 2020. The regulations noted below, which may also serve to significantly reduce other pollutant emissions, are all part of this risk reduction plan.

Emission Standards for On-Road and Off-Road Diesel Engines

The CARB, similar to the USEPA on-road and off-road emissions standards regulations described above, has established emission standards for new on-road and off-road diesel engines. These regulations have model year based emissions standards for NO_x, hydrocarbons, CO, and particulate matter (PM).

In-Use Off-Road Vehicle Regulation

The State has also enacted a regulation for the reduction of DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles (CCR Title 13, Article 4.8, Chapter 9, Section 2449). This regulation provides target emission rates for PM and NO_x emissions from owners of fleets of diesel-fueled off-road vehicles, and applies to off-road equipment fleets of three specific sizes where the target emission rates are reduced over time. Specific regulation requirements include:

- Limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to the CARB (using the Diesel Off-Road Online Reporting System, DOORS) and labeled;
- Restricts adding older vehicles into fleets starting on January 1, 2014; and
- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies, VDECS (i.e., exhaust retrofits). (CARB, 2014)

The construction contractor(s) who complete the construction activities for this Project, including the VCWPD if they use their own off-road equipment fleet, would have to comply with the requirements of this regulation.

Heavy Duty Diesel Truck Idling Regulation

This CARB rule became effective February 1, 2005, and prohibits heavy-duty diesel trucks from idling for longer than five minutes at a time, unless they are queuing, and provided the queue is located more than 100 feet from any homes or schools (CARB, 2006).

California Diesel Fuel Regulations

In 2004, the CARB set limits on the sulfur content of diesel fuel sold in California for use in on-road and off-road motor vehicles (Title 13, California Code of Regulations, Sections 2281-2285 and Title 17, California Code of Regulations, Section 93114). Under this rule, sulfur content of diesel fuel would be limited to 15 ppm starting in June 2006 (CARB, 2004).

Statewide Portable Equipment Registration Program (PERP)

The PERP establishes a uniform program to regulate portable engines and portable engine-driven equipment units (CARB, 2005). Once registered in the PERP, engines and equipment units may operate throughout California without the need to obtain individual permits from local air districts, as long as the equipment is located at a single location for no more than 12 months.

Local

The VCAPCD is primarily responsible for planning, implementing, and enforcing federal and State ambient air quality standards within the Ventura County portion of the SCCAB. As part of its planning

responsibilities, VCAPCD prepares Air Quality Management Plans and Attainment Plans as necessary based on the attainment status of the air basins within its jurisdiction. The VCAPCD is also responsible for permitting and controlling stationary source criteria and air toxic pollutants as delegated by the USEPA. The VCAPCD has developed the following federal and State attainment planning documents:

- 2006 Reasonably Available Control Technology (RACT) State Implementation Plan (SIP) Revision (VCAPCD, 2006)
- 2007 Air Quality Management Plan (VCAPCD, 2008)
- 2009 Reasonably Available Control Technology State Implementation Plan (2009 RACT SIP) Revision (VCAPCD, 2009)
- Ventura County Triennial Assessment and Plan Update 2006 – 2008 (VCAPCD, 2011)

Through the attainment planning process, the VCAPCD develops the VCAPCD Rules and Regulations to regulate sources of air pollution in Ventura County (VCAPCD, 2015a). The VCAPCD rules that may be applicable to the Project are listed below.

VCAPCD Rule 50 – Opacity. This rule prohibits discharge of air contaminants or other material, which are as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or obscure an observer's view.

VCAPCD Rule 51 – Nuisance. This rule prohibits discharge 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.

VCAPCD Rule 55 – Fugitive Dust. The purpose of this rule is to control the amount of PM entrained in the atmosphere from man-made sources of fugitive dust. The rule limits visible dust opacity and visible dust plumes beyond property lines, requires control of track-out onto paved roads, prohibits visible dust plumes from earth moving to extend more than 100 feet, and specifies dust control requirements for truck hauling of bulk materials.

VCAPCD Rule 55.1 – Paved Roads and Public Unpaved Roads. This regulation requires the owner/operator of paved public roads to remove visible roadway accumulations, provides construction requirements for new roads with average daily trips of more than 1,000, and requires that activity on public unpaved roads not cause dust plumes that would exceed 100 feet in length or violate specified opacity requirements.

VCAPCD Rule 74.2 – Architectural Coatings. Architectural coating Rule 74.2 limits the volatile organic compound (VOC) content of paints applied to various surfaces and applies to any construction painting operation;

VCAPCD Rule 74.29 – Soil Decontamination Operations. The rule specifies the allowed methods for soil decontamination. This rule, which applies to soils contaminated with gasoline, diesel fuel, or jet fuel would only apply if contaminated soils are encountered during Project construction.

VCAPCD Rules 10, 23, and 26 to 26.13 – Permitting. These rules require the permitting of stationary sources, and requires new emission sources use best available control technology (BACT) to control criteria pollutant emissions, and requires offsetting emissions if permitted emissions would exceed designated thresholds. Portable internal combustion engines may be used during Project construction and would require permits if they are not permitted under the CARB PERP program.

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There are no new rules or revisions to rules currently on the VCAPCD 2015 Rule Development Calendar that would likely be applicable to the Project (VCAPCD, 2015b).

Ventura County Air Quality Assessment Guidelines

The VCAPCD in their *Ventura County Air Quality Assessment Guidelines* (VCAPCD Guidelines) document has recommended air quality analysis methodologies, and has established recommended CEQA significant emissions levels for applicable criteria pollutant emissions as follows:

- Nitrogen Oxides (NOx) – 25 pounds per day
- Reactive Organic Compounds (ROC) – 25 pounds per day

These two significance thresholds do not apply to construction emissions; however, if construction emissions exceed these values, then appropriate construction mitigation measures outlined in this guideline should be implemented to reduce the NOx and ROC emissions. Fugitive dust emissions' significance is based on the potential to cause a significant adverse air quality impact through injury or nuisance. Additionally, this guideline provides recommended fugitive dust emissions mitigation measures and Valley Fever mitigation measures.

General Plans

Ventura County and the City of Oxnard have adopted General Plans that include air quality-related goals, policies, and programs (Ventura County, 2015; City of Oxnard, 2011). However, none of the goals, policies, or programs in these General Plans provide specific air quality-related requirements beyond those already required by VCAPCD rules and regulations. The relevant goals and policies related to air quality are as follows (Ventura County, 2015):

Goals

- 1.2.1-1 Diligently seek and promote a level of air quality that protects public health, safety, and welfare, and seek to attain and maintain the State and Federal Ambient Air Quality standards.
- 1.2.1-2 Ensure that any adverse air quality impacts, both long-term and short-term, resulting from discretionary development are mitigated the maximum extent feasible.

Policies

- 1.2.2-1 Discretionary development that is inconsistent with the Air Quality Management Plan (AQMP) shall be prohibited, unless overriding considerations are cited by the decision-making body.
- 1.2.2-2 The air quality impacts of discretionary development shall be evaluated by use of the Guidelines for the Preparation of Air Quality Impact Analysis.
- 1.2.2-3 Discretionary development that would have a significant adverse air quality impact shall only be approved if it is conditioned with all reasonable mitigation measures to avoid, minimize or compensate (offset) for the air quality impact. Developers shall be encouraged to employ innovative methods and technologies to minimize air pollution impacts.
- 1.2.2-5 Development subject to APCD permit authority shall comply with all applicable APCD rules and permit requirements, including the use of best available control technology (BACT) as determined by the APCD.

3.1.2 Environmental Impacts and Mitigation Measures

3.1.2.1 Criteria for Determining Impact Significance

In accordance with the Ventura County *Initial Study Assessment Guidelines*, Ventura County General Plan, and Ventura County Administrative Supplement to the CEQA Guidelines, all County agencies, departments, and special districts utilize the air quality assessment guidelines as adopted and periodically updated by the VCAPCD. The most recently adopted guidelines are the 2003 VCAPCD Air Quality Assessment Guidelines (VCAPCD, 2003). Based on the VCAPCD Guidelines and the CEQA Guidelines, an air quality impact would be significant if the Project would:

- Conflict with or obstruct implementation of the VCAPCD Air Quality Management Plan and emit two pounds per day or greater of ROC and NO_x;
- Violate any air quality standard or contribute to an existing or projected air quality violation as demonstrated by an appropriate air dispersion modeling analysis;
- Result in a cumulatively considerable net increase of any criteria nonattainment pollutant, which for the Ventura County area surrounding the Project site is defined by VCAPCD as 25 pounds per day of ROC and NO_x (does not apply to temporary construction emissions);
- Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescent facilities, and residences) to substantial pollutant concentrations, including generating fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or have a natural tendency to cause injury or damage to business or property;
- Create objectionable odors affecting a substantial number of people; or
- Create a significant San Joaquin Valley Fever impact.

3.1.2.2 Direct and Indirect Impacts

VCAPCD Air Quality Management Plan

Option 1B and Option 1A

The VCAPCD has federal and State air quality management plans for ozone. The State does not require air quality planning documents for PM₁₀ attainment. The Ventura County portion of the SCCAB is in federal and State attainment of the other criteria pollutants, so no air quality plans are required for those pollutants (PM_{2.5}, CO, NO_x, and SO_x).

The VCAPCD air quality management planning documents, listed above in Section 3.1.1.2, do not propose any new control measures that would be applicable to this Project beyond those currently existing in the VCAPCD rules and regulations. Therefore, since the Project would not promote growth beyond the assumptions contained in the approved Air Quality Management Plan, and assuming compliance with existing rules and regulations, the Project would be consistent with the VCAPCD Air Quality Management Plan and, therefore, no violation of the Plan would occur.

Air Quality Standards

Impact AQ-1: Project construction could violate or substantially contribute to existing or projected violations of applicable air quality standards.

Option 1B and Option 1A

The Project's construction emissions would be temporary, would be distributed and dispersed over a large project site area that would substantially reduce concentrations, and would not be of a magnitude (see construction emissions summary tables below [Tables 3.1-6 through 3.1-13] under Impact AQ-3) that could cause new ambient air quality violations or substantially contribute to existing violations. The Project's calculated controlled average daily construction criteria emissions are no more than 0.031 percent of the 2012 Ventura County emissions inventory for all pollutants as shown in Table 3.1-5.

	VOC	CO	NOx	SOx	PM10	PM2.5
Option 1A Average Daily Emissions	1.15	8.73	7.69	0.02	19.57	2.56
Ventura County 2012 Average Daily Emissions	148,800	589,400	99,000	6,200	63,400	37,800
Percent of County Total	0.001%	0.001%	0.008%	0.000%	0.031%	0.007%

Source: CARB, 2015e; EIR Appendix C (Total Option 1A controlled emissions distributed over the accelerated 20-month total Project schedule)

Additionally, construction is a short-term activity that would not affect long-term projections for air quality attainment. With implementation of Mitigation Measures AQ-3a through AQ-3c, the Project's construction emissions would not violate or substantially contribute to any violations of air quality standards (Class II).

Impact AQ-2: Project O&M could violate or substantially contribute to existing or projected violations of applicable air quality standards.

The Project's operation emissions, which would be limited to occasional vegetation thinning activity and facility inspections, are negligible, as shown below in Table 3.1-14. The Project's operation emissions would not violate air quality standards and, therefore, would not result in significant impacts (Class III).

Impact AQ-3: Project construction could result in a cumulatively considerable net increase in non-attainment pollutants.

As shown in Table 3.1-3, Ventura County is in non-attainment of the federal and State ozone standards and the State PM10 standard. Therefore, this impact analysis primarily considers ozone precursors (NOx and VOC) and PM10 emissions.

Option 1B – Minimum Levee System (Preferred) with Reach 4 Floodwall

The proposed Project would create air pollutant emissions during construction. The Project's uncontrolled construction emissions estimate was completed and is provided in Appendix C, which provides a list of the methods and assumptions used in the emissions calculation. A limited amount of fugitive dust emission mitigation in the form of unpaved road watering, which is assumed to be necessary for VCAPCD rules compliance, is included in the uncontrolled emissions estimate. The uncontrolled on-road vehicle and off-road equipment emissions are based on fleet average emissions factors for the SCCAB.

A summary of the uncontrolled construction emissions estimate for Option 1B is provided below in Tables 3.1-6 and 3.1-7.

	VOC	CO	NOx	SOx	PM10	PM2.5
On-road vehicles	2.10	14.22	35.71	0.08	0.03	0.01
Off-road equipment	3.83	37.87	55.52	0.05	2.14	1.97
Fugitive dust	---	---	---	---	486.15	71.73
Total	5.92	52.09	91.23	0.14	488.31	73.71

Source: Appendix C

	VOC	CO	NOx	SOx	PM10	PM2.5
On-road vehicles	0.13	0.93	1.48	0.00	0.05	0.03
Off-road equipment	0.44	2.47	3.11	0.00	0.14	0.13
Fugitive dust	---	---	---	---	15.78	1.84
Total	0.57	3.40	4.59	0.01	15.97	2.00

Source: Appendix C

The maximum daily emissions for the gaseous pollutants (VOC, CO, NOx, and SOx) occurs during the overlap of the Levee Embankment Fill, Rock Riprap, Golf Course Fill, and 66-inch Reinforced Concrete Pipe (RCP) work tasks. The particulate emissions (i.e., fugitive dust) maximum daily emissions occur during the Foundation Excavation work task, which does not overlap with any other work tasks. The difference between the two is the larger amount of on-road vehicle tailpipe emissions versus the large amount of unpaved road fugitive dust emissions from scraper use and unpaved road travel, respectively. The total construction emissions occur over an estimated 77-week construction schedule.

VCAPCD's CEQA Guidelines do not provide quantitative emissions significance criteria for construction based on the emissions being temporary; however, the guidelines do indicate that NOx, VOC, and fugitive dust emissions from construction should be mitigated in consideration of Ventura County being nonattainment of the federal and State ozone ambient air quality standards and the State PM10 ambient air quality standards. For this Project, the NOx and VOC emissions sources comprise off-road equipment and on-road vehicles. Mitigating the on-road vehicle emissions by restricting the type or model year of the engine would be difficult to implement, so on-road vehicle mitigation is limited to idle duration control and proper engine maintenance (see Mitigation Measure AQ-3c); no emissions reductions have been assumed for this mitigation. However, mitigation of off-road vehicle emissions could be reasonably accomplished by specifying the use of equipment with newer, lower emitting engines. Therefore, Mitigation Measure AQ-3b, which specifies the use of off-road equipment that meet or exceed Tier 3 emission standards, is recommended. Additionally, Mitigation Measure AQ-3a is recommended to reduce particulate emissions impacts during construction. The specific mitigation assumptions and revisions to both off-road equipment and fugitive dust emissions calculations are provided in Appendix C. Tables 3.1-8 and 3.1-9 provide the mitigated construction emissions estimate.

	VOC	CO	NOx	SOx	PM10	PM2.5
On-road vehicles	2.10	14.22	35.71	0.08	0.03	0.01
Off-road equipment	1.90	37.87	27.03	0.05	1.01	0.93
Fugitive dust	---	---	---	---	166.36	23.18
Total	4.00	52.09	62.74	0.14	167.39	24.12

Source: Appendix C

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	VOC	CO	NOx	SOx	PM10	PM2.5
On-road vehicles	0.13	0.93	1.48	0.00	0.05	0.03
Off-road equipment	0.32	2.47	1.41	0.00	0.07	0.07
Fugitive dust	---	---	---	---	6.53	0.75
Total	0.45	3.40	2.88	0.01	6.65	0.85

Source: Appendix C

After mitigation, the estimated Project construction emissions would be substantially reduced. The off-road NOx and VOC emissions are estimated to be reduced by over 50 percent for the maximum day and almost 55 and over 25 percent over the entire construction period, respectively. The total NOx and VOC emissions are estimated to be reduced by over 30 percent for the maximum day and over 37 and over 21 percent over the entire construction period, respectively. The fugitive particulate emissions (PM10 and PM2.5) are estimated to be reduced by over 65 percent for the maximum day and over 57 percent over the total construction period.

Construction emissions for Option 1B, after implementation of Mitigation Measures AQ-3a through AQ-3c, would still be adverse. However, the construction emissions would be temporary, would be greatly reduced from the potential uncontrolled construction emissions, and therefore would not result in significant impacts after implementation of mitigation (Class II).

Option 1A – Full Levee System with Reach 4 Floodwall

This option requires more construction activity than Option 1B and, therefore, has greater overall emissions (comparing values in Table 3.1-11 for Option 1A to Table 3.1-7 for Option 1B). However, the differences in task overlap in the two schedules determine which option has the greatest estimated maximum daily emissions (comparing values in Tables 3.1-10 and 3.1-6).

The proposed Project’s uncontrolled construction emissions estimate was completed and is provided in Appendix C, which provides a list of the methods and assumptions used in the emissions calculation. A limited amount of fugitive dust emission mitigation in the form of unpaved road watering, which is assumed to be necessary for VCAPCD rules compliance, is included in the uncontrolled emissions estimate. The uncontrolled on-road vehicle and off-road equipment emissions are based on fleet average emissions factors for the SCCAB. A summary of the uncontrolled construction emissions estimate for Option 1A are provided in Tables 3.1-10 and 3.1-11.

	VOC	CO	NOx	SOx	PM10	PM2.5
On-road vehicles	2.09	14.27	32.99	0.08	0.03	0.01
Off-road equipment	3.97	23.77	31.64	0.02	2.14	1.97
Fugitive dust	---	---	---	---	488.49	72.21
Total	6.06	38.03	64.63	0.11	490.66	74.19

Source: Appendix C

Table 3.1-11. Option 1A Uncontrolled Total Construction Emissions (Tons)

	VOC	CO	NO _x	SO _x	PM10	PM2.5
On-road vehicles	0.15	1.05	1.70	0.00	0.05	0.03
Off-road equipment	0.47	2.54	3.34	0.00	0.15	0.14
Fugitive dust	---	---	---	---	19.57	2.39
Total	0.61	3.59	5.03	0.01	19.78	2.56

Source: Appendix C

The maximum daily emissions for most of the gaseous pollutants (VOC, CO, and SO_x) occurs during the overlap of the Levee Embankment Fill and Concrete Retaining Wall work tasks (Weeks 11-13; see Table 2-3). The NO_x maximum daily emissions occurs during the overlap of the Levee Embankment Fill and Rock Riprap tasks (Weeks 18-22; see Table 2-3). The particulate emissions maximum daily emissions occurs during the Foundation Excavation task (Weeks 7-10; see Table 2-3), which does not overlap with any other work tasks. For the gaseous pollutants (VOC, CO, SO_x) other than NO_x, the daily maximum is based on an overlap of tasks with high off-road equipment use and on-road vehicle use requirements. However, for NO_x the specific off-road equipment required during the Rock Riprap task has proportionally higher uncontrolled NO_x emissions than the equipment required for the Concrete Retaining Wall task, which creates a maximum day for NO_x that is a fraction of a pound higher during Weeks 18-22 as opposed to Weeks 11-13. For the PM emissions (PM10 and PM2.5), the Foundation Excavation task in Reaches 1-3 has much higher fugitive dust emissions from scraper use and greater on-site unpaved road travel than any other task for Option 1A, enough to overwhelm any differences in the off-road and on-road PM emissions during other construction periods. The total construction emissions occur over an estimated 80 week construction schedule.

Construction emissions mitigation applies to Option 1A as it did for Option 1B. Therefore, the same mitigation measures (AQ-3a through AQ-3c) and controlled emissions calculation assumptions apply. Tables 3.1-12 and 3.1-13 provide the mitigated construction emissions estimate for Option 1A.

Table 3.1-12. Option 1A Maximum Daily Controlled Construction Emissions (lbs/day)

	VOC	CO	NO _x	SO _x	PM10	PM2.5
On-road vehicles	2.09	14.27	35.73	0.08	0.03	0.01
Off-road equipment	2.54	23.77	12.77	0.02	1.01	0.93
Fugitive dust	---	---	---	---	167.27	23.36
Total	4.63	38.03	48.50	0.11	168.31	24.30

Source: Appendix C

Table 3.1-13. Option 1A Controlled Total Construction Emissions (Tons)

	VOC	CO	NO _x	SO _x	PM10	PM2.5
On-road vehicles	0.15	1.05	1.70	0.00	0.05	0.03
Off-road equipment	0.33	2.54	1.46	0.00	0.08	0.07
Fugitive dust	---	---	---	---	7.91	0.95
Total	0.47	3.59	3.16	0.01	8.04	1.05

Source: Appendix C

In the controlled emissions scenario, all gaseous pollutant maximum daily emissions occur during the overlap of the Levee Embankment Fill and Concrete Retaining Wall work tasks (Weeks 11-13). The maximum daily PM emissions remain during the Foundation Excavation work task (Weeks 7-10).

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After mitigation, the estimated Project construction emissions for Option 1A would be substantially reduced. The off-road NOx and VOC emissions are estimated to be reduced by over 50 and 35 percent for the maximum day and nearly 60 and over 30 percent over the entire construction period, respectively. The total NOx and VOC emissions are estimated to be reduced by about 25 and 24 percent for the maximum day and about 37 and 22 percent over the entire construction period, respectively. The fugitive particulate emissions (PM10 and PM2.5) are estimated to be reduced by over 65 percent for the maximum day and nearly 60 percent over the total construction period.

The Project's construction emissions for Option 1A, after implementation of Mitigation Measures AQ-3a through AQ-3c, would still be adverse. However, the construction emissions would be temporary, would be greatly reduced from the potential uncontrolled construction emissions, and therefore would not result in significant impacts after implementation of mitigation (Class II).

Mitigation Measures

The following mitigation measures would substantially reduce the off-road equipment NOx emissions and the fugitive dust particulate emissions during Project construction (applies to Options 1A and 1B).

AQ-3a **Fugitive Dust Control.** All construction and site preparation operations shall be conducted in compliance with all applicable Ventura County Air Pollution Control District (VCAPCD) Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), and Rules 55 (Fugitive Dust) and 55.1 (Paved Roads and Public Unpaved Roads), as well as Rule 10 (Permits Required). The following specific dust control measures, unless more strict measures are implemented for VCAPCD rule compliance, shall be implemented:

1. Apply environmentally safe chemical stabilization, which can be water or other non-toxic soil binder(s), at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with public paved surface to the working areas of the Project site, with an acceptable width to accommodate traffic ingress and egress from the site.
2. Minimize areas of grading, excavation, earth moving, and surface disturbance to the extent feasible.
3. Pre-water areas to be graded or excavated, and water during grading/excavation activities so that soils being handled are moist (12 percent moisture or greater).
4. Maintain stabilized surfaces on inactive graded/excavated areas by using water, rolling, or other non-toxic soil binders; and re-vegetate or perform other long-term surface stabilization within a week after active construction activities are completed.
5. Install a properly functioning and well-maintained track-out control device(s) that prevents track-out of soil onto paved public roads.
6. Remove track-out from pavement as soon as possible but no later than one hour after it has been deposited on the paved road.
7. Use properly secured tarps or covering that covers the entire surface area of the earthen fill, or other fine bulk material, loads.
8. Water or use environmentally safe chemical stabilization to treat earthen fill storage piles to minimize wind erosion emissions.
9. Limit vehicle speeds, including off-road scrapers, on unpaved roads and work areas to 15 mph. Speed limit signs shall be posted onsite at locations of the point of initial egress to the unpaved areas and within unpaved work areas.

10. Discontinue work activities, including all grading activities, with the exception of fugitive dust control activities, as necessary to prevent nuisance dust conditions during high wind events (25 mph for more than 5 minutes in any hour).

AQ-3b **Off-road Equipment Emissions Control.** Off-road equipment with engines larger than 50 horsepower shall have engines that meet or exceed USEPA/CARB Tier 3 Emissions Standards. Exceptions will be allowed only on a case by case basis for three specific situations: (1) an off-road equipment item that is a specialty, or unique, piece of equipment that cannot be found with a Tier 3 or better engine after a due diligence search; and/or (2) an off-road equipment item that will be used for a total of no more than 5 days; and/or (3) the off-road equipment is registered under CARB’s Statewide Portable Equipment Registration Program. Additionally, all off-road equipment engines shall be maintained in good operating condition and in tune per manufacturers’ specification, and equipment idling shall be limited to more than five minutes unless needed for proper operation.

AQ-3c **On-road Equipment Emissions Control.** All non-employee on-road vehicle engines shall be turned off when not in use. Engine idling shall not exceed five (5) minutes unless required for proper operation. All non-employee on-road vehicle engines shall be maintained in good operating condition and in tune per manufacturers’ specification.

Impact AQ-4: Project O&M could result in a cumulatively considerable net increase in non-attainment pollutants.

Option 1B and Option 1A

The Project’s increase in operation emissions is limited to two weeks of vegetation thinning and up to 12 inspections per year. Options 1B and 1A are assumed to have the same type of increased O&M activities. The emission estimate for this increase in O&M activities is provided in Table 3.1-14.

Table 3.1-14. Option 1B and 1A Operation Emissions (lbs/day and lbs/year)						
	VOC	CO	NO _x	SO _x	PM10	PM2.5
Maximum Daily Emissions, lbs/day	8.97	32.14	3.57	0.01	0.39	0.22
VCAPCD Significance Thresholds, lbs/day	25	--	25	--	--	--
Significant?	NO	--	NO	--	--	--
Total Annual Emissions, lbs/year	89.71	321.70	36.02	0.08	3.88	2.23

Source: Appendix C; VCAPCD, 2003

Operations emissions are minimal and are below all VCAPCD emissions significance thresholds. The VOC and CO emissions are proportionately higher than the rest of the pollutants due to the assumed use of gasoline-powered chainsaws. The minimal O&M emissions for Options 1B and 1A would not cause significant air quality impacts (Class III).

Localized Health Impacts

Impact AQ-5: Project construction and O&M could expose the public to substantial pollutant concentrations.

Option 1B and Option 1A

The Project’s construction emissions of criteria pollutants after mitigation, including particulate emissions, are not considered to be at a level that would be high enough to cause direct health impacts

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to local sensitive receptors. The Project's emissions would occur over a large area, the on-road portion of the emissions would occur over a large portion of the County and the off-road emissions would move over the approximately two-mile long Project construction corridor. Therefore, Project emissions would not materially affect criteria pollutant ambient air quality attainment, much less create substantial pollutant concentrations that could cause distress or injury. Additionally, the Project elements with the highest off-road emissions occur in or adjacent to the Santa Clara River channel, and so are generally the farthest construction elements from the sensitive receptors that surround the Project. Therefore, these emissions would generally disperse substantially before reaching sensitive receptor locations. Additionally, the Project's operation emissions of criteria pollutants are negligible (see Table 3.1-14).

The Project's emissions of toxic air pollutants would be minimal and would consist primarily of DPM emissions during Project construction activities. These emissions would be temporary, would occur over a large Project area, and would average just over 0.3 pounds per day over the construction period and less than 0.2 pounds per day within the approximately two-mile long Project construction site area. This latter average daily level of on-site DPM emissions would be equivalent to that from a two-mile long section of Highway 101 for approximately 180 truck trips per day, while in reality there is over 30 times that amount of traffic on Highway 101; over 5,600 truck trips per day on the 101 near the Project site (Highway 101 at PCH in Oxnard in 2013 had 5,618 average daily truck trips; Caltrans, 2014). This illustrates the relative low magnitude of the Project's DPM emissions. DPM does not have substantial acute toxic effects, so its risks are related to long-term/lifetime chronic and primarily carcinogenic exposures, while the Project would occur and expose receptors for 27 months. Therefore, given the temporary small quantity of toxic air pollutant emissions, their large release area, and the large project average distance to sensitive receptors, construction of the proposed Project (Option 1B or Option 1A) would not expose any nearby sensitive receptor location to a cancer risk above 10 in a million or an acute or chronic hazard index of one or more, so construction air toxics emissions impacts would be less than significant (Class III). Additionally, the primary on-site source of air toxic emission, the diesel fueled off-road equipment, would be subject to NO_x emission mitigation (Mitigation Measure AQ-3b) that would also reduce uncontrolled on-site PM₁₀ emissions from off-road equipment (where PM₁₀=DPM) by 50 percent or more. The Project's operation emissions of air toxics are negligible (Class III).

Objectionable Odors

Impact AQ-6: Project construction and O&M could cause localized nuisance odors.

Option 1B and Option 1A

The Project's construction and operation for both design options would not include the use of malodorous substances or activities that would cause significant odors. Construction equipment and construction operations may create mildly objectionable odors, such as during asphalt paving operations. However, these odors would be temporary, limited in extent, are the types of odors regularly experienced by the public, and would not affect a substantial number of people. The Project's operation, which would be limited to the additional maintenance activity of occasional thinning of vegetation, is not expected to create any noticeable odors. The localized odor impacts from the proposed Project's construction and operation activities would not be significant (Class III).

San Joaquin Valley Fever

Impact AQ-7: Project construction could cause an increase in the incidence of Valley Fever infections.

Option 1B and Option 1A

Valley fever is endemic or suspected to be endemic throughout Southern California, so fugitive dust emissions from the Project could cause exposure to the arthroconidia (spores) of the fungus *Coccidioides immitis* (CI) if those spores are present in areas being excavated or in areas with unpaved vehicle/equipment travel. Exposure to the CI spores could cause Project construction workers, area residents, or others using recreation facilities downwind of the Project construction activities to contract the disease. The primary way to avoid valley fever is to limit exposure to the CI spores. The construction methods and mitigation measure (see Mitigation Measure AQ-3a above), which have been designed to comply with the VCAPCD Guidelines' recommended fugitive dust mitigation measures, would provide substantial control of the fugitive dust emissions during construction. The potential for the Project to increase incidence of valley fever infection during construction would not be significant after fugitive dust mitigation (Class II).

Impact AQ-8: Project O&M could cause an increase in the incidence of Valley Fever infections.

Option 1B and Option 1A

The potential for Project-related valley fever impacts during operation would be minimal as the additional maintenance activities, occasional vegetation thinning and facility inspections, should cause negligible quantities of fugitive dust emissions. The potential for the Project to increase incidence of valley fever infection during operation would not be significant (Class III).

3.1.2.3 Cumulative Impacts

Introduction

The geographic extent for the analysis of cumulative impacts related to air quality is generally limited to areas within approximately one mile of the Project alignment. It is possible that air pollutant emissions from different sources could combine to create a significant impact to receptors in the same downwind direction. At distances greater than one mile air pollutants have had time to disperse to concentrations that would not be of concern. The shorter the distance between projects, all other things being equal, the higher the potential for cumulative impacts. The baseline for assessing cumulative air quality impacts includes the ambient air quality in the Project area and existing projects and land uses.

The proposed Project alignment, as shown in Figure 3-1, would be within one mile of approximately 17 of the 55 listed cumulative projects and within one-half mile of six of those projects.

Project Contribution to Cumulative Impacts

The proposed Project has dozens of work tasks that would occur at various times and places over an approximately two-mile length of the Project alignment along the Santa Clara River channel and adjacent lands. Based on the accelerated (worst-case) construction schedule (20 months), none of these work tasks are anticipated to last longer than 16 weeks, and the entire construction period is less than two years, whereas the anticipated normal-case construction schedule is expected to be somewhat longer at 27 months. While there may be some overlap between some of the identified

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cumulative projects within a mile of the Project area, the Project’s emissions and mitigation would be consistent with the Air Quality Management Plan. Therefore, per VCAPCD Guidelines, the construction emissions, which would be mitigated, would not create a cumulatively considerable contribution to cumulative air quality impacts.

The Project’s operation is limited to a small increase in occasional vegetation thinning activities, and therefore would not make a cumulatively considerable contribution to cumulative air quality impacts.

3.1.2.4 Impact Significance Summary

Table 3.1-14, below, provides a summary of each identified direct and indirect impact and associated mitigation measures to reduce or avoid the impact, if warranted. Mitigation measures are required for each significant impact, but are not required for impacts that are not significant. Table 3.1-15 also indicates the significance conclusion for each identified impact. For cumulative impacts, the proposed Project’s contributions to construction and O&M air quality impacts were determined not to be cumulatively considerable.

Table 3.1-15. Summary of Air Quality Impacts and Mitigation Measures		
Impacts	Mitigation Measures	Significance Conclusion
Impact AQ-1: Project construction could violate or substantially contribute to existing or projected violations of applicable air quality standards.	AQ-3a: Fugitive Dust Control. AQ-3b: Off-road Equipment Emissions Control. AQ-3c: On-road Equipment Emissions Control.	Class II
Impact AQ-2: Project O&M could violate or substantially contribute to existing or projected violations of applicable air quality standards.	No mitigation measures are required.	Class III
Impact AQ-3: Project construction could result in a cumulatively considerable net increase in non-attainment pollutants.	AQ-3a: Fugitive Dust Control. AQ-3b: Off-road Equipment Emissions Control. AQ-3c: On-road Equipment Emissions Control.	Class II
Impact AQ-4: Project O&M could result in a cumulatively considerable net increase in non-attainment pollutants.	No mitigation measures are required.	Class III
Impact AQ-5: Project construction and O&M could expose the public to substantial pollutant concentrations.	No mitigation measures are required.	Class III
Impact AQ-6: Project construction and O&M could cause localized nuisance odors.	No mitigation measures are required.	Class III
Impact AQ-7: Project construction could cause an increase in the incidence of Valley Fever infections.	AQ-3a: Fugitive Dust Control.	Class II
Impact AQ-8: Project O&M could cause an increase in the incidence of Valley Fever infections.	No mitigation measures are required.	Class III

Class I: Significant impact; cannot be mitigated to a level that is not significant. A Class I impact is a significant adverse effect that cannot be mitigated below a level of significance through the application of feasible mitigation measures. Class I impacts are significant and unavoidable.

Class II: Significant impact; can be mitigated to a level that is not significant. A Class II impact is a significant adverse effect that can be reduced to a less-than-significant level through the application of feasible mitigation measures presented in this EIR/EIS.

Class III: Adverse; less than significant. A Class III impact is a minor change or effect on the environment that does not meet or exceed the criteria established to gauge significance.

Class IV: Beneficial impact. A Class IV impact represents a beneficial effect that would result from project implementation.