



**Plot Plan No. 26225, Revised
Permit No. 1, (PP26225R01)**

AIR QUALITY ANALYSIS

Prepared By:

Haseeb Qureshi | hqureshi@urbanxroads.com

Shannon Wong | swong@urbanxroads.com

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LIST OF ABBREVIATED TERMS

$\mu\text{g}/\text{m}^3$	Microgram per Cubic Meter
1992 CO Plan	1992 Federal Attainment Plan for Carbon Monoxide
1993 CEQA Handbook	SCAQMD's CEQA Air Quality Handbook (1993)
2016-2040 RTP/SCS	2016-2040 Regional Transportation Plan/Sustainable Communities Strategy
AB 2595	California Clean Air Act
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
BC	Black Carbon
Brief	Brief of Amicus Curiae by the SCAQMD in the Friant Ranch Case
C_2Cl_4	Perchloroethylene
C_4H_6	1,3-butadiene
C_6H_6	Benzene
$\text{C}_2\text{H}_3\text{Cl}$	Vinyl Chloride
$\text{C}_2\text{H}_4\text{O}$	Acetaldehyde
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	2019 CEQA Statute and Guidelines
CH_2O	Formaldehyde
CO	Carbon Monoxide
COH	Coefficient of Haze
COHb	Carboxyhemoglobin
County	County of Riverside
Cr(VI)	Chromium
EC	Elemental Carbon
EIR	Environmental Impact Report
EMFAC	Emissions FACtor Model
EPA	Environmental Protection Agency
ETW	Equivalent Test Weight



EV	Electric Vehicle
FAR	Floor Area Ratio
GHG	Greenhouse Gas
GVWR	Gross Vehicle Weight Rating
H ₂ S	Hydrogen Sulfide
HI	Hazard Index
hp	Horsepower
lbs	Pounds
lbs/day	Pounds Per Day
LED	Light-Emitting Diode
LST	Localized Significance Threshold
LST Methodology	Final Localized Significance Threshold Methodology
MDR	Medium Density Residential
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
mph	Miles Per Hour
MWEL0	California Department of Water Resources' Model Water Efficient
N ₂	Nitrogen
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NO	Nitric Oxide
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
O ₂	Oxygen
O ₃	Ozone
O ₂ Deficiency	Chronic Hypoxemia
OBD-II	On-Board Diagnostic
ODC	Ozone Depleting Compounds
Pb	Lead
PM	Particulate Matter
PM ₁₀	Particulate Matter 10 microns in diameter or less
PM _{2.5}	Particulate Matter 2.5 microns in diameter or less
ppm	Parts Per Million
Project	Akash Winery
R-4	Planned Residential
RECLAIM	Regional Clean Air Incentives Market
ROG	Reactive Organic Gases
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIPs	State Implementation Plans



SO ₂	Sulfur Dioxide
SO ₄	Sulfates
SO _x	Sulfur Oxides
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
Title 24	California Building Code
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
VOC	Volatile Organic Compounds



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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this Akash Winery Air Quality Impact Analysis (AQIA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the CEQA Guidelines (CEQA Guidelines) (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA before and after any required mitigation measures (MM) described below.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	<i>Less Than Significant</i>	<i>n/a</i>
Localized Construction Emissions	3.6	<i>Less Than Significant</i>	<i>n/a</i>
Regional Operational Emissions	3.5	<i>Less Than Significant</i>	<i>n/a</i>
Localized Operational Emissions	3.6	<i>Less Than Significant</i>	<i>n/a</i>
CO "Hot Spot" Analysis	3.7	<i>Less Than Significant</i>	<i>n/a</i>
Air Quality Management Plan	3.8	<i>Less Than Significant</i>	<i>n/a</i>
Sensitive Receptors	3.10	<i>Less Than Significant</i>	<i>n/a</i>
Odors	3.11	<i>Less Than Significant</i>	<i>n/a</i>
Cumulative Impacts	3.12	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality. 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 South Coast Air Quality Management District (SCAQMD). SCAQMD Rules that are currently applicable to this Project are described below.

SCAQMD 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.

SCAQMD 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 earth moving and grading activities.

SCAQMD Rule 445

This rule serves to reduce emissions from wood-burning devices by prohibiting their installation in new residential developments. This rule applies to the construction of any new dwelling units within the SCAQMD.

SCAQMD Rule 1113

This rule serves to limit the VOC content of architectural coatings used on projects in the SCAQMD. This rule applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.

SCAQMD Rule 1301

This rule is intended to provide that pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards (NAAQS), while future economic growth within the SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

SCAQMD Rule 1401

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.



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1 INTRODUCTION

This report presents the results of the AQIA prepared by Urban Crossroads, Inc., for the proposed Akash Winery (Project). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD.

1.1 SITE LOCATION

The Project site is located at 39730 Calle Contento (Assessor's Parcel Number [APN] 943-210-012) in the County of Riverside, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

It is our understanding that the 19.34-acre Project facility has approximately 14.5 acres devoted to vineyards. The existing structures on-site consist of the following: a 4,932 square foot (sf) tasting and production building (consisting of tasting, retail, lounge, and wine production, storage, office/lab, and glass washing station), and a 430 sf restroom facility.

The Project proposes to expand the existing 4,932 sf tasting and production building by an additional 16,886 square feet. The expanded building area will consist of an increased wine production area, wine storage, wine lab, barrel washroom, staff restrooms, staff breakroom, offices, conference room, and a covered tractor parking area. The existing wine tasting/production building area will also be modified to add a delicatessen and wine tasting bar. Outdoor patio covers will also be replaced along with the addition of an outdoor wine tasting bar and refrigeration unit. The Project is anticipated to be developed in a single phase with an opening year of 2027.

EXHIBIT 1-A: LOCATION MAP



LEGEND:

 Site Boundary



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2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (2). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the Project site is located within the SCAB, a 6,745 square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to mid 60s (degrees Fahrenheit °[F]). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO₂) to sulfates (SO₄) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast. Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level. A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_x) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

2.3 WIND PATTERNS AND PROJECT LOCATION

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 AIR POLLUTANTS

2.4.1 Criteria Pollutants

Air quality regulations were first promulgated with the Federal Clean Air Act (CAA) of 1970. Air quality is defined by ambient air concentrations of seven "criteria air pollutants," which are a group of common air pollutants identified by the United States Environmental Protection Agency (U.S.

EPA) to be of concern with respect to the health and welfare of the general public. Federal and State governments regulate criteria air pollutants by using ambient standards based on criteria regarding the health and/or environmental effects of each pollutant. The seven “criteria” air pollutants defined by the U.S. EPA are: (1) carbon monoxide (CO); (2) sulfur dioxide (SO₂); (3) nitrogen dioxide (NO₂); (4) ozone (O₃); (5) respirable particulate matter with a diameter of 10 microns or less (PM₁₀), (6) fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), and (7) lead (Pb). Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (3).

TABLE 2-1: CRITERIA POLLUTANTS (1 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O ₃), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O ₂) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O ₂ transport and competing with O ₂ to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O ₂ supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O ₂ deficiency) as seen at high altitudes.
SO ₂	SO ₂ is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant	Coal or oil burning power plants and industries,	A few minutes of exposure to low levels of SO ₂ can result in airway constriction

TABLE 2-1: CRITERIA POLLUTANTS (2 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
SO ₂ (Continued)	mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO ₂ oxidizes in the atmosphere, it forms SO ₄ . Collectively, these pollutants are referred to as sulfur oxides (SO _x).	refineries, diesel engines	in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO₂. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO₂. Animal studies suggest that despite SO₂ being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO₂ levels. In these studies, efforts to separate the effects of SO₂ from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.

TABLE 2-1: CRITERIA POLLUTANTS (3 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
NO ₂	NO₂ is a key component of nitrogen oxides (NO_x), which also includes nitric oxide (NO) and nitrous oxide (N₂O). NO_x compounds are primarily produced during combustion processes when nitrogen (N₂) reacts with oxygen (O₂). Both NO and NO₂ serve as precursors in the formation of O₃ and PM_{2.5}, making their monitoring crucial for air quality assessments. NO₂, being the more abundant form of NO_x in the atmosphere, has a relatively short lifespan of one to seven days, which enhances its significance as a major air pollutant. As a criteria air pollutant, NO₂ poses various health risks, including respiratory issues and increased vulnerability to infections. It also absorbs blue light, imparting a brownish-red hue to the atmosphere and contributing to reduced visibility and smog formation. Given that NO emissions largely convert to NO₂, the examination of NO_x emissions becomes essential when assessing potential air quality impacts. The concentrations of NO₂ are closely related to traffic density, often resulting in higher exposure levels for commuters in heavy traffic compared to what regional monitoring stations may indicate.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO₂ considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O₃ exposure increases when animals are exposed to a combination of O₃ and NO₂.
O ₃	O ₃ is a highly reactive and unstable gas that is formed when VOCs and NO _x , both	Formed when ROGs and NO _x react in the	Individuals exercising outdoors, children, and people with preexisting lung

TABLE 2-1: CRITERIA POLLUTANTS (4 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
O ₃ (Continued)	byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O ₃ concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.	disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for O₃ effects. Short-term exposure (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O₃ levels are associated with increased school absences. In recent years, a correlation between elevated ambient O₃ levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and reside in communities with high O₃ levels. O₃ exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O₃ may be more toxic than exposure to O₃ alone. Although lung volume and resistance changes observed after a single exposure

TABLE 2-1: CRITERIA POLLUTANTS (5 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
O ₃ (Continued)			diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.
Particulate Matter	PM₁₀: A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduce visibility (haze) which is caused by the scattering of light and consequently the significant reduction air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM₁₀ is considered a criteria air pollutant. PM_{2.5}: A similar air pollutant to PM₁₀ consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO₄ formed from SO₂ release from power plants and industrial facilities and nitrates that are formed from NO_x release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and	Sources of PM₁₀ include road dust, windblown dust and construction. Also formed from other pollutants (acid rain, NO_x, SO_x, organics). Incomplete combustion of any fuel. PM_{2.5} comes from fuel combustion in motor vehicles, equipment, and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_x, SO_x, organics).	A consistent correlation between elevated ambient fine particulate matter (PM₁₀ and PM_{2.5}) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in PM_{2.5} concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter.

TABLE 2-1: CRITERIA POLLUTANTS (6 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
Particulate Matter (Continued)	weather conditions. PM _{2.5} is a criteria air pollutant.		The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM ₁₀ and PM _{2.5} .
Pb	Pb is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or Pb acid battery manufacturing. As such, the Project is not anticipated to generate a quantifiable amount of Pb emissions.	Metal smelters, resource recovery, leaded gasoline, deterioration of Pb paint.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous

TABLE 2-1: CRITERIA POLLUTANTS (7 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
Pb (Continued)			environmental Pb exposure of their mothers.

2.4.2 Additional Pollutants

The SCAQMD's primary focus is to achieve the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for criteria pollutants. However, it also has a broader mandate to control emissions of air contaminants and safeguard public health. As a result, SCAQMD regulates additional pollutants beyond criteria pollutants, including reactive organic gases (ROGs), VOCs, and odors. Additional pollutants, their typical sources, and health effects are identified below (3).

TABLE 2-2: ADDITIONAL POLLUTANTS (1 OF 2)

Pollutant	Description	Sources	Health Effects
VOC	VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O ₃ to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O ₃ , which is a	Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.	Breathing VOCs can irritate the eyes, nose, and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.

TABLE 2-2: ADDITIONAL POLLUTANTS (2 OF 2)

Pollutant	Description	Sources	Health Effects
VOC (Continued)	criteria pollutant. The terms VOC and ROG (see below) interchangeably.		
ROG	Similar to VOC, ROG's are also precursors in forming O ₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO _x react in the presence of sunlight. ROG's are a criteria pollutant since they are a precursor to O ₃ , which is a criteria pollutant. The terms ROG and VOC (see previous) interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves (4).	Odors can come from many sources including animals, human activities, industry, nature, and vehicles.	Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-3 (5).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on July 16, 2024, and are presented in Table 2-3. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, PM₁₀, and PM_{2.5} are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the state assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (6).

TABLE 2-3: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards							
Pollutant	Averaging Time	California Standards ¹		National Standards ²			
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)			
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m ³		—			
Fine Particulate Matter (PM2.5) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	9.0 µg/m ³	15.0 µg/m ³		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)	
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—		
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence	
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		53 ppb (100 µg/m ³)	Same as Primary Standard		
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)	
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)		
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—		
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—		
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard		
	Rolling 3-Month Average	—		0.15 µg/m ³			
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards			
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence				
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				

See footnotes on next page ...

See footnotes on next page ...

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TABLE 2-3: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr, ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On February 7, 2024, the national annual PM2.5 primary standard was lowered from $12.0 \mu\text{g}/\text{m}^3$ to $9.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15.0 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for seven of the most common air pollutants: CO, Pb, O₃, PM₁₀, PM_{2.5}, NO₂, and SO₂ which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 35 permanent monitoring stations and 2 single-pollutant source Pb air monitoring sites throughout the air district (7). On January 25, 2024, CARB adopted the proposed 2023 amendments to the state and national area designations. See Table 2-4 for attainment designations for the SCAB (8). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-4: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Criteria Pollutant	State Designation	Federal Designation
O ₃ - 1-hour standard	Nonattainment	--
O ₃ - 8-hour standard	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO ₂	Attainment	Unclassified/Attainment
SO ₂	Attainment	Unclassified/Attainment
PB1	Attainment	Unclassified/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB

"--" = no standard.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to inform Southern California residents about the air quality conditions. The Project site is located within the Temecula Valley area (SRA 26). The Temecula Valley (SRA 26) monitoring station is located approximately 2.97 miles northwest of the Project site and reports air quality statistics for O₃. The nearest station for CO, NO₂ and PM₁₀ data was obtained from the Lake Elsinore area monitoring station, which is located approximately 17.59 miles northwest of the Project site in SRA 25. The nearest station for PM_{2.5} data was obtained from the Metropolitan Riverside County 1 monitoring station which is located approximately 37.34 miles northwest of the Project site in SRA 23. It should be noted that data from the Lake Elsinore area and Metropolitan Riverside County 1 monitoring station were utilized in lieu of the Temecula Valley monitoring station only in instances where data was not available.

The most recent three (3) years of data available is shown in Table 2-5 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} for 2021 through 2024 was obtained from the SCAQMD Air Quality Data Tables (9). Additionally, data for SO₂ has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO₂ concentrations.

TABLE 2-5: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2022-2024

Pollutant	Standard	2022	2023	2024
O₃				
Maximum Federal 1-Hour Concentration (ppm)		0.087	0.088	0.100
Maximum Federal 8-Hour Concentration (ppm)		0.079	0.082	0.077
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	0	0	1
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	4	3	6
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	0.9	1.3	1.8
Maximum Federal 8-Hour Concentration	> 20 ppm	0.6	0.7	1.0
NO₂				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.037	0.042	0.045
Annual Federal Standard Design Value		0.007	0.007	0.007
PM₁₀				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 150 µg/m ³	91	186	81
Annual Federal Arithmetic Mean (µg/m ³)		19.8	20.8	25.5
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m ³	0	1	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m ³	1	5	16
PM_{2.5}				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 35 µg/m ³	38.5	48.7	63.5
Annual Federal Arithmetic Mean (µg/m ³)	> 12 µg/m ³	10.8	10.47	12.09
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m ³	1	1	5

ppm = Parts Per Million

µg/m³ = Microgram per Cubic Meter

Source: Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 Federal Regulations

The EPA is responsible for setting and enforcing the NAAQS for O₃, CO, NO_x, SO₂, PM₁₀, and Pb (10). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB. The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (11). The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of

the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (12) (13). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3 , NO_2 , SO_2 , PM_{10} , CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 2-4 (previously presented) provides the NAAQS within the SCAB. Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_x . NO_x is a collective term that includes all forms of NO_x which are emitted as byproducts of the combustion process.

2.8.2 California Regulations

CARB

CARB, which became part of CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4 , visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (14) (10). Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_x , CO and PM_{10} . However, air basins may use an alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption (15). Title 24, Part 6 is mandatory for all applicable new construction and alterations.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission (16).

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2025 California Green Building Code Standards that go into effect on January 1, 2026. Title 24, Part 11 includes both mandatory measures and optional voluntary measures. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (16):

Nonresidential Mandatory Measures

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitors, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 20% of the peak daily visitors, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. Acceptable bicycle parking facility for Sections 5.106.4.1.2.1, 5.106.4.1.2.2 and 5.106.4.1.2.3 shall be conveniently located near the street and shall meet one of the following:
 - 1) Covered, lockable enclosures with permanently anchored racks for bicycles;
 - 2) Lockable bicycle rooms with permanently anchored racks; or
 - 3) Lockable, permanently anchored bicycle lockers.

Calculations for bicycle parking requirements shall be rounded up to the nearest whole number (5.106.4.1.2).

- EV charging stations. Construction to provide EV infrastructure and facilitate EV charging shall comply with Section 5.106.5.3.1 EV capable spaces, Section 5.106.5.3.2. EV charging stations and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 EV charging stations – Power allocation method and associated Table 5.106.5.3.6, and shall be provided in accordance with regulations in the *California Building Code* and the *California Electrical Code*.
- Light pollution reduction. Outdoor lighting systems shall be designed and installed to comply with the following:
 - 1) The minimum requirements in the *California Energy Code* for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the *California Administrative Code*; and
 - 2) Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
 - 3) Uplight and Glare ratings as defined in *California Energy Code* (shown in Tables 130.2-A and 130.2-B in Chapter 8)
 - 4) Allowable BUG ratings not exceeding those shown in Table 5.106.8, or

- 5) Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1)
 - Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
 - Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
 - Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - 1) Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1).
 - 2) Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
 - 3) Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
 - 4) Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute/20 [rim space (inches)] at 60 psi (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
 - Outdoor potable water use in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).
 - Meters. For new buildings or additions in excess of 50,000 sf, separate submeters shall be installed as follows (5.303.1.1):
 - 1) For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces

used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.

- 2) Where separate submeters for individual buildings tenants are unfeasible, for water supplied to the following subsystems:
 - a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
 - b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
 - c. Steam and hot-water boilers with energy input more than 500,000 BTU/h (147 kW).

For excess consumption, a separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day (5.303.1.2).

- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

2.8.3 Regional Regulations

Air Quality Management Plan

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (17). AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.8.



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3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

This study quantifies air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the SCAQMD's AQMP and Lead Agency planning regulations. The analysis of Project-generated air emissions determines whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the SCAB is in non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine whether the Project would expose sensitive receptors to substantial pollutant concentrations and the impacts of odors. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *CEQA Guidelines* (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (1):

- 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 in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has developed regional and localized significance thresholds for criteria pollutants, as summarized at Table 3-1 (18). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 3-1: REGIONAL EMISSIONS SIGNIFICANCE THRESHOLDS

Pollutant	Construction	Operations
NOX	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOX	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day
ppm = Parts Per Million
µg/m³ = Micrograms Per Cubic Meter

TABLE 3-2: LOCALIZED EMISSIONS SIGNIFICANCE THRESHOLDS

Pollutant	Construction	Operations
NOX	0.18 ppm	0.18 ppm
CO (1-hour average)	20 ppm	20 ppm
CO (8-hour average)	9 ppm	9 ppm
PM10	10.4 µg/m ³	2.5 µg/m ³
PM2.5	10.4 µg/m ³	2.5 µg/m ³

3.3 MODELS EMPLOYED TO ANALYZE AIR QUALITY

3.3.1 CalEEMod

Land uses such as the Project affect air quality through construction-source and operational-source emissions. The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (19). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendices 3.1 and 3.2.

3.4 CONSTRUCTION EMISSIONS

3.4.1 Construction Activities

Construction activities associated with the Project would result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction-related emissions are expected from the following construction activities:

- Grading
- Building Construction
- Paving
- Architectural Coating

Grading Activities

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. This analysis assumes that earthwork activities are expected to balance on site and no import or export of soils would be required.

Building Construction, Paving, and Architectural Coating Activities

Building construction and paving emissions are primarily associated with exhaust emissions from on-site equipment and vehicular trips to the site by construction workers and vendor trips. Architectural coating emissions include worker trips as well, but the primary pollutant emission of concern during this phase is ROG/VOC. CalEEMod default emission rates include the effects of Rule 1113 to limit ROG/VOC emissions.

3.4.2 Construction Duration

For purposes of analysis, Project construction will begin in December 2026 and would last through June 2027. The construction schedule utilized in the analysis, shown in Table 3-3, represents a “conservative” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.¹ The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (1).

TABLE 3-3: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Grading	12/14/2026	12/15/2026	2
Building Construction	12/15/2026	05/04/2027	100
Paving	05/05/2027	05/18/2027	10
Architectural Coating	05/19/2027	06/01/2027	10

3.4.3 Construction Equipment

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-4 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the County code.

TABLE 3-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Quantity	Hours
Grading	Graders	1	8
Grading	Rubber Tired Dozers	1	8
Grading	Tractors/Loaders/Backhoes	2	8
Building Construction	Tractors/Loaders/Backhoes	1	8
Building Construction	Cranes	1	8
Building Construction	Forklifts	1	8
Building Construction	Generator Sets	1	8
Building Construction	Welder	1	8
Paving	Tractors/Loaders/Backhoes	1	8

¹ As shown in the CalEEMod User’s Guide Version 2022, Appendix G “Table G-11. Statewide Average Annual Offroad Equipment Emission Factors” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Construction Activity	Equipment	Quantity	Hours
Paving	Cement and Mortar Mixers	1	8
Paving	Pavers	1	8
Paving	Paving Equipment	1	8
Paving	Rollers	1	8
Architectural Coating	Air Compressors	1	8

3.4.4 On-Road Trips

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of worker, vendor, and hauling trips per phase is presented below in Table 3-5 and are based on client provided information.

TABLE 3-5: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips	Vendor Trips	Hauling Trips
Grading	20	15	0
Building Construction	20	15	0
Paving	20	15	0
Architectural Coating	20	15	0

3.4.5 Construction Emissions Summary

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions without mitigation for both summer and winter periods are summarized in Table 3-6. Detailed unmitigated construction model outputs are presented in Appendices 3.1 and 3.2. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD.

TABLE 3-6: CONSTRUCTION EMISSIONS SUMMARY

Year	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
2027	13.48	12.20	13.23	0.05	1.63	0.68
Winter						
2026	1.56	16.11	16.12	0.05	4.03	1.85
2027	1.21	12.32	12.91	0.05	1.63	0.68
Maximum Daily Emissions	13.48	16.11	16.12	0.05	4.03	1.85
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions are expected from the following primary sources:

- Mobile Source Emissions;
- Area Source Emissions; and
- Energy Source Emissions.

3.5.1 Mobile Source Emissions

The Project related operational air quality emissions derive primarily from vehicle trips generated by the Project associated with the proposed use. The Project trip generation has been calculated based on the Project's anticipated event schedule, including the estimated number of events per year, number of guests per event, and associated travel miles. The anticipated trip generation for the Project is shown in Table 3-7 and is based on client provided information.

TABLE 3-7: PROJECT TRIP GENERATION AND MOBILE TRAVEL MILES

Event	Event Frequency	No. Events per Year	Number Guests	Travel Miles Per Event	Miles per year
Wellness Classes	Once a week	52	40	20	41,600
Comedy Night	Twice per month	24	200	20	96,000
Wine Club Night	Twice per month	24	200	20	96,000
Charity Events	Twice per month	24	200	20	96,000
Live Music-Indoor	5x per week	260	200	20	1,040,000
Live Music-Outdoor	4x per month	48	200	20	192,000
Wedding Ceremonies	5x per month	60	200	20	240,000
Wedding Reception	5x per month	60	200	20	240,000
Total					2,041,600

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads was calculated using CalEEMod.

3.5.2 Area Source Emissions

Architectural Coatings

Over a period of time the buildings that are part of this Project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products

Consumer products include, but are not limited to, detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic

compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

3.5.3 Energy Source Emissions

Combustion Emissions Associated with Electricity and Natural Gas

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Natural gas and electricity usage associated with the Project was calculated by CalEEMod using default parameters.

3.5.4 Operational Emissions Summary

Operational activities for summer and winter scenarios are presented in Table 3-8. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-8, the Project would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less-than-significant.

TABLE 3-8: SUMMARY OF PEAK OPERATIONAL EMISSIONS

Source	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Mobile	0.42	1.42	14.62	0.04	3.99	1.03
Area	0.53	0.01	0.73	0.00	0.00	0.00
Energy	0.03	0.50	0.42	0.00	0.04	0.04
Maximum Daily Emissions	0.99	1.93	15.77	0.05	4.03	1.07
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Mobile	0.42	1.53	11.41	0.04	3.99	1.03
Area	0.41	0.00	0.00	0.00	0.00	0.00

Energy	0.03	0.50	0.42	0.00	0.04	0.04
Maximum Daily Emissions	0.86	2.03	11.83	0.04	4.03	1.07
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

3.6 LOCALIZED AIR QUALITY IMPACTS

3.6.1 Background on LST Development

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that localized impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4.² LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. 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. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (20).

3.6.2 Emissions Considered

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_x, CO, PM_{2.5}, and PM₁₀. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (21)." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

3.6.3 Dispersion Modeling

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. The modeling approach utilized is discussed as follows.

3.6.4 Sources

It should be noted that in order to model worst-case conditions, the highest daily peak on-site emissions resulting from overlapping construction activity were modeled. A ground level release

² The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

height and a 1 meter (approximately 3.28 feet) initial vertical dimension (sigma z) were utilized for fugitive dust emissions of PM₁₀ and PM_{2.5} consistent with SCAQMD's LST guidance. In order to account for equipment exhaust emissions from NO₂, CO, PM₁₀, and PM_{2.5} a release height of 5.0 meters was utilized consistent with SCAQMD's LST guidance.

3.6.5 Meteorological Data and Model Options

In order to account for meteorological conditions at the Project site, meteorological data from the SCAQMD's Temecula monitoring station was utilized, as this is the nearest station to the Project site for which meteorological data is available. Additionally, a receptor height of 2 meters and regulatory default options were utilized consistent with SCAQMD's LST guidance.

3.6.6 Receptors

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities. Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors". These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use to the Project site where an individual could remain for 24 hours has been used to determine construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5}, since PM₁₀ and PM_{2.5} thresholds are based on a 24-hour averaging time.

Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a full 24 hours but are typically on-site for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO₂ and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours (21).*" Therefore, any adjacent land use where an individual could remain for 1 or 8 hours, that is located at a closer distance to the Project site than the receptor used for PM₁₀ and PM_{2.5} analysis, must be considered to determine construction and operational LST air impacts for emissions of NO₂ and CO since these pollutants have an averaging time of 1 and 8 hours.

Receptors in the Project study area are described below and shown on Exhibit 3-A. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

- Location R1 represents the existing residence at 40124 Sperry Ct, approximately 38 feet north of the Project site. Receptor R1 is placed at the private outdoor living area (backyard) facing the Project site.
- Location R2 represents the existing residence at 33667 Vino Way, approximately 88 feet north of the Project site. Receptor R2 is placed at the private outdoor living area (backyard) facing the Project site.

- Location R3 represents the existing residence at 33775 Corte Privada, approximately 384 feet east of the Project site. Receptor R3 is placed at the private outdoor living area (backyard) facing the Project site.
- Location R4 represents the existing residence at 39820 Calle Contento, approximately 506 feet south of the Project site. Receptor R4 is placed at the private outdoor living area (backyard) facing the Project site.
- Location R5 represents the existing building at 39555 Calle Contento, approximately 370 feet west of the Project site. Receptor R5 is placed at the private outdoor living area (backyard) facing the Project site.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a Project's impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time).

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_x and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours.

EXHIBIT 3-A: RECEPTOR LOCATIONS



LEGEND:

 Site Boundary
  Receptor Locations
  Distance from receptor to Project site boundary (in feet)

3.6.7 Construction-Source Localized Emissions

Emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 3-9. All other modeled locations in the study area would experience lower concentrations, resulting in a reduced impact. As such, the Project's localized impacts during construction activity would be less than significant. AERMOD Outputs from the model runs for construction LSTs are provided in Appendix 3.2.

TABLE 3-9: CONSTRUCTION LOCALIZED SIGNIFICANCE SUMMARY

Peak Construction	CO (1-Hour)	CO (8-Hours)	NO2 (1-Hour)	PM10 (24-Hours)	PM2.5 (24-Hours)
Peak Day Concentrations	0.03	0.01	0.01	0.79	0.41
Background Concentrations	1.8	1.0	0.05		
Total Concentrations	1.83	1.01	0.06	0.79	0.41
SCAQMD Localized Threshold	20	9	0.18	10.40	10.40
Threshold Exceeded?	NO	NO	NO	NO	NO

^A Highest concentration from the last three years of available data.

Notes: PM₁₀ and PM_{2.5} concentrations are expressed in µg/m³. All others are expressed in ppm.

Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO_x.

3.6.8 Operational-Source Localized Emissions

It is our understanding that the 19.34-acre Project facility has approximately 14.5 acres devoted to vineyards. The existing structures on-site consist of the following: a 4,932 square foot (sf) tasting and production building (consisting of tasting, retail, lounge, and wine production, storage, office/lab, and glass washing station), and a 430 sf restroom facility. The Project proposes to expand the existing 4,932 sf tasting and production building by an additional 16,886 square feet. The expanded building area will consist of an increased wine production area, wine storage, wine lab, barrel washroom, staff restrooms, staff breakroom, offices, conference room, and a covered tractor parking area. The existing wine tasting/production building area will also be modified to add a delicatessen and wine tasting bar. Outdoor patio covers will also be replaced along with the addition of an outdoor wine tasting bar and refrigeration unit.

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 Project 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.

3.7 CO "HOT SPOT" ANALYSIS

A CO hotspot is defined as a localized concentration of carbon monoxide exceeding the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. At the time the most recent CEQA Air Quality Handbook (1993) was published by SCAQMD, the air basin was designated as non-attainment, requiring projects to perform hotspot analyses to ensure they did not worsen the existing conditions. Over the last two decades, background CO concentrations have been

significantly reduced due to regulatory controls on tailpipe emissions, which have culminated in the air basin achieving attainment status for CO.

The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the state's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns.

In 2003, the SCAQMD as part of its AQMP development process, prepared modeling to determine the potential for CO Hotspots at the four busiest intersections in the air basin. As summarized in the 2003 AQMP, even at one of the busiest intersections at that time, only 0.7 ppm of CO is attributable to vehicular traffic and the remaining 7.7 ppm were due to ambient background conditions. As shown on Table 2-5 in this report, the background 1-hour and 8-hour concentrations are well below the applicable AAQS. The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the state's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns.

As such, Project-related traffic at any intersections within the Project area would not cause or contribute to a CO hotspot since the background concentrations are low and any contribution from Project traffic would be negligible.

3.8 AQMP

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards. Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the *Final 2022 AQMP (2022 AQMP)*. The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (22). Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 RTP/SCS, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements (23). The Project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below.

It should be noted that although SCAG has released an updated 2024-2050 RTP, the 2022 AQMP is based on the 2020-2045 RTP. Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (24). These indicators are discussed below:

3.8.1 Consistency Criterion No. 1

Potential to result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's localized and regional operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

3.8.2 Consistency Criterion No. 2

Potential to exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in County of Riverside General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

The Project site is located within an unincorporated portion of the County of Riverside. As per the General Plan, the unincorporated portions of the County are divided into 19 area plans. These area plans provide more detailed land use and policy direction regarding local issues such as land use, circulation, open space, and other topical areas (25).

The County of Riverside General Plan designates the Project site within the Temecula Valley Wine Country Policy Area and is part of the Winery District. As such, the Project site is designated as "Agriculture (AG)" land uses and "Wine Country Winery Zone (WC-W)" zoning uses. The AG designation allows for agricultural land including row crops, groves, nurseries, dairies, poultry farms, processing plants as well as the development of a single-family residence per 10 acres unless specified over a policy or an overlay (26). The WC-W designation intends for agricultural cultivation, vineyards, wineries, equestrian uses, preserve the wine-making atmosphere, estate living, equestrian life-style, and protect this area and its residents from incompatible uses (27).

It is our understanding that the 19.34-acre Project facility has approximately 14.5 acres devoted to vineyards. The existing structures on-site consist of the following: a 4,932 square foot (sf) tasting and production building (consisting of tasting, retail, lounge, and wine production, storage, office/lab, and glass washing station), and a 430 sf restroom facility. The Project proposes to expand the existing 4,932 sf tasting and production building by an additional 16,886 square feet. The expanded building area will consist of an increased wine production area, wine storage, wine lab, barrel washroom, staff restrooms, staff breakroom, offices, conference room, and a covered tractor parking area. The existing wine tasting/production building area will also be modified to add a delicatessen and wine tasting bar. Outdoor patio covers will also be replaced along with the addition of an outdoor wine tasting bar and refrigeration unit.

The Project's proposed uses are consistent with the current land use and zoning designation and would not require a General Plan and Zone Change Amendment. The Project on an individual basis does not have an impact and as such, the proposed Project would not conflict with the goals and objectives of the AQMP. Furthermore, the Project, as evaluated herein would not exceed the regional or localized air quality significance thresholds.

On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion

The Project would not have the potential to result in or cause NAAQS or CAAQS violations. The Project's proposed uses are consistent with the land use and zoning designation. The Project would not exceed the regional or localized construction and operational thresholds; the Project's development intensity is consistent with the development intensities allowed within the General Plan as previously stated. As such, the Project is considered to be consistent with the AQMP.

3.9 TOXIC AIR CONTAMINANTS

Construction

During short-term construction activity, the Project will also result in some diesel particulate matter (DPM) which is a listed carcinogen and toxic air contaminant (TAC) in the State of California. The 2015 Office of Environmental Health Hazard Assessment (OEHHA) revised risk assessment guidelines suggest that construction projects as short as 2-6 months may warrant evaluation. Notwithstanding, based on Urban Crossroad's professional opinion and experience in preparing health risk assessments for development projects, given the distance of the Project from surrounding sensitive receptors, the dominant wind patterns blowing to the northwest away from receptors, and the annual PM_{2.5} emissions from equipment during each year of construction, any DPM generated from construction activity would result in less than significant ground level concentrations of DPM and not result in a significant health risks and no further evaluation is required.

Furthermore, many air districts throughout the state, including the SCAQMD, are currently evaluating the applicability of age sensitivity factors and have not established CEQA guidance. More specifically in their response to comments received on SCAQMD New Source Review rule, the SCAQMD explicitly states that:

"The Proposed Amended Rules are separate from the CEQA significance thresholds. The SCAQMD staff is currently evaluating how to implement the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will evaluate a variety of options on how to evaluate health risks under the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will conduct public workshops to gather input before bringing recommendations to the Governing Board. In the interim, staff will continue to use the previous guidelines for CEQA determinations."

Operational

TACs analysis 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 project does not include such uses, and thus, due to the lack of significant stationary source emissions, no TAC analysis is needed for operations.

3.10 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the Project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project would not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

3.10.1 Friant Ranch Case

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

Most local agencies, including the County of Riverside, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the Project's air emissions without undue speculation. Instead, readers are directed to the Project's air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project's construction and long-term operation.

Notwithstanding, this AQIA does evaluate the proposed Project's localized impact to air quality for emissions of CO, NO_x, PM₁₀, and PM_{2.5} by comparing the proposed Project's on-site emissions to the SCAQMD's applicable LST thresholds. The LST analysis above determined that the Project would not result in emissions exceeding SCAQMD's LSTs. Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_x, PM₁₀, and PM_{2.5}.

As the Project's emissions would comply with federal, state, and local air quality standards, the proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

3.11 ODORS

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed Project would be less than significant and no mitigation is required (28).

3.12 CUMULATIVE IMPACTS

As previously shown in Table 2-4, the CAAQS designates the Project site as nonattainment for O₃, PM₁₀, and PM_{2.5} while the NAAQS designates the Project site as nonattainment for O₃ and PM_{2.5}. The SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (29). In this report the SCAQMD clearly states (Page D-3):

"...the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Conversely, project-level construction and operational emissions that exceed SCAQMD thresholds would be considered cumulatively considerable. SCAQMD's thresholds of significance for project-specific direct and cumulatively-considerable



impacts have clearly been successful, as application of these thresholds has led to significant air quality improvements throughout the SCAB.

Construction-Source Emission Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project construction-source emissions would be considered less than significant on a Project-specific and cumulative basis.

Operational-Source Emission Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project operation-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, the proposed Project operation-source emissions would be considered less than significant on a project-specific and cumulative basis.



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5 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Akash Winery Project. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

Haseeb Qureshi
Principal
URBAN CROSSROADS, INC.
1133 Camelback #8329
Newport Beach, CA 92658
hqureshi@urbanxroads.com

Education

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010
Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

Professional Affiliations

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

Professional Certifications

Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006



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APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

Appendix C - Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

Table of Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	9.0 µg/m ³	15.0 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		53 ppb (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (7/16/24)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On February 7, 2024, the national annual PM_{2.5} primary standard was lowered from 12.0 µg/m³ to 9.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15.0 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³) as a quarterly average remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment transitional, or unclassified for each pollutant, as shown below:

Designation	Abbreviation
Attainment	A
Nonattainment	N
Nonattainment Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

Table 1 California Ambient Air Quality Standards Area Designations for Ozone¹

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	
Alpine County	U
Inyo County	N
Mono County	N
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	NA-T
MOJAVE DESERT AIR BASIN	N
MOUNTAIN COUNTIES AIR BASIN	
Amador County	NA-T
Calaveras County	NA-T
El Dorado County (portion)	N
Mariposa County	N
Nevada County	N
Placer County (portion)	NA-T
Plumas County	U
Sierra County	U
Tuolumne County	NA-T
NORTH CENTRAL COAST AIR BASIN	A
NORTH COAST AIR BASIN	A
NORTHEAST PLATEAU AIR BASIN	A
SACRAMENTO VALLEY AIR BASIN	
Butte County	NA-T
Colusa and Glenn Counties	A
Shasta County	NA-T
Sutter/Yuba Counties	
Sutter Buttes	NA-T
Remainder of Sutter County	NA-T
Yuba County	NA-T
Yolo/Solano Counties	NA-T
Remainder of Air Basin	N
SALTON SEA AIR BASIN	N
SAN DIEGO AIR BASIN	N
SAN FRANCISCO BAY AREA AIR BASIN	NA-T
SAN JOAQUIN VALLEY AIR BASIN	N
SOUTH CENTRAL COAST AIR BASIN	
San Luis Obispo County	N
Santa Barbara County	NA-T
Ventura County	N
SOUTH COAST AIR BASIN	N

¹ AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

Figure 1



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Table 2
California Ambient Air Quality Standards Area Designations for
Suspended Particulate Matter (PM₁₀)

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	N
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	N
MOJAVE DESERT AIR BASIN	N
MOUNTAIN COUNTIES AIR BASIN	
Amador County	U
Calaveras County	N
El Dorado County (portion)	N
Mariposa County	
- Yosemite National Park	N
- Remainder of County	U
Nevada County	U
Placer County (portion)	N
Plumas County	U
Sierra County	U
Tuolumne County	U
NORTH CENTRAL COAST AIR BASIN	N
NORTH COAST AIR BASIN	
Del Norte, Mendocino, Sonoma (portion) and Trinity Counties	A
Remainder of Air Basin	N
NORTHEAST PLATEAU AIR BASIN	
Siskiyou County	A
Remainder of Air Basin	U
SACRAMENTO VALLEY AIR BASIN	
Shasta County	A
Remainder of Air Basin	N
SALTON SEA AIR BASIN	N
SAN DIEGO AIR BASIN	N
SAN FRANCISCO BAY AREA AIR BASIN	N
SAN JOAQUIN VALLEY AIR BASIN	N
SOUTH CENTRAL COAST AIR BASIN	N
SOUTH COAST AIR BASIN	N

Figure 2



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Table 3
California Ambient Air Quality Standards Area Designations for
Fine Particulate Matter (PM_{2.5})

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	A
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	A
MOJAVE DESERT AIR BASIN	A
MOUNTAIN COUNTIES AIR BASIN	
Plumas County	
- Portola Valley ²	N
- Remainder Plumas County	U
Remainder of Air Basin	U
NORTH CENTRAL COAST AIR BASIN	A
NORTH COAST AIR BASIN	A
NORTHEAST PLATEAU AIR BASIN	A
SACRAMENTO VALLEY AIR BASIN	
Butte County	A
Colusa County	A
Glenn County	A
Placer County (portion)	A
Sacramento County	A
Shasta County	A
Sutter and Yuba Counties	N
Remainder of Air Basin	U
SALTON SEA AIR BASIN	
Imperial County	
- City of Calexico ³	N
Remainder of Air Basin	A
SAN DIEGO AIR BASIN	N
SAN FRANCISCO BAY AREA AIR BASIN	A
SAN JOAQUIN VALLEY AIR BASIN	N
SOUTH CENTRAL COAST AIR BASIN	A
SOUTH COAST AIR BASIN	N

² California Code of Regulations, title 17, section 60200(c)

³ California Code of Regulations, title 17, section 60200(a)

Figure 3



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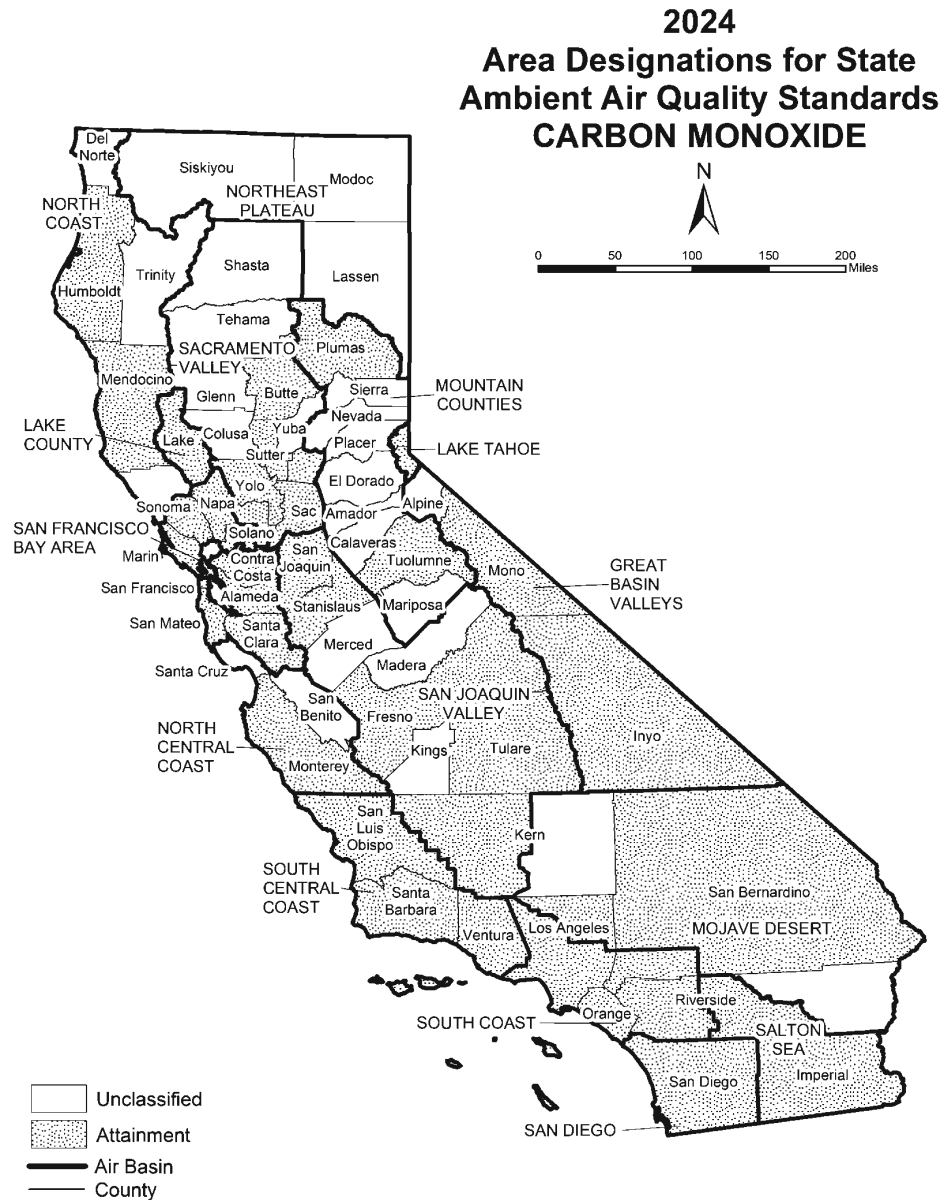
Table 4
California Ambient Air Quality Standards Area Designations for
Carbon Monoxide*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	
Alpine County	U
Inyo County	A
Mono County	A
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	A
MOJAVE DESERT AIR BASIN	
Kern County (portion)	U
Los Angeles County (portion)	A
Riverside County (portion)	U
San Bernardino County (portion)	A
MOUNTAIN COUNTIES AIR BASIN	
Amador County	U
Calaveras County	U
El Dorado County (portion)	U
Mariposa County	U
Nevada County	U
Placer County (portion)	U
Plumas County	A
Sierra County	U
Tuolumne County	A
NORTH CENTRAL COAST AIR BASIN	
Monterey County	A
San Benito County	U
Santa Cruz County	U
NORTH COAST AIR BASIN	
Del Norte County	U
Humboldt County	A
Mendocino County	A
Sonoma County (portion)	U
Trinity County	U

Area	Designations
NORTHEAST PLATEAU AIR BASIN	U
SACRAMENTO VALLEY AIR BASIN	
Butte County	A
Colusa County	U
Glenn County	U
Placer County (portion)	A
Sacramento County	A
Shasta County	U
Solano County (portion)	A
Sutter County	A
Tehama County	U
Yolo County	A
Yuba County	U
SALTON SEA AIR BASIN	A
SAN DIEGO AIR BASIN	A
SAN FRANCISCO BAY AREA AIR BASIN	A
SAN JOAQUIN VALLEY AIR BASIN	
Fresno County	A
Kern County (portion)	A
Kings County	U
Madera County	U
Merced County	U
San Joaquin County	A
Stanislaus County	A
Tulare County	A
SOUTH CENTRAL COAST AIR BASIN	A
SOUTH COAST AIR BASIN	A

* The area designated for carbon monoxide is a county or portion of a county

Figure 4



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Table 5
California Ambient Air Quality Standards Area Designations for
Nitrogen Dioxide

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	A
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	A
MOJAVE DESERT AIR BASIN	A
MOUNTAIN COUNTIES AIR BASIN	A
NORTH CENTRAL COAST AIR BASIN	A
NORTH COAST AIR BASIN	A
NORTHEAST PLATEAU AIR BASIN	A
SACRAMENTO VALLEY AIR BASIN	A
SALTON SEA AIR BASIN	A
SAN DIEGO AIR BASIN	A
SAN FRANCISCO BAY AREA AIR BASIN	A
SAN JOAQUIN VALLEY AIR BASIN	A
SOUTH CENTRAL COAST AIR BASIN	A
SOUTH COAST AIR BASIN	
CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties	A
Remainder of Air Basin	A

Figure 5



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Table 6
California Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	A
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	A
MOJAVE DESERT AIR BASIN	A
MOUNTAIN COUNTIES AIR BASIN	A
NORTH CENTRAL COAST AIR BASIN	A
NORTH COAST AIR BASIN	A
NORTHEAST PLATEAU AIR BASIN	A
SACRAMENTO VALLEY AIR BASIN	A
SALTON SEA AIR BASIN	A
SAN DIEGO AIR BASIN	A
SAN FRANCISCO BAY AREA AIR BASIN	A
SAN JOAQUIN VALLEY AIR BASIN	A
SOUTH CENTRAL COAST AIR BASIN	A
SOUTH COAST AIR BASIN	A

* The area designated for sulfur dioxide is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 6



Last Updated: November 2024
Air Quality Planning and Science Division, CARB

Table 7
California Ambient Air Quality Standards Area Designations for
Sulfates

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	A
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	A
MOJAVE DESERT AIR BASIN	A
MOUNTAIN COUNTIES AIR BASIN	A
NORTH CENTRAL COAST AIR BASIN	A
NORTH COAST AIR BASIN	A
NORTHEAST PLATEAU AIR BASIN	A
SACRAMENTO VALLEY AIR BASIN	A
SALTON SEA AIR BASIN	A
SAN DIEGO AIR BASIN	A
SAN FRANCISCO BAY AREA AIR BASIN	A
SAN JOAQUIN VALLEY AIR BASIN	A
SOUTH CENTRAL COAST AIR BASIN	A
SOUTH COAST AIR BASIN	A

Figure 7



Last Updated: November 2024
Air Quality Planning and Science Division, CARB

Table 8
California Ambient Air Quality Standards Area Designations for
Lead (particulate)*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	A
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	A
MOJAVE DESERT AIR BASIN	A
MOUNTAIN COUNTIES AIR BASIN	A
NORTH CENTRAL COAST AIR BASIN	A
NORTH COAST AIR BASIN	A
NORTHEAST PLATEAU AIR BASIN	A
SACRAMENTO VALLEY AIR BASIN	A
SALTON SEA AIR BASIN	A
SAN DIEGO AIR BASIN	A
SAN FRANCISCO BAY AREA AIR BASIN	A
SAN JOAQUIN VALLEY AIR BASIN	A
SOUTH CENTRAL COAST AIR BASIN	A
SOUTH COAST AIR BASIN	A

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 8



Last Updated: November 2024
Air Quality Planning and Science Division, CARB

Table 9
California Ambient Air Quality Standards Area Designations for
Hydrogen Sulfide*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	
Alpine County	U
Inyo County	A
Mono County	A
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	U
MOJAVE DESERT AIR BASIN	
Kern County (portion)	U
Los Angeles County (portion)	U
Riverside County (portion)	U
San Bernardino County (portion)	
- Searles Valley Planning Area ⁴	N
- Remainder of County	U
MOUNTAIN COUNTIES AIR BASIN	
Amador County	
- City of Sutter Creek	N
- Remainder of County	U
Calaveras County	U
El Dorado County (portion)	U
Mariposa County	U
Nevada County	U
Placer County (portion)	U
Plumas County	U
Sierra County	U
Tuolumne County	U

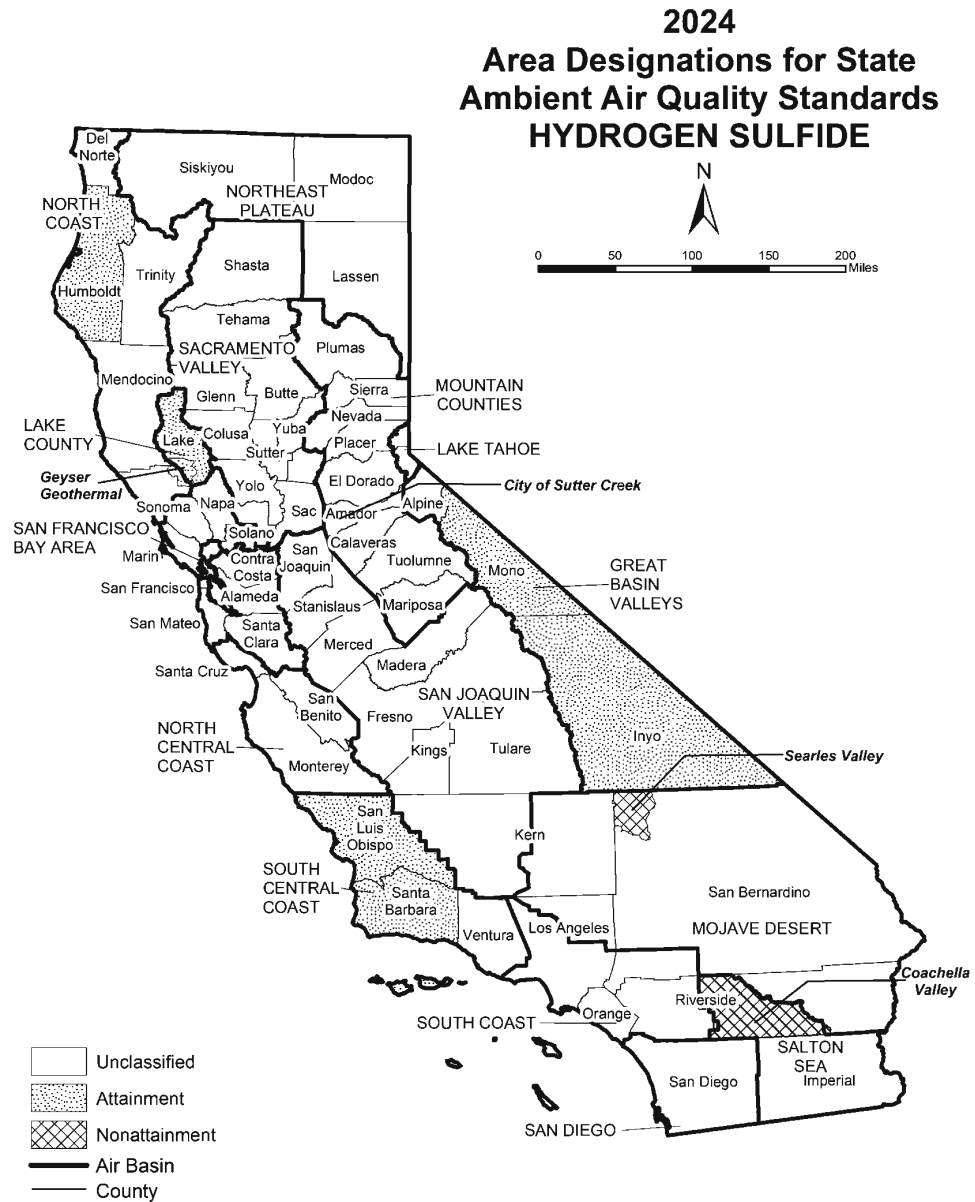
Area	Designations
NORTH CENTRAL COAST AIR BASIN	U
NORTH COAST AIR BASIN	
Del Norte County	U
Humboldt County	A
Mendocino County	U
Sonoma County (portion)	
- Geyser Geothermal Area ⁵	A
- Remainder of County	U
Trinity County	U
NORTHEAST PLATEAU AIR BASIN	U
SACRAMENTO VALLEY AIR BASIN	U
SALTON SEA AIR BASIN	
Riverside County (portion)	N
Imperial County	U
SAN DIEGO AIR BASIN	U
SAN FRANCISCO BAY AREA AIR BASIN	U
SAN JOAQUIN VALLEY AIR BASIN	U
SOUTH CENTRAL COAST AIR BASIN	
San Luis Obispo County	A
Santa Barbara County	A
Ventura County	U
SOUTH COAST AIR BASIN	U

* The area designated for hydrogen sulfide is a county or portion of a county

⁴ 52 Federal Register 29384 (August 7, 1987)

⁵ California Code of Regulations, title 17, section 60200(d)

Figure 9

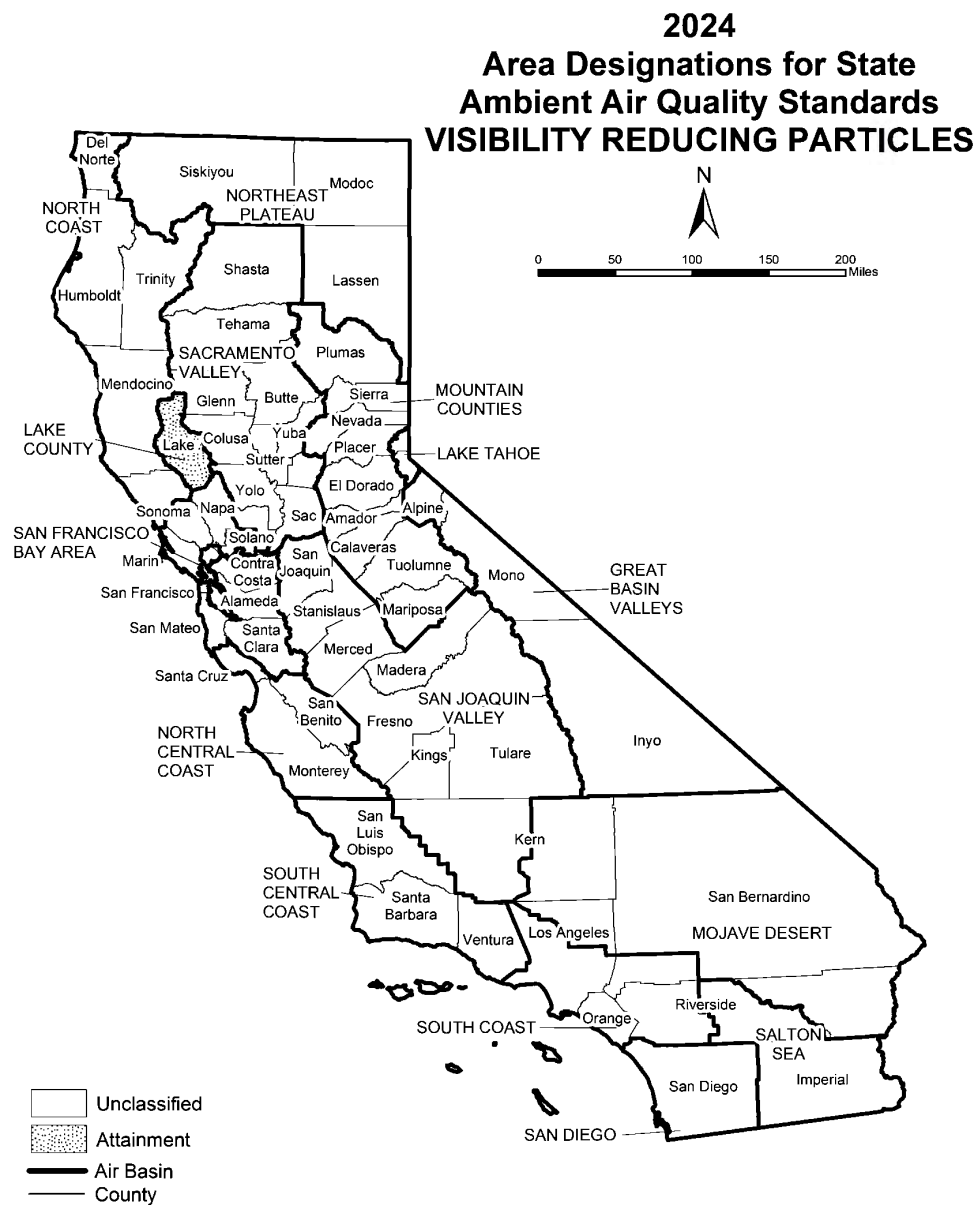


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Air Quality Planning and Science Division, CARB

Table 10
California Ambient Air Quality Standards Area Designations for
Visibility Reducing Particles

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	U
LAKE COUNTY AIR BASIN	A
LAKE TAHOE AIR BASIN	U
MOJAVE DESERT AIR BASIN	U
MOUNTAIN COUNTIES AIR BASIN	U
NORTH CENTRAL COAST AIR BASIN	U
NORTH COAST AIR BASIN	U
NORTHEAST PLATEAU AIR BASIN	U
SACRAMENTO VALLEY AIR BASIN	U
SALTON SEA AIR BASIN	U
SAN DIEGO AIR BASIN	U
SAN FRANCISCO BAY AREA AIR BASIN	U
SAN JOAQUIN VALLEY AIR BASIN	U
SOUTH CENTRAL COAST AIR BASIN	U
SOUTH COAST AIR BASIN	U

Figure 10



Last Updated: November 2024
Air Quality Planning and Science Division, CARB

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. These maps reflect all current national standards. For example, the map for Fine Suspended Particulate Matter (PM_{2.5}) reflects both the annual and the 24-hour standard. Additional information about the federal area designations is available on the U.S. EPA website: [Nonattainment Areas for Criteria Pollutants \(Green Book\)](#)

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website: [Criteria Air Pollutants](#)

On February 7, 2024, the U.S. EPA established a new national annual primary PM_{2.5} standard of 9.0 µg/m³. Area designations for this revised standard will be finalized in February 2026. Until that time, the current designation map will reflect the most previous 2012 annual average standard of 12.0 µg/m³ as well as the 24-hour standard of 35 µg/m³, last revised in 2006.

Designation Categories

Suspended Particulate Matter (PM₁₀). The U.S. EPA uses three categories to designate areas with respect to PM₁₀:

- Attainment (A)
- Nonattainment (N)
- Unclassifiable (U)

Ozone, Fine Suspended Particulate Matter (PM_{2.5}), Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), and Lead. The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment (N)
- Unclassifiable/Attainment (U/A)

Sulfur Dioxide (SO₂). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment (N),
- Unclassifiable (U), and
- Unclassifiable/Attainment (U/A).

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency,

the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at: [Title 40 SECTION 81.305](#).

Table 11
National Ambient Air Quality Standards Area Designations for
8-Hour Ozone*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	U/A
LAKE COUNTY AIR BASIN	U/A
LAKE TAHOE AIR BASIN	U/A
MOUNTAIN COUNTIES AIR BASIN	
Amador County	N
Calaveras County	N
El Dorado County (portion) ⁶	N
Mariposa County	N
Nevada County	
- Western Nevada County	N
- Remainder of County	U/A
Placer County (portion) ⁶	N
Plumas County	U/A
Sierra County	U/A
Tuolumne County	N
NORTH CENTRAL COAST AIR BASIN	U/A
NORTH COAST AIR BASIN	U/A
NORTHEAST PLATEAU AIR BASIN	U/A
SACRAMENTO VALLEY AIR BASIN	
Butte County	N
Colusa County	U/A
Glenn County	U/A
Sacramento Metro Area ⁶	N
Shasta County	U/A
Sutter County	
- Sutter Buttes	N
- Southern portion of Sutter County ⁶	N
- Remainder of Sutter County	U/A
Tehama County	
- Tuscan Buttes	N
- Remainder of Tehama County	U/A

Area	Designations
SACRAMENTO VALLEY AIR BASIN (cont.)	
Yolo County ⁶	N
Yuba County	U/A
SAN DIEGO COUNTY	N
SAN FRANCISCO BAY AREA AIR BASIN	N
SAN JOAQUIN VALLEY AIR BASIN	N
SOUTH CENTRAL COAST AIR BASIN ⁷	
San Luis Obispo County	
- Eastern San Luis Obispo County	N
- Remainder of County	U/A
Santa Barbara County	U/A
Ventura County	
- Area Excluding Anacapa and San Nicolas Islands	N
- Channel Islands ⁷	U/A
SOUTH COAST AIR BASIN ⁷	N
SOUTHEAST DESERT AIR BASIN	
Kern County (portion)	N
- Indian Wells Valley	U/A
Imperial County	N
Los Angeles County (portion)	N
Riverside County (portion)	
- Coachella Valley	N
- Non-AQMA portion	U/A
San Bernardino County	
- Western portion (AQMA)	N
- Eastern portion (non-AQMA)	U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and Table reflect the 2015 8-hour ozone standard of 0.070 ppm.

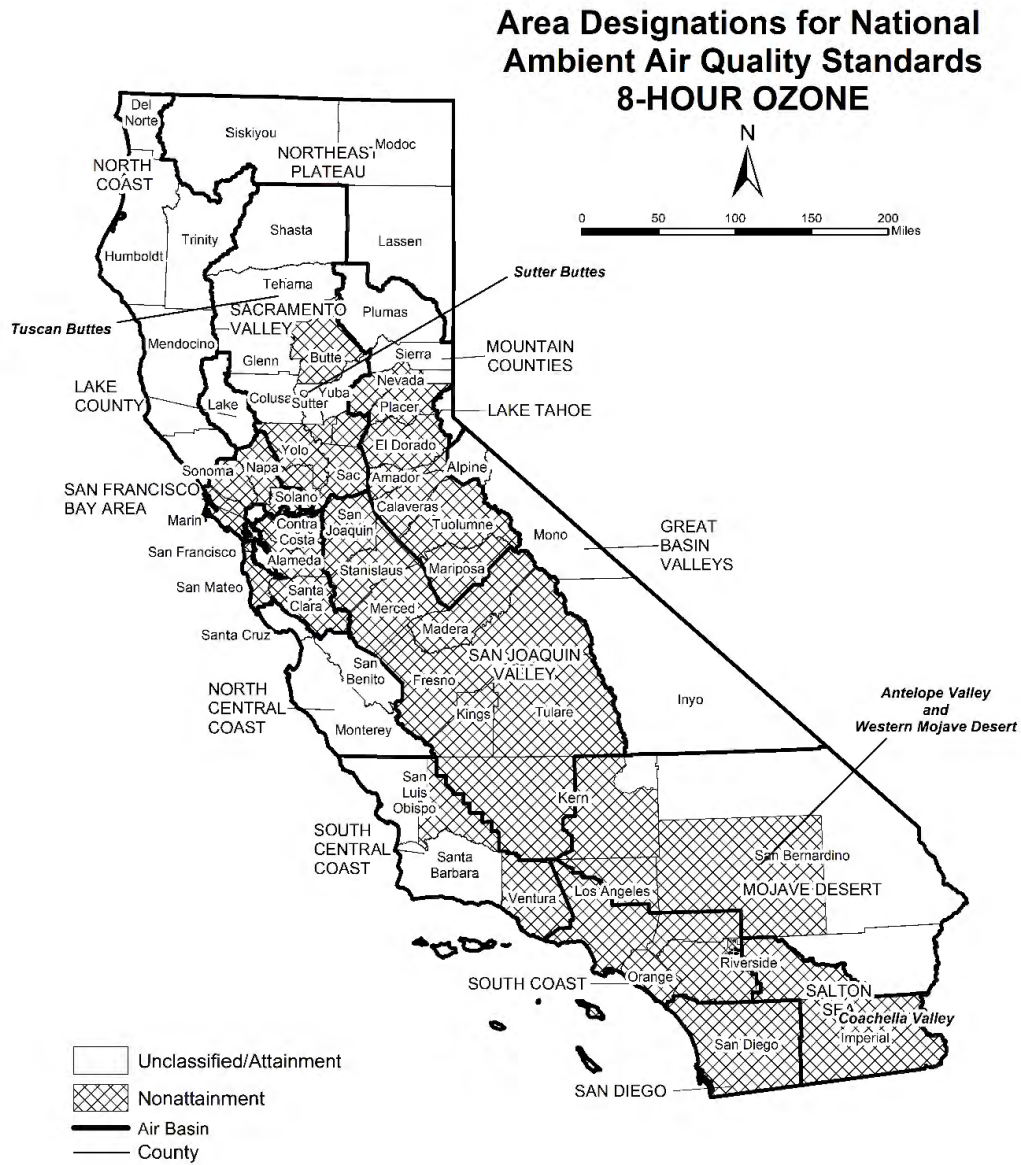
⁶ For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

⁷ South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands. Ventura County includes Anacapa and San Nicolas Islands.

South Coast Air Basin:
Los Angeles County includes San Clemente and Santa Catalina Islands.

Figure 11



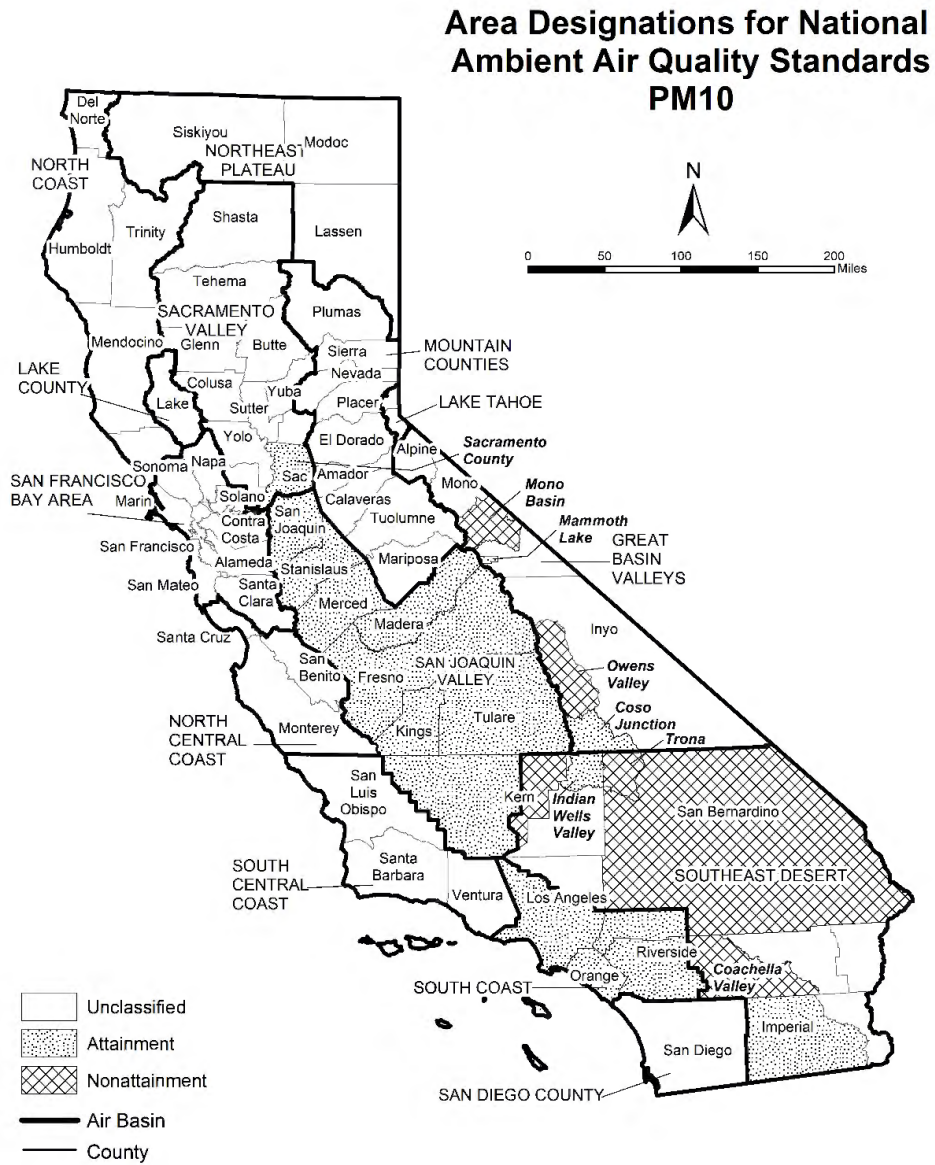
Last Updated: November 2023
 Map reflects the 2015 8-hour ozone standard of 0.070 ppm
 Air Quality Planning and Science Division, CARB

Table 12 National Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM₁₀)*

Area	Designations	Area	Designations
GREAT BASIN VALLEYS AIR BASIN		SAN FRANCISCO BAY AREA AIR BASIN	U
Alpine County	U	SAN JOAQUIN VALLEY AIR BASIN	A
Inyo County		SOUTH CENTRAL COAST AIR BASIN	U
- Owens Valley Planning Area	N	SOUTH COAST AIR BASIN	A
- Coso Junction	A	SOUTHEAST DESERT AIR BASIN	
- Remainder of County	U	Eastern Kern County	
Mono County		- Indian Wells Valley	A
- Mammoth Lake Planning Area	A	- Portion within San Joaquin Valley Planning Area	N
- Mono Lake Basin	N	- Remainder of County	U
- Remainder of County	U	Imperial County	
LAKE COUNTY AIR BASIN	U	- Imperial Valley Planning Area	A
LAKE TAHOE AIR BASIN	U	- Remainder of County	U
MOUNTAIN COUNTIES AIR BASIN	U	Los Angeles County (portion)	U
NORTH CENTRAL COAST AIR BASIN	U	Riverside County (portion)	
NORTH COAST AIR BASIN	U	- Coachella Valley	N
NORTHEAST PLATEAU AIR BASIN	U	- Non-AQMA portion	U
SACRAMENTO VALLEY AIR BASIN		San Bernardino County	
Sacramento County	A	- Trona	N
Remainder of Air Basin	U	- Remainder of County	N
SAN DIEGO COUNTY	U		

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 12



Last Updated: November 2023
Air Quality Planning and Science Division

Table 13
National Ambient Air Quality Standards Area Designations for
Fine Particulate Matter (PM_{2.5})

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	U/A
LAKE COUNTY AIR BASIN	U/A
LAKE TAHOE AIR BASIN	U/A
MOUNTAIN COUNTIES AIR BASIN	
Plumas County	
- Portola Valley Portion of Plumas County	N
- Remainder of Plumas County	U/A
Remainder of Air Basin	U/A
NORTH CENTRAL COAST AIR BASIN	U/A
NORTH COAST AIR BASIN	U/A
NORTHEAST PLATEAU AIR BASIN	U/A
SACRAMENTO VALLEY AIR BASIN	
Sacramento Metro Area ⁸	N
Remainder of Air Basin	U/A
SAN DIEGO COUNTY	U/A
SAN FRANCISCO BAY AREA AIR BASIN ⁹	N
SAN JOAQUIN VALLEY AIR BASIN	N
SOUTH CENTRAL COAST AIR BASIN	U/A
SOUTH COAST AIR BASIN ¹⁰	N
SOUTHEAST DESERT AIR BASIN	
Imperial County (portion) ¹¹	N
Remainder of Air Basin	U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map reflects the 2006 24-hour PM_{2.5} standard as well as the 1997 and 2012 PM_{2.5} annual standards.

⁸ For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national PM_{2.5} standards. A Determination of Attainment for the 2006 24-hour PM_{2.5} standard was made by U.S. EPA in June 2017.

⁹ Air quality in this area meets the national PM_{2.5} standards. A Determination of Attainment for the 2006 24-hour PM_{2.5} standard was made by U.S. EPA in June 2017.

¹⁰ Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

¹¹ That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national PM_{2.5} standards. A Determination of Attainment for the 2006 24-hour PM_{2.5} standard was made by U.S. EPA in June 2017.

Figure 13



Last Updated: November 2023
Air Quality Planning and Science Division

Table 14
National Ambient Air Quality Standards Area Designations for
Carbon Monoxide*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	U/A
LAKE COUNTY AIR BASIN	U/A
LAKE TAHOE AIR BASIN	U/A
MOUNTAIN COUNTIES AIR BASIN	U/A
NORTH CENTRAL COAST AIR BASIN	U/A
NORTH COAST AIR BASIN	U/A
NORTHEAST PLATEAU AIR BASIN	U/A
SACRAMENTO VALLEY AIR BASIN	U/A
SAN DIEGO COUNTY	U/A
SAN FRANCISCO BAY AREA AIR BASIN	U/A
SAN JOAQUIN VALLEY AIR BASIN	U/A
SOUTH CENTRAL COAST AIR BASIN	U/A
SOUTH COAST AIR BASIN	U/A
SOUTHEAST DESERT AIR BASIN	U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 14



Last Updated: November 2023
Air Quality Planning and Science Division

Table 15
National Ambient Air Quality Standards Area Designations for
Nitrogen Dioxide*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	U/A
LAKE COUNTY AIR BASIN	U/A
LAKE TAHOE AIR BASIN	U/A
MOUNTAIN COUNTIES AIR BASIN	U/A
NORTH CENTRAL COAST AIR BASIN	U/A
NORTH COAST AIR BASIN	U/A
NORTHEAST PLATEAU AIR BASIN	U/A
SACRAMENTO VALLEY AIR BASIN	U/A
SAN DIEGO COUNTY	U/A
SAN FRANCISCO BAY AREA AIR BASIN	U/A
SAN JOAQUIN VALLEY AIR BASIN	U/A
SOUTH CENTRAL COAST AIR BASIN	U/A
SOUTH COAST AIR BASIN	U/A
SOUTHEAST DESERT AIR BASIN	U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 15



Last Updated: November 2023
Air Quality Planning and Science Division

Table 16
National Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	U/A
LAKE COUNTY AIR BASIN	U/A
LAKE TAHOE AIR BASIN	U/A
MOUNTAIN COUNTIES AIR BASIN	U/A
NORTH CENTRAL COAST AIR BASIN	U/A
NORTH COAST AIR BASIN	U/A
NORTHEAST PLATEAU AIR BASIN	U/A
SACRAMENTO VALLEY AIR BASIN	U/A
SAN DIEGO COUNTY	U/A
SAN FRANCISCO BAY AREA AIR BASIN	U/A
SAN JOAQUIN VALLEY AIR BASIN	U/A
SOUTH CENTRAL COAST AIR BASIN ¹²	U/A
SOUTH COAST AIR BASIN	U/A
SOUTHEAST DESERT AIR BASIN	U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and table reflect the 2010 1-hour SO₂ standard of 75 ppb.

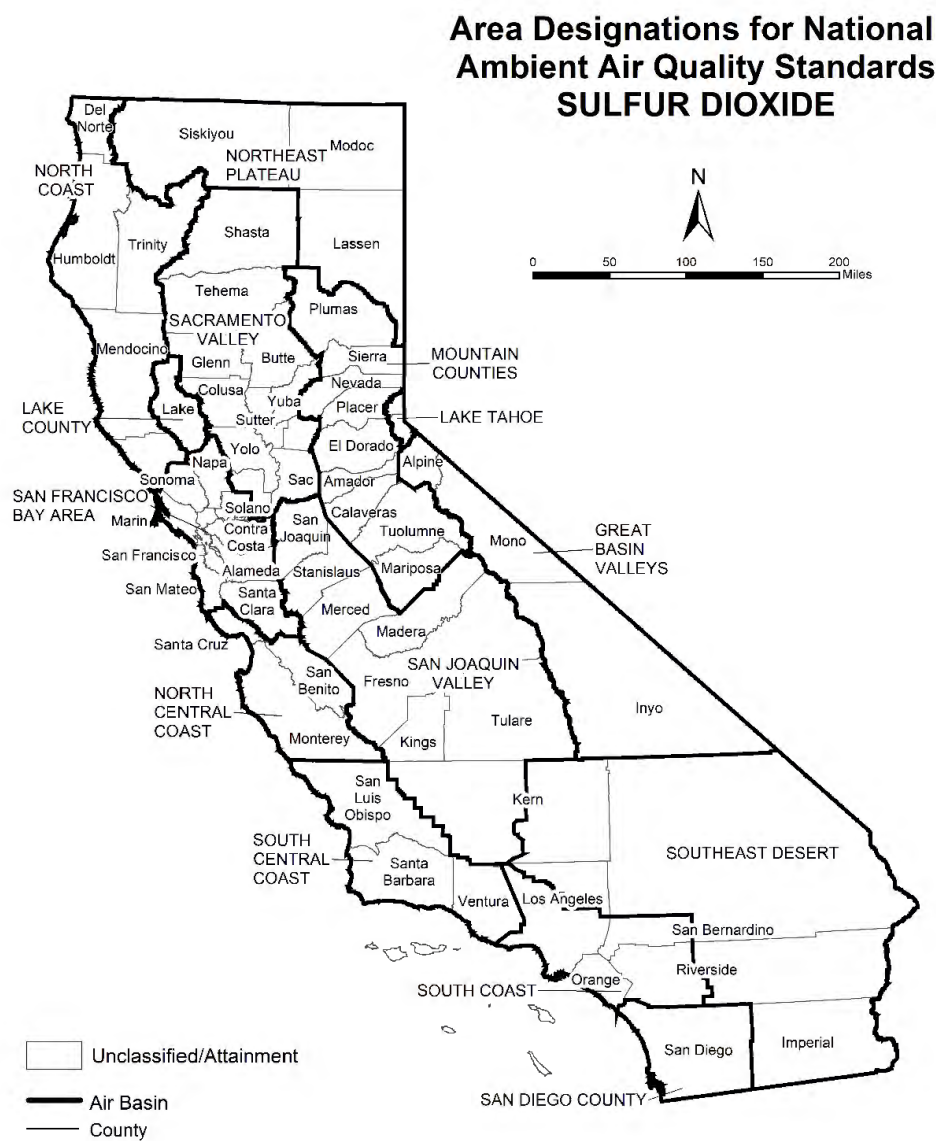
¹² South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.

Ventura County includes Anacapa and San Nicolas Islands.

Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

Figure 16



Last Updated: November 2023
Air Quality Planning and Science Division

Table 17
National Ambient Air Quality Standards Area Designations for
Lead (particulate)

Area	Designations
GREAT BASIN VALLEYS AIR BASIN	U/A
LAKE COUNTY AIR BASIN	U/A
LAKE TAHOE AIR BASIN	U/A
MOUNTAIN COUNTIES AIR BASIN	U/A
NORTH CENTRAL COAST AIR BASIN	U/A
NORTH COAST AIR BASIN	U/A
NORTHEAST PLATEAU AIR BASIN	U/A
SACRAMENTO VALLEY AIR BASIN	U/A
SAN DIEGO COUNTY	U/A
SAN FRANCISCO BAY AREA AIR BASIN	U/A
SAN JOAQUIN VALLEY AIR BASIN	U/A
SOUTH CENTRAL COAST AIR BASIN	U/A
SOUTH COAST AIR BASIN	
Los Angeles County (portion) ¹³	N
Remainder of Air Basin	U/A
SOUTHEAST DESERT AIR BASIN	U/A

¹³ Portion of County in Air Basin, not including Channel Islands

Figure 17



Last Updated: November 2023
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APPENDIX 3.1:

CALEEMOD PROJECT EMISSIONS MODEL OUTPUTS

17103 - Akash Winery Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	17103 - Akash Winery
Construction Start Date	12/14/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.6000
Location	39730 Calle Contento, Temecula, CA 92591, USA
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5530
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

Data Field	Value
App Version	2022.1.1.45

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Quality Restaurant	15.9250	1000sqft	0.36559	15,925.0	0.00000	—	—	—
General Light Industry	0.96100	1000sqft	0.02206	961.000	0.00000	—	—	Wine Production
Parking Lot	221.000	Space	4.45000	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	Su	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.5835	13.4850	12.2028	13.2275	0.04919	0.36206	1.26800	1.63005	0.33732	0.33938	0.67670	—	5.805.57	5.805.57	0.14722	0.53197	9.69355	5.977.47

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.90476	1.56199	16.1060	16.1226	0.04979	0.64055	3.38520	4.02575	0.59354	1.25958	1.85312	—	6,220.82	6,220.82	0.16272	0.56185	0.27508	6,392.59
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.78961	0.71237	3.31985	3.46722	0.01374	0.09679	0.37323	0.47003	0.09031	0.09996	0.19027	—	1,638.18	1,638.18	0.04055	0.15756	1.24448	1,687.39
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14410	0.13001	0.60587	0.63277	0.00251	0.01766	0.06811	0.08578	0.01648	0.01824	0.03473	—	271.220	271.220	0.00671	0.02609	0.20604	279.367

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	13.5835	13.4850	12.2028	13.2275	0.04919	0.36206	1.26800	1.63005	0.33732	0.33938	0.67670	—	5,805.57	5,805.57	0.14722	0.53197	9.69355	5,977.47
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.90476	1.56199	16.1060	16.1226	0.04979	0.64055	3.38520	4.02575	0.59354	1.25958	1.85312	—	6,220.82	6,220.82	0.16272	0.56185	0.27508	6,392.59

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Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
2027	1.49905	1.21077	12.3249	12.9075	0.04919	0.36206	1.26800	1.63005	0.33732	0.33938	0.67670	—	5,784.17	5,784.17	0.14733	0.53197	0.25183	5,946.63
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.05927	0.04807	0.49266	0.49942	0.00181	0.01596	0.05776	0.07373	0.01484	0.01741	0.03225	—	217,442	217,442	0.00552	0.02058	0.16795	223.880
2027	0.78961	0.71237	3.31985	3.46722	0.01374	0.09679	0.37323	0.47003	0.09031	0.09996	0.19027	—	1,638.18	1,638.18	0.04055	0.15756	1.24448	1,687.39
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01082	0.00877	0.08991	0.09114	0.00033	0.00291	0.01054	0.01346	0.00271	0.00318	0.00589	—	36,0001	36,0001	0.00091	0.00341	0.02781	37.0659
2027	0.14410	0.13001	0.60587	0.63277	0.00251	0.01766	0.06811	0.08578	0.01648	0.01824	0.03473	—	271,220	271,220	0.00671	0.02609	0.20604	279.367

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	13.4041	13.3723	9.47687	11.4072	0.02273	0.30915	0.00000	0.30915	0.28441	0.00000	0.28441	—	2,159.13	2,159.13	0.08758	0.01752	0.00000	2,166.54
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.72575	1.45011	13.1150	14.5107	0.02333	0.58764	2.11720	2.70484	0.54063	0.92020	1.46083	—	2,527.64	2,527.64	0.10253	0.02051	0.00000	2,536.31
2027	1.32433	1.10319	9.47687	11.4072	0.02273	0.30915	0.00000	0.30915	0.28441	0.00000	0.28441	—	2,159.13	2,159.13	0.08758	0.01752	0.00000	2,166.54
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.05271	0.04397	0.38053	0.43834	0.00084	0.01402	0.01160	0.02562	0.01290	0.00504	0.01794	—	81,4568	81,4568	0.00330	0.00066	0.00000	81,7364
2027	0.73754	0.68027	2.46366	3.00673	0.00587	0.08106	0.00000	0.08106	0.07457	0.00000	0.07457	—	559,011	559,011	0.02268	0.00454	0.00000	560,929

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.00962	0.00802	0.06945	0.08000	0.00015	0.00256	0.00212	0.00468	0.00235	0.00092	0.00327	—	13.4861	13.4861	0.00055	0.00011	0.00000	13.5324
2027	0.13460	0.12415	0.44962	0.54873	0.00107	0.01479	0.00000	0.01479	0.01361	0.00000	0.01361	—	92.5506	92.5506	0.00375	0.00075	0.00000	92.8683

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.17946	0.11266	2.72591	1.82025	0.02646	0.05291	1.26800	1.32091	0.05291	0.33938	0.39229	—	3,646.44	3,646.44	0.05964	0.51445	9.69355	3,810.93
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.17902	0.11188	2.99101	1.61191	0.02646	0.05291	1.26800	1.32091	0.05291	0.33938	0.39229	—	3,693.18	3,693.18	0.06019	0.54135	0.27508	3,856.28
2027	0.17472	0.10759	2.84804	1.50025	0.02646	0.05291	1.26800	1.32091	0.05291	0.33938	0.39229	—	3,625.04	3,625.04	0.05975	0.51445	0.25183	3,780.09
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.00657	0.00410	0.11213	0.06108	0.00097	0.00195	0.04616	0.04811	0.00195	0.01236	0.01431	—	135.986	135.986	0.00221	0.01992	0.16795	142.144
2027	0.05207	0.03210	0.85618	0.46049	0.00787	0.01574	0.37323	0.38897	0.01574	0.09966	0.11570	—	1,079.17	1,079.17	0.01787	0.15303	1.24448	1,126.46
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.00120	0.00075	0.02046	0.01115	0.00018	0.00036	0.00842	0.00878	0.00036	0.00226	0.00261	—	22.5140	22.5140	0.00037	0.00330	0.02781	23.5335
2027	0.00950	0.00586	0.15625	0.08404	0.00144	0.00287	0.06811	0.07099	0.00287	0.01824	0.02112	—	178.669	178.669	0.00296	0.02534	0.20604	186.499

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.17014	0.98570	1.92731	15.7697	0.04675	0.06897	3.96121	4.03018	0.06688	1.00536	1.07224	22.6955	5,817.54	5,840.24	2.53681	0.20822	23.4444	5,989.16
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.03055	0.85929	2.02905	11.8296	0.04397	0.06767	3.96121	4.02887	0.06589	1.00536	1.07126	22.6955	5,536.93	5,559.62	2.53458	0.21348	9.39856	5,696.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.12282	0.94420	2.07116	12.8346	0.04439	0.06856	3.91400	3.98256	0.06657	0.99356	1.06013	22.6955	5,579.14	5,601.83	2.53498	0.21529	15.2510	5,744.62
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20491	0.17232	0.37799	2.34232	0.00810	0.01251	0.71431	0.72682	0.01215	0.18133	0.19347	3.75751	923.690	927.447	0.41969	0.03564	2.52498	951.087

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.57174	0.42483	1.42216	14.6162	0.04372	0.02974	3.96121	3.99095	0.02797	1.00536	1.03333	—	4,471.08	4,471.08	0.10748	0.16379	14.4198	4,536.99
Area	0.54351	0.53343	0.00618	0.73439	0.00004	0.00130	—	0.00130	0.00099	—	0.00099	—	3.02000	3.02000	0.00013	0.00003	—	3.03089

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Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Energy	0.05489	0.02744	0.49897	0.41913	0.00299	0.03792	—	0.03792	0.03792	—	0.03792	—	1,295.53	1,295.53	0.11943	0.00921	—	1,301.26
Water	—	—	—	—	—	—	—	—	—	—	—	14.2217	47.9190	62.1407	1.46284	0.03520	—	109.202
Waste	—	—	—	—	—	—	—	—	—	—	—	8.47384	0.00000	8.47384	0.84693	0.00000	—	29.6471
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.02466	9.02466
Total	1.17014	0.98570	1.92731	15.7697	0.04675	0.06897	3.96121	4.03018	0.06888	1.00536	1.07224	22.6955	5,817.54	5,840.24	2.53681	0.20822	23.4444	5,989.16
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.56284	0.41902	1.53008	11.4104	0.04097	0.02974	3.96121	3.99095	0.02797	1.00536	1.03333	—	4,193.48	4,193.48	0.10538	0.16906	0.37389	4,246.87
Area	0.41283	0.41283	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05489	0.02744	0.49897	0.41913	0.00299	0.03792	—	0.03792	0.03792	—	0.03792	—	1,295.53	1,295.53	0.11943	0.00921	—	1,301.26
Water	—	—	—	—	—	—	—	—	—	—	—	14.2217	47.9190	62.1407	1.46284	0.03520	—	109.202
Waste	—	—	—	—	—	—	—	—	—	—	—	8.47384	0.00000	8.47384	0.84693	0.00000	—	29.6471
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.02466	9.02466
Total	1.03055	0.85929	2.02905	11.8296	0.04397	0.06767	3.96121	4.02887	0.06589	1.00536	1.07126	22.6955	5,536.93	5,559.62	2.53458	0.21348	9.39856	5,696.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.56560	0.42132	1.56796	11.9125	0.04137	0.02974	3.91400	3.94375	0.02797	0.99356	1.02153	—	4,233.62	4,233.62	0.10569	0.17086	6.22633	4,293.41
Area	0.50233	0.49543	0.00423	0.50301	0.00003	0.00089	—	0.00089	0.00068	—	0.00068	—	2.06850	2.06850	0.00009	0.00002	—	2.07595
Energy	0.05489	0.02744	0.49897	0.41913	0.00299	0.03792	—	0.03792	0.03792	—	0.03792	—	1,295.53	1,295.53	0.11943	0.00921	—	1,301.26
Water	—	—	—	—	—	—	—	—	—	—	—	14.2217	47.9190	62.1407	1.46284	0.03520	—	109.202
Waste	—	—	—	—	—	—	—	—	—	—	—	8.47384	0.00000	8.47384	0.84693	0.00000	—	29.6471
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.02466	9.02466

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Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Total	1.12282	0.94420	2.07116	12.8346	0.04439	0.06856	3.91400	3.98256	0.06657	0.99356	1.06013	22.6955	5,579.14	5,601.83	2.53498	0.21529	15.2510	5,744.62	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile	0.10322	0.07689	0.28615	2.17403	0.00755	0.00543	0.71431	0.71973	0.00510	0.18133	0.18643	—	700.924	700.924	0.01750	0.02829	1.03084	710.823	
Area	0.09168	0.09042	0.00077	0.09180	0.00001	0.00016	—	0.00016	0.00012	—	0.00012	—	0.34246	0.34246	0.00001	<0.000005	—	0.34370	
Energy	0.01002	0.00501	0.09106	0.07649	0.00055	0.00692	—	0.00692	0.00692	—	0.00692	—	214.490	214.490	0.01977	0.00152	—	215.438	
Water	—	—	—	—	—	—	—	—	—	—	—	—	2.35456	7.93355	10.2881	0.24219	0.00583	—	18.0796
Waste	—	—	—	—	—	—	—	—	—	—	—	—	1.40294	0.00000	1.40294	0.14022	0.00000	—	4.90842
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.49414	1.49414	
Total	0.20491	0.17232	0.37799	2.34232	0.00810	0.01251	0.71431	0.72682	0.01215	0.18133	0.19347	3.75751	923.690	927.447	0.41969	0.03564	2.52498	951.087	

3. Construction Emissions Details

3.1. Grading (2026)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Off-Road Equipment	1.72575	1.45011	13.11150	14.5107	0.02333	0.58764	—	0.58764	0.54063	—	0.54063	—	2.527,64	2,527,64	0.10253	0.02051	—	2,536.31
Dust From Material Movement	—	—	—	—	—	—	2.11720	2.11720	—	0.92020	0.92020	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00946	0.00795	0.07186	0.07951	0.00013	0.00322	—	0.00322	0.00296	—	0.00296	—	13.8501	13.8501	0.00056	0.00011	—	13.8976
Dust From Material Movement	—	—	—	—	—	—	0.01160	0.01160	—	0.00504	0.00504	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00173	0.00145	0.01311	0.01451	0.00002	0.00059	—	0.00059	0.00054	—	0.00054	—	2.29304	2.29304	0.00009	0.00002	—	2.30091
Dust From Material Movement	—	—	—	—	—	—	0.00212	0.00212	—	0.00092	0.00092	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08973	0.07981	0.08752	1.08908	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	253.625	253.625	0.00397	0.00992	0.02426	256.705
Vendor	0.08929	0.03208	2.90349	0.52283	0.02646	0.05291	1.00658	1.05949	0.05291	0.27810	0.33101	—	3,439.55	3,439.55	0.05622	0.53142	0.25082	3,599.57
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00049	0.00043	0.00052	0.00624	0.00000	0.00000	0.00142	0.00142	0.00000	0.00033	0.00033	—	1.40735	1.40735	0.00002	0.00005	0.00221	1.42630
Vendor	0.00049	0.00018	0.01618	0.00285	0.00014	0.00029	0.00546	0.00575	0.00029	0.00151	0.00180	—	18.8458	18.8458	0.00031	0.00291	0.02280	19.7441
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00009	0.00008	0.00010	0.00114	0.00000	0.00000	0.00026	0.00026	0.00000	0.00006	0.00006	—	0.23300	0.23300	<0.00005	0.00001	0.00037	0.23614
Vendor	0.00009	0.00003	0.00295	0.00052	0.00003	0.00005	0.00100	0.00105	0.00005	0.00028	0.00033	—	3.12014	3.12014	0.00005	0.00048	0.00378	3.26886
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Building Construction (2026)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38126	1.15048	9.85821	11.4601	0.02273	0.34482	—	0.34482	0.31724	—	0.31724	—	2,159.19	2,159.19	0.08759	0.01752	—	2,166.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04325	0.03602	0.30867	0.35883	0.00071	0.01080	—	0.01080	0.00993	—	0.00993	—	67.6067	67.6067	0.00274	0.00055	—	67.8388
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00789	0.00657	0.05633	0.06549	0.00013	0.00197	—	0.00197	0.00181	—	0.00181	—	11.1931	11.1931	0.00045	0.00009	—	11.2315
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO ₂	PM _{10E}	PM _{10D}	PM _{10T}	PM _{2.5E}	PM _{2.5D}	PM _{2.5T}	BCO ₂	NBCO ₂	CO _{2T}	CH ₄	N ₂ O	R	CO _{2e}
Daily Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08973	0.07981	0.08752	1.08908	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	253.625	253.625	0.00397	0.00992	0.02426	256.705
Vendor	0.08929	0.03208	2.90349	0.52283	0.02646	0.05291	1.00658	1.05949	0.05291	0.27810	0.33101	—	3,439.55	3,439.55	0.05622	0.53142	0.25082	3,599.57
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00280	0.00249	0.00300	0.03567	0.00000	0.00000	0.00809	0.00809	0.00000	0.00189	0.00189	—	8.04200	8.04200	0.00012	0.00031	0.01264	8.15031
Vendor	0.00280	0.00100	0.09243	0.01631	0.00083	0.00166	0.03120	0.03286	0.00166	0.00863	0.01029	—	107.690	107.690	0.00176	0.01664	0.13030	112.823
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00051	0.00045	0.00055	0.00651	0.00000	0.00000	0.00148	0.00148	0.00000	0.00035	0.00035	—	1.33144	1.33144	0.00002	0.00005	0.00209	1.34938
Vendor	0.00051	0.00018	0.01687	0.00298	0.00015	0.00030	0.00569	0.00600	0.00030	0.00157	0.00188	—	17.8294	17.8294	0.00029	0.00275	0.02157	18.6792
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Building Construction (2027)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

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Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32433	1.10319	9.47687	11.4072	0.02273	0.30915	—	0.30915	0.28441	—	0.28441	—	2,159.13	2,159.13	0.08758	0.01752	—	2,166.54
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32433	1.10319	9.47687	11.4072	0.02273	0.30915	—	0.30915	0.28441	—	0.28441	—	2,159.13	2,159.13	0.08758	0.01752	—	2,166.54
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32136	0.26770	2.29967	2.76809	0.00552	0.07502	—	0.07502	0.06902	—	0.06902	—	523.937	523.937	0.02125	0.00425	—	525.735
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05865	0.04886	0.41969	0.50518	0.00101	0.01369	—	0.01369	0.01260	—	0.01260	—	86.7437	86.7437	0.00352	0.00070	—	87.0414
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09017	0.08025	0.06945	1.32851	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	270.715	270.715	0.00309	0.00948	0.84102	274.459
Vendor	0.08929	0.03241	2.65646	0.49174	0.02646	0.05291	1.00658	1.05949	0.05291	0.27810	0.33101	—	3,375.73	3,375.73	0.05655	0.50497	8.85253	3,536.48
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08576	0.07584	0.07848	1.00421	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	248.978	248.978	0.00353	0.00948	0.02181	251.913
Vendor	0.08896	0.03175	2.76956	0.49604	0.02646	0.05291	1.00658	1.05949	0.05291	0.27810	0.33101	—	3,376.07	3,376.07	0.05622	0.50497	0.23001	3,528.18
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02081	0.01840	0.02102	0.25577	0.00000	0.00000	0.06268	0.06268	0.00000	0.01468	0.01468	—	61.1818	61.1818	0.00086	0.00230	0.08803	61.9768
Vendor	0.02167	0.00778	0.67744	0.11989	0.00642	0.01284	0.24180	0.25464	0.01284	0.06687	0.07971	—	819.194	819.194	0.01372	0.12254	0.92720	856.980
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00380	0.00336	0.00384	0.04668	0.00000	0.00000	0.01144	0.01144	0.00000	0.00268	0.00268	—	10.1294	10.1294	0.00014	0.00038	0.01457	10.2610
Vendor	0.00395	0.00142	0.12363	0.02188	0.00117	0.00234	0.04413	0.04647	0.00234	0.01220	0.01455	—	135.627	135.627	0.00227	0.02029	0.15351	141.883
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Paving (2027)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62044	0.52043	4.87754	7.20959	0.01050	0.19500	—	0.19500	0.17940	—	0.17940	—	1,102.20	1,102.20	0.04471	0.00894	—	1,105.98
Paving	1.16590	1.16590	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01700	0.01426	0.13363	0.19752	0.00029	0.00534	—	0.00534	0.00491	—	0.00491	—	30.1972	30.1972	0.00122	0.00024	—	30.3008
Paving	0.03194	0.03194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00310	0.00260	0.02439	0.03605	0.00005	0.00097	—	0.00097	0.00090	—	0.00090	—	4.99948	4.99948	0.00020	0.00004	—	5.01664

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Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Paving	0.00583	0.00583	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09017	0.08025	0.06945	1.32851	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	270.715	270.715	0.00309	0.00948	0.84102	274.459
Vendor	0.08929	0.03241	2.65646	0.49174	0.02646	0.05291	1.00658	1.05949	0.05291	0.27810	0.33101	—	3,375.73	3,375.73	0.05655	0.50497	8.85253	3,536.48
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00235	0.00208	0.00237	0.02888	0.00000	0.00000	0.00708	0.00708	0.00000	0.00166	0.00166	—	6.90763	6.90763	0.00010	0.00026	0.00994	6.99738
Vendor	0.00245	0.00088	0.07649	0.01354	0.00072	0.00145	0.02730	0.02875	0.00145	0.00755	0.00900	—	92.4896	92.4896	0.00155	0.01383	0.10468	96.7558
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00043	0.00038	0.00043	0.00527	0.00000	0.00000	0.00129	0.00129	0.00000	0.00030	0.00030	—	1.14364	1.14364	0.00002	0.00004	0.00165	1.15850
Vendor	0.00045	0.00016	0.01396	0.00247	0.00013	0.00026	0.00498	0.00525	0.00026	0.00138	0.00164	—	15.3127	15.3127	0.00026	0.00229	0.01733	16.0190
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Architectural Coating (2027)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18287	0.15113	1.10822	1.50052	0.00230	0.02540	—	0.02540	0.02337	—	0.02337	—	178.017	178.017	0.00722	0.00144	—	178.628
Architectural Coatings	13.2212	13.2212	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00501	0.00414	0.03036	0.04111	0.00006	0.00070	—	0.00070	0.00064	—	0.00064	—	4.87718	4.87718	0.00020	0.00004	—	4.89391
Architectural Coatings	0.36222	0.36222	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Off-Road Equipment	0.00091	0.00076	0.00554	0.00750	0.00001	0.00013	—	0.00013	0.00012	—	0.00012	—	0.80747	0.80747	0.00003	0.00001	—	0.81024
Architectural Coatings	0.06611	0.06611	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09017	0.08025	0.06945	1.32851	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	270.715	270.715	0.00309	0.00948	0.84102	274.459
Vendor	0.08929	0.03241	2.65646	0.49174	0.02646	0.05291	1.00658	1.05949	0.05291	0.27810	0.33101	—	3,375.73	3,375.73	0.05655	0.50497	8.85253	3,536.48
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00235	0.00208	0.00237	0.02888	0.00000	0.00000	0.00708	0.00708	0.00000	0.00166	0.00166	—	6.90763	6.90763	0.00010	0.00026	0.00994	6.99738
Vendor	0.00245	0.00088	0.07649	0.01354	0.00072	0.00145	0.02730	0.02875	0.00145	0.00755	0.00900	—	92.4896	92.4896	0.00155	0.01383	0.10468	96.7558
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Worker	0.00043	0.00038	0.00043	0.00527	0.00000	0.00000	0.00129	0.00129	0.00000	0.00030	0.00030	—	1.14364	1.14364	0.00002	0.00004	0.00165	1.15850
Vendor	0.00045	0.00016	0.01396	0.00247	0.00013	0.00026	0.00498	0.00525	0.00026	0.00138	0.00164	—	15.3127	15.3127	0.00026	0.00229	0.01733	16.0190
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	530.396	530.396	0.05056	0.00613	—	533.486

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Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	8.72213	8.72213	0.00083	0.00010	—	8.77294
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161.058	161.058	0.01535	0.00186	—	161.996
Total	—	—	—	—	—	—	—	—	—	—	—	—	700.176	700.176	0.06674	0.00809	—	704.255
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	530.396	530.396	0.05056	0.00613	—	533.486
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	8.72213	8.72213	0.00083	0.00010	—	8.77294
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161.058	161.058	0.01535	0.00186	—	161.996
Total	—	—	—	—	—	—	—	—	—	—	—	—	700.176	700.176	0.06674	0.00809	—	704.255
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	87.8131	87.8131	0.00837	0.00101	—	88.3247
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	1.44405	1.44405	0.00014	0.00002	—	1.45246
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	26.6649	26.6649	0.00254	0.00031	—	26.8203
Total	—	—	—	—	—	—	—	—	—	—	—	—	115.922	115.922	0.01105	0.00134	—	116.597

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO ₂	PM _{10E}	PM _{10D}	PM _{10T}	PM _{2.5E}	PM _{2.5D}	PM _{2.5T}	BCO ₂	NBCO ₂	CO _{2T}	CH ₄	N ₂ O	R	CO _{2e}
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	0.05367	0.02683	0.48788	0.40982	0.00293	0.03708	—	0.03708	0.03708	—	0.03708	—	582.125	582.125	0.05152	0.00110	—	583.740
General Light Industry	0.00122	0.00061	0.01109	0.00931	0.00007	0.00084	—	0.00084	0.00084	—	0.00084	—	13.2281	13.2281	0.00117	0.00002	—	13.2648
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.05489	0.02744	0.49897	0.41913	0.00299	0.03792	—	0.03792	0.03792	—	0.03792	—	595.353	595.353	0.05269	0.00112	—	597.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	0.05367	0.02683	0.48788	0.40982	0.00293	0.03708	—	0.03708	0.03708	—	0.03708	—	582.125	582.125	0.05152	0.00110	—	583.740
General Light Industry	0.00122	0.00061	0.01109	0.00931	0.00007	0.00084	—	0.00084	0.00084	—	0.00084	—	13.2281	13.2281	0.00117	0.00002	—	13.2648
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.05489	0.02744	0.49897	0.41913	0.00299	0.03792	—	0.03792	0.03792	—	0.03792	—	595.353	595.353	0.05269	0.00112	—	597.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Quality Restaurant	0.00979	0.00490	0.08904	0.07479	0.00053	0.00677	—	0.00677	0.00677	—	0.00677	—	96.3775	96.3775	0.00853	0.00018	—	96.6448
General Light Industry	0.00022	0.00011	0.00202	0.00170	0.00001	0.00015	—	0.00015	0.00015	—	0.00015	—	2.19007	2.19007	0.00019	<0.00005	—	2.19614
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.01002	0.00501	0.09106	0.07649	0.00055	0.00692	—	0.00692	0.00692	—	0.00692	—	98.5675	98.5675	0.00872	0.00019	—	98.8409

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.37661	0.37661	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03622	0.03622	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13068	0.12060	0.00618	0.73439	0.00004	0.00130	—	0.00130	0.00099	—	0.00099	—	3.02000	3.02000	0.00013	0.00003	—	3.03089
Total	0.54351	0.53343	0.00618	0.73439	0.00004	0.00130	—	0.00130	0.00099	—	0.00099	—	3.02000	3.02000	0.00013	0.00003	—	3.03089

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.37661	0.37661	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03622	0.03622	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.41283	0.41283	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.06873	0.06873	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00661	0.00661	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscaping Equipment	0.01633	0.01507	0.00077	0.09180	0.00001	0.00016	—	0.00016	0.00012	—	0.00012	—	0.34246	0.34246	0.0000105	<0.000005	—	0.34370
Total	0.09168	0.09042	0.00077	0.09180	0.00001	0.00016	—	0.00016	0.00012	—	0.00012	—	0.34246	0.34246	0.0000105	<0.000005	—	0.34370

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

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Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	9.26265	31.2099	40.4725	0.95275	0.02293	—	71.1236
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	4.95904	16.7092	21.6682	0.51009	0.01227	—	38.0782
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	14.2217	47.9190	62.1407	1.46284	0.03520	—	109.202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	9.26265	31.2099	40.4725	0.95275	0.02293	—	71.1236
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	4.95904	16.7092	21.6682	0.51009	0.01227	—	38.0782
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	14.2217	47.9190	62.1407	1.46284	0.03520	—	109.202
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.53354	5.16715	6.70069	0.15774	0.00380	—	11.7753

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.82103	2.76639	3.58742	0.08445	0.00203	—	6.30428
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	2.35456	7.93355	10.2881	0.24219	0.00583	—	18.0796

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	7.83162	0.00000	7.83162	0.78274	0.00000	—	27.4002
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.64222	0.00000	0.64222	0.06419	0.00000	—	2.24691
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	8.47384	0.00000	8.47384	0.84693	0.00000	—	29.6471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	7.83162	0.00000	7.83162	0.78274	0.00000	—	27.4002
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.64222	0.00000	0.64222	0.06419	0.00000	—	2.24691
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	8.47384	0.00000	8.47384	0.84693	0.00000	—	29.6471
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1.29661	0.00000	1.29661	0.12959	0.00000	—	4.53641
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.10633	0.00000	0.10633	0.01063	0.00000	—	0.37200
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.40294	0.00000	1.40294	0.14022	0.00000	—	4.90842

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

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Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.93481	8.93481
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08985	0.08985
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.02466	9.02466
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.93481	8.93481
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08985	0.08985
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.02466	9.02466
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47926	1.47926
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01488	0.01488
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.49414	1.49414

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily, Winter (Max)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	12/14/2026	12/15/2026	5.00000	2.00000	2
Building Construction	Building Construction	12/16/2026	5/4/2027	5.00000	100.0000	100
Paving	Paving	5/5/2027	5/18/2027	5.00000	10.00000	10

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Architectural Coating	Architectural Coating	5/19/2027	6/1/2027	5.00000	10.00000	10

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000
Paving	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Paving	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Architectural Coating	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	Worker	20.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	15.0000	80.0000	HHD1,MHDT
Grading	Hauling	0.00000	0.00000	HHD1
Grading	Onsite truck	0.00000	0.00000	HHD1
Building Construction	Worker	20.0000	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	15.0000	80.0000	HHD1,MHDT
Building Construction	Hauling	0.00000	0.00000	HHD1
Building Construction	Onsite truck	0.00000	0.00000	HHD1
Paving	Worker	20.0000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	15.0000	80.0000	HHD1,MHDT
Paving	Hauling	0.00000	0.00000	HHD1
Paving	Onsite truck	0.00000	0.00000	HHD1
Architectural Coating	Worker	20.0000	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	15.0000	80.0000	HHD1,MHDT
Architectural Coating	Hauling	0.00000	0.00000	HHD1

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Architectural Coating	Onsite truck	0.00000	0.00000	HDDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	25,329.0	8,443.00	11,630.5

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	—	2.00000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	4.45000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Quality Restaurant	0.00000	0%
Paving	General Light Industry	0.00000	0%
Paving	Parking Lot	4.45000	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00000	346.196	0.03300	0.00400
2027	0.00000	346.196	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00000	0.00000	0.00000	0.00000	5,593.42	5,593.42	5,593.42	2,041,600

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Quality Restaurant	Wood Fireplaces	0	0

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Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Quality Restaurant	Gas Fireplaces	0	0
Quality Restaurant	Propane Fireplaces	0	0
Quality Restaurant	Electric Fireplaces	0	0
Quality Restaurant	No Fireplaces	0	0
Quality Restaurant	Conventional Wood Stoves	0	0
Quality Restaurant	Catalytic Wood Stoves	0	0
Quality Restaurant	Non-Catalytic Wood Stoves	0	0
Quality Restaurant	Pellet Wood Stoves	0	0
General Light Industry	Wood Fireplaces	0	0
General Light Industry	Gas Fireplaces	0	0
General Light Industry	Propane Fireplaces	0	0
General Light Industry	Electric Fireplaces	0	0
General Light Industry	No Fireplaces	0	0
General Light Industry	Conventional Wood Stoves	0	0
General Light Industry	Catalytic Wood Stoves	0	0
General Light Industry	Non-Catalytic Wood Stoves	0	0
General Light Industry	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	25,329.0	8,443.00	11,630.5

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Quality Restaurant	559,205	346.196	0.0330	0.0040	1,816,387

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	9,195.88	346.196	0.0330	0.0040	41,275.3
Parking Lot	169,806	346.196	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Quality Restaurant	4,833,774	0.00000
General Light Industry	2,587,909	0.00000
Parking Lot	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Quality Restaurant	14.5316	0.00000
General Light Industry	1.19164	0.00000
Parking Lot	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Quality Restaurant	Household refrigerators and/or freezers	User Defined	150.000	0.00000	0.60000	0.00000	1.000000
Quality Restaurant	Other commercial A/ C and heat pumps	User Defined	750.000	1.80000	4.00000	4.00000	18.0000
Quality Restaurant	Walk-in refrigerators and freezers	User Defined	150.000	0.00040	7.50000	7.50000	20.0000
General Light Industry	Other commercial A/ C and heat pumps	User Defined	750.000	0.30000	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	33.0000	annual days of extreme heat
Extreme Precipitation	4.10000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	23.7900	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{1}{2}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al. 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk

reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	76.9384
AQ-PM	31.5744
AQ-DPM	25.0653
Drinking Water	19.3456
Lead Risk Housing	4.96534
Pesticides	58.8621
Toxic Releases	8.73968
Traffic	14.0875
Effect Indicators	—
Cleanup Sites	40.8361
Groundwater	30.8816
Haz Waste Facilities/Generators	59.1396
Impaired Water Bodies	66.7367
Solid Waste	75.6701
Sensitive Population	—
Asthma	17.8215
Cardio-vascular	64.2323
Low Birth Weights	67.9240
Socioeconomic Factor Indicators	—

Indicator	Result for Project Census Tract
Education	46.2288
Housing	2.99113
Linguistic	9.46001
Poverty	11.2688
Unemployment	65.6299

7.2. Healthy Places Index Scores

The maximum Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	90.00384961
Employed	14.1537277
Median HI	89.1056076
Education	—
Bachelor's or higher	59.373797
High school enrollment	25.49724111
Preschool enrollment	10.97138458
Transportation	—
Auto Access	80.12318748
Active commuting	2.707558065
Social	—

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Indicator	Result for Project Census Tract
2-parent households	78.17271911
Voting	57.98793789
Neighborhood	—
Alcohol availability	92.19812652
Park access	4.965995124
Retail density	9.778005903
Supermarket access	7.4554087
Tree canopy	6.351854228
Housing	—
Homeownership	80.30283588
Housing habitability	95.02117285
Low-inc homeowner severe housing cost burden	92.58308739
Low-inc renter severe housing cost burden	86.06441678
Uncrowded housing	75.52932119
Health Outcomes	—
Insured adults	82.56127294
Arthritis	44.8
Asthma ER Admissions	91.5
High Blood Pressure	53.6
Cancer (excluding skin)	36.4
Asthma	46.1

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Indicator	Result for Project Census Tract
Coronary Heart Disease	77.0
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	82.1
Life Expectancy at Birth	84.3
Cognitively Disabled	99.0
Physically Disabled	89.8
Heart Attack ER Admissions	62.1
Mental Health Not Good	56.0
Chronic Kidney Disease	79.8
Obesity	46.0
Pedestrian Injuries	19.6
Physical Health Not Good	65.0
Stroke	80.6
Health Risk Behaviors	—
Binge Drinking	16.3
Current Smoker	49.4
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	4.7
SLR Inundation Area	0.0
Children	27.6

Indicator	Result for Project Census Tract
Elderly	90.0
English Speaking	73.0
Foreign-born	22.5
Outdoor Workers	91.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.1
Traffic Density	14.5
Traffic Access	23.0
Other Indices	—
Hardship	38.7
Other Decision Support	—
2016 Voting	59.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0000
Healthy Places Index Score for Project Location (b)	61.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Taken from site plan, consistent with previous CalEEMod run. Based on the PD, the total project facility is 19.34 acres, of which 14.5 acres are vineyards. As such, 4.84 acres have been modeled to reflect the net project site.
Construction: Construction Phases	Schedule adjusted based on previous analysis.
Construction: Off-Road Equipment	Equipment list adjusted based on previous analysis.
Construction: Trips and VMT	Worker, vendor, onsite truck trips, and vendor trip lengths based on previous analysis.
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Architectural Coatings	SCAQMD Rule 1113

Screen		Justification
Operations: Water and Waste Water		
Water usage for wine production was estimated based on the net Project site (4.84 ac) x the RCWD Duty Factor for a Winery use (1.5 ac-ft/yr/ac) x the gal/ac-ft unit conversion factor (325,851 gal/ac-ft). Based on this calculation, the water usage for wine production would be 2,365,678 gal/year and has been added to the LI CalEEMod default water usage, totaling 2,587,909 gal/year.		
Operations: Refrigerants		
As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.		

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	1.98900	4.45000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Grading	Grading	Start Date	1/20/2027	12/14/2026
Grading	Grading	End Date	1/31/2027	12/15/2026
Grading	Grading	Work Days per Phase	8.00000	2.00000
Grading	Grading	Description	—	2
Building Construction	Building Construction	Start Date	2/1/2027	12/16/2026

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Building Construction	Building Construction	End Date	12/20/2027	5/4/2027
Building Construction	Building Construction	Work Days per Phase	230.000	100.0000
Building Construction	Building Construction	Description	—	100
Paving	Paving	Start Date	12/21/2027	5/5/2027
Paving	Paving	End Date	1/15/2028	5/18/2027
Paving	Paving	Work Days per Phase	18.0000	10.00000
Paving	Paving	Description	—	10
Architectural Coating	Architectural Coating	Start Date	1/16/2028	5/19/2027
Architectural Coating	Architectural Coating	End Date	2/10/2028	6/1/2027
Architectural Coating	Architectural Coating	Work Days per Phase	18.0000	10.00000
Architectural Coating	Architectural Coating	Description	—	10

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Grading	Tractors/Loaders/Backhoes	Number per Day	3.00000	2.00000
Building Construction	Cranes	Hours Per Day	7.00000	8.00000
Building Construction	Forklifts	Number per Day	3.00000	1.000000
Building Construction	Tractors/Loaders/Backhoes	Number per Day	3.00000	1.000000
Building Construction	Tractors/Loaders/Backhoes	Hours Per Day	7.00000	8.00000
Building Construction	Welders	Number per Day	1.000000	3.00000
Paving	Cement and Mortar Mixers	Number per Day	2.00000	1.000000

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Paving	Cement and Mortar Mixers	Hours Per Day	6.00000	8.00000
Paving	Paving Equipment	Number per Day	2.00000	1.000000
Paving	Paving Equipment	Hours Per Day	6.00000	8.00000
Paving	Rollers	Number per Day	2.00000	1.000000
Paving	Rollers	Hours Per Day	6.00000	8.00000
Architectural Coating	Air Compressors	Hours Per Day	6.00000	8.00000

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Grading	Worker	One-Way Trips per Day	10.00000	20.0000
Grading	Vendor	One-Way Trips per Day	—	15.0000
Grading	Vendor	Miles per Trip	10.2000	80.0000
Grading	Hauling	Miles per Trip	20.0000	0.00000
Building Construction	Worker	One-Way Trips per Day	7.09212	20.0000
Building Construction	Vendor	One-Way Trips per Day	2.76762	15.0000
Building Construction	Vendor	Miles per Trip	10.2000	80.0000
Building Construction	Hauling	Miles per Trip	20.0000	0.00000
Paving	Worker	One-Way Trips per Day	12.5000	20.0000
Paving	Vendor	One-Way Trips per Day	—	15.0000
Paving	Vendor	Miles per Trip	10.2000	80.0000
Paving	Hauling	Miles per Trip	20.0000	0.00000

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Architectural Coating	Worker	One-Way Trips per Day	1,41842	20,0000
Architectural Coating	Vendor	One-Way Trips per Day	—	15,0000
Architectural Coating	Vendor	Miles per Trip	10,2000	80,0000
Architectural Coating	Hauling	Miles per Trip	20,0000	0,00000

8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
Architectural Coating	Non-Residential Interior VOC	g/L	100,0000	50,0000
Architectural Coating	Non-Residential Exterior VOC	g/L	100,0000	50,0000

8.5. Operations

8.5.2. Area Sources

8.5.2.3. Architectural Coatings

Model Parameter	Units	Default Value	New Value
Non-Residential Interior VOC	g/L	100,0000	50,0000
Non-Residential Exterior VOC	g/L	100,0000	50,0000

8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
General Light Industry	Indoor Water	gal/year	222,231	2,587,909

8.5.6. Refrigerants

Land Use	Equipment Type	Model Parameter	Default Value	New Value
Quality Restaurant	Household refrigerators and/or freezers	Refrigerant	R-134a	User Defined
Quality Restaurant	Household refrigerators and/or freezers	GWP	1,430.00	150.000
Quality Restaurant	Other commercial A/C and heat pumps	Refrigerant	R-410A	User Defined
Quality Restaurant	Other commercial A/C and heat pumps	GWP	2,088.00	750.000
Quality Restaurant	Walk-in refrigerators and freezers	Refrigerant	R-404A	User Defined
Quality Restaurant	Walk-in refrigerators and freezers	GWP	3,922.00	150.000
General Light Industry	Other commercial A/C and heat pumps	Refrigerant	R-410A	User Defined
General Light Industry	Other commercial A/C and heat pumps	GWP	2,088.00	750.000



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APPENDIX 3.2:

AERMOD LOCALIZED EMISSIONS MODEL OUTPUTS

```

1  ** Lakes Environmental AERMOD MPI
2  **
3  ****
4  **
5  ** AERMOD Input Produced by:
6  ** AERMOD View Ver. 13.0.0
7  ** Lakes Environmental Software Inc.
8  ** Date: 6/26/2026
9  ** File: C:\Users\Michael Tirohn\Desktop\HRAs\17103 Akash Winery\17103 Cons LST\17103
   Cons LST.ADI
10 **
11 ****
12 **
13 **
14 ****
15 ** AERMOD Control Pathway
16 ****
17 **
18 **
19 CO STARTING
20 TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\17103 Akash Winery\17103 Cons L
21 MODELOPT DFAULT CONC
22 AVERTIME 1 8 24
23 URBANOPT 2492442 Riverside_County
24 POLLUTID OTHER
25 FLAGPOLE 2.00
26 RUNORNOT RUN
27 ERRORFIL "17103 Cons LST.err"
28 CO FINISHED
29 **
30 ****
31 ** AERMOD Source Pathway
32 ****
33 **
34 **
35 SO STARTING
36 ** Source Location **
37 ** Source ID - Type - X Coord. - Y Coord. **
38 LOCATION VOL1 VOLUME 493228.410 3710955.800 403.150
39 LOCATION AREA1 AREA 493153.650 3710880.420 393.660
40 ** Source Parameters **
41 SRCPARAM VOL1 1.0 5.000 34.965 1.400
42 SRCPARAM AREA1 0.0000443734 0.000 150.120 150.120 0.000 1.000
43 URBANSRC ALL
44
45 ** Variable Emissions Type: "By Hour / Day (HRDOW)"
46 ** Variable Emission Scenario: "Scenario 1"
47 ** WeekDays:
48 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
49 EMISFACT VOL1 HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
50 EMISFACT VOL1 HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
51 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
52 ** Saturday:
53 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
54 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
55 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
56 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
57 ** Sunday:
58 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
59 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
60 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
61 EMISFACT VOL1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
62 ** WeekDays:
63 EMISFACT AREA1 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
64 EMISFACT AREA1 HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
65 EMISFACT AREA1 HRDOW 1.0 1.0 1.0 1.0 0.0 0.0

```

```

66     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
67 ** Saturday:
68     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
69     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
70     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
71     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
72 ** Sunday:
73     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
74     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
75     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
76     EMISFACT AREA1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
77     SRCGROUP Exh           VOL1
78     SRCGROUP Dust          AREA1
79 SO FINISHED
80 **
81 *****
82 ** AERMOD Receptor Pathway
83 *****
84 **
85 **
86 RE STARTING
87     INCLUDED "17103 Cons LST.rou"
88 RE FINISHED
89 **
90 *****
91 ** AERMOD Meteorology Pathway
92 *****
93 **
94 **
95 ME STARTING
96     SURFFILE TMCA_V11_trimmed.sfc
97     PROFFILE TMCA_V11_trimmed.PFL
98     SURFDATA 3171 2019
99     UAIRDATA 3190 2019
100    SITEDATA 60650016 2019
101    PROFBASE 453.0 METERS
102 ME FINISHED
103 **
104 *****
105 ** AERMOD Output Pathway
106 *****
107 **
108 **
109 OU STARTING
110     RECTABLE ALLAVE 1ST
111     RECTABLE 1 1ST
112     RECTABLE 8 1ST
113     RECTABLE 24 1ST
114     PLOTFILE 1 Exh 1ST "17103 Cons LST.AD\Exh 1hr.PLT" 31
115     PLOTFILE 8 Exh 1ST "17103 Cons LST.AD\Exh 8hr.PLT" 32
116     PLOTFILE 24 Exh 1ST "17103 Cons LST.AD\Exh 24hr.PLT" 33
117     PLOTFILE 24 Dust 1ST "17103 Cons LST.AD\Dust 24hr.PLT" 34
118     SUMMFILE "17103 Cons LST.sum"
119 OU FINISHED
120
121
122 *** Message Summary For AERMOD Model Setup ***
123
124 ----- Summary of Total Messages -----
125
126 A Total of          0 Fatal Error Message(s)
127 A Total of          2 Warning Message(s)
128 A Total of          0 Informational Message(s)
129
130
131 ***** FATAL ERROR MESSAGES *****

```

```

132          *** NONE ***
133
134
135          ***** WARNING MESSAGES *****
136 ME W186      101      MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
used          0.50
137 ME W187      101      MEOPEN: ADJ_U* Option for Stable Low Winds used in
AERMET
138
139          *****
140          *** SETUP Finishes Successfully ***
141          *****
142
143  *** AERMOD - VERSION 24142 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L ***      06/26/26
144 *** AERMET - VERSION 22112 ***
***
12:20:52
145
146          PAGE      1
147 *** MODELOPTs:      RegDEFAULT CONC ELEV FLGPOL URBAN ADJ_U*
148
149          ***      MODEL SETUP OPTIONS SUMMARY      ***
- - - - -
- - - - -
150
151 ** Model Options Selected:
152   * Model Uses Regulatory DEFAULT Options
153   * Model Is Setup For Calculation of Average CONCentration Values.
154   * NO GAS DEPOSITION Data Provided.
155   * NO PARTICLE DEPOSITION Data Provided.
156   * Model Uses NO DRY DEPLETION. DDPLETE = F
157   * Model Uses NO WET DEPLETION. WETDPLT = F
158   * Stack-tip Downwash.
159   * Model Accounts for ELEVated Terrain Effects.
160   * Use Calms Processing Routine.
161   * Use Missing Data Processing Routine.
162   * No Exponential Decay.
163   * Model Uses URBAN Dispersion Algorithm for the SBL for      2 Source(s),
164     for Total of      1 Urban Area(s):
165   Urban Population = 2492442.0 ; Urban Roughness Length = 1.000 m
166   * Urban Roughness Length of 1.0 Meter Used.
167   * ADJ_U* - Use ADJ_U* option for SBL in AERMET
168   * CCVR_Sub - Meteorological data includes CCVR substitutions
169   * TEMP_Sub - Meteorological data includes TEMP substitutions
170   * Model Accepts FLAGPOLE Receptor . Heights.
171   * The User Specified a Pollutant Type of: OTHER
172
173 **Model Calculates 3 Short Term Average(s) of: 1-HR 8-HR 24-HR
174
175 **This Run Includes:      2 Source(s);      2 Source Group(s); and      8 Receptor(s)
176
177   with:      0 POINT(s), including
178             0 POINTCAP(s) and      0 POINTHOR(s)
179   and:      1 VOLUME source(s)
180   and:      1 AREA type source(s)
181   and:      0 LINE source(s)
182   and:      0 RLINE/RLINEXT source(s)
183   and:      0 OPENPIT source(s)
184   and:      0 BUOYANT LINE source(s) with a total of      0 line(s)
185   and:      0 SWPOINT source(s)
186
187
188 **Model Set To Continue RUNning After the Setup Testing.
189
190 **The AERMET Input Meteorological Data Version Date: 22112

```

```

191
192 **Output Options Selected:
193     Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
      Keyword)
194     Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
195     Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)
196
197 **NOTE: The Following Flags May Appear Following CONC Values:  c for Calm Hours
198                                                                m for Missing Hours
199                                                                b for Both Calm and
                                                                Missing Hours
200
201 **Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 453.00 ; Decay Coef.
      = 0.000 ; Rot. Angle = 0.0
202                      Emission Units = GRAMS/SEC ; Emission
203                      Rate Unit Factor = 0.10000E+07
204                      Output Units = MICROGRAMS/M**3
205
206 **Approximate Storage Requirements of Model = 3.5 MB of RAM.
207
208 **Input Runstream File:
      aermod.inp
209
210 **Output Print File:
      aermod.out
211
212 **Detailed Error/Message File: 17103 Cons
      LST.err
213 **File for Summary of Results: 17103 Cons
      LST.sum
214
215 *** AERMOD - VERSION 24142 *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
      Akash Winery\17103 Cons L *** 06/26/26
216
217 *** AERMET - VERSION 22112 ***
      ***
218 12:20:52
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233

```

PAGE 2

```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

```

NUMBER	EMISSION RATE	BASE	RELEASE	INIT.
INIT.	URBAN	EMISSION RATE	AIRCRAFT	
SOURCE	PART.	(GRAMS/SEC)	X	Y
SZ	SOURCE	SCALAR VARY		
ID	CATS.	(METERS)	(METERS)	(METERS)
(METERS)	BY			
VOL1	0	0.10000E+01	493228.4	3710955.8
1.40	YES	HRDOW	NO	

PAGE 3

```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** AREA SOURCE DATA ***

```

```

234          NUMBER EMISSION RATE COORD (SW CORNER) BASE RELEASE X-DIM
          Y-DIM ORIENT. INIT. URBAN EMISSION RATE AIRCRAFT
235 SOURCE PART. (GRAMS/SEC X Y ELEV. HEIGHT OF AREA OF
          AREA OF AREA SZ SOURCE SCALAR VARY
236 ID CATS. /METER**2) (METERS) (METERS) (METERS) (METERS) (METERS)
          (METERS) (DEG.) (METERS) BY
237 - - - - -
238
239 AREA1 0 0.44373E-04 493153.6 3710880.4 393.7 0.00 150.12
150.12 0.00 1.00 YES HRDOW NO
240 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26
241 *** AERMET - VERSION 22112 ***
***
12:20:52
242
243          PAGE 4
243 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
244
245
246 *** SOURCE IDs DEFINING SOURCE GROUPS ***
247
248 SRCGROUP ID SOURCE IDs
249 -----
250
251
252 EXH VOL1 ,
253
254 DUST AREA1 ,
255 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26
256 *** AERMET - VERSION 22112 ***
***
12:20:52
257
258          PAGE 5
258 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
259
260
261 *** SOURCE IDs DEFINED AS URBAN SOURCES ***
262
263 URBAN ID URBAN POP SOURCE IDs
264 -----
265
266
267 2492442. VOL1 , AREA1 ,
268 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26
269 *** AERMET - VERSION 22112 ***
***
12:20:52
270
271          PAGE 6
271 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
272
273 * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *
274
275 SOURCE ID = VOL1 ; SOURCE TYPE = VOLUME :
276 HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR
SCALAR HOUR SCALAR HOUR SCALAR
277 - - - - -
278 DAY OF WEEK = WEEKDAY
279 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6

```

```

280      .0000E+00    7 .0000E+00    8 .0000E+00
      9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01   14
      .1000E+01   15 .1000E+01   16 .1000E+01
281     17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22
      .0000E+00   23 .0000E+00   24 .0000E+00
282                                     DAY OF WEEK = SATURDAY
283     1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6
      .0000E+00    7 .0000E+00    8 .0000E+00
284     9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14
      .0000E+00   15 .0000E+00   16 .0000E+00
285     17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22
      .0000E+00   23 .0000E+00   24 .0000E+00
286                                     DAY OF WEEK = SUNDAY
287     1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6
      .0000E+00    7 .0000E+00    8 .0000E+00
288     9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14
      .0000E+00   15 .0000E+00   16 .0000E+00
289     17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22
      .0000E+00   23 .0000E+00   24 .0000E+00
290 FF *** AERMOD - VERSION 24142 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
      Akash Winery\17103 Cons L ***      06/26/26
291     *** AERMET - VERSION 22112 ***
      ***
      12:20:52

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292
293                                     PAGE      7
294     *** MODELOPTs:      RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
295
296                                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
297                                     WEEK (HRDOW) *
298
299     SOURCE ID = AREA1      ; SOURCE TYPE = AREA      :
300     HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR
301     SCALAR    HOUR    SCALAR    HOUR    SCALAR
302     - - - - -
303     - - - - -
304                                     DAY OF WEEK = WEEKDAY
305     1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6
306     .0000E+00    7 .0000E+00    8 .0000E+00
307     9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01   14
308     .1000E+01   15 .1000E+01   16 .1000E+01
309     17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22
310     .0000E+00   23 .0000E+00   24 .0000E+00
311                                     DAY OF WEEK = SATURDAY
312     1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6
313     .0000E+00    7 .0000E+00    8 .0000E+00
314     9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14
315     .0000E+00   15 .0000E+00   16 .0000E+00
316     17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22
317     .0000E+00   23 .0000E+00   24 .0000E+00
318                                     DAY OF WEEK = SUNDAY
319     1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6
320     .0000E+00    7 .0000E+00    8 .0000E+00
321     9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14
322     .0000E+00   15 .0000E+00   16 .0000E+00
323     17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22
324     .0000E+00   23 .0000E+00   24 .0000E+00
325 FF *** AERMOD - VERSION 24142 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
326     Akash Winery\17103 Cons L ***      06/26/26
327     *** AERMET - VERSION 22112 ***
328     ***
329     12:20:52

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330                                     PAGE      8
331     *** MODELOPTs:      RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
332

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317                                     *** DISCRETE CARTESIAN RECEPTORS ***
318                                     (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
319                                     (METERS)
320
321      ( 493111.4, 3711065.4,      402.3,      436.9,      2.0);      ( 493352.7,
322      3711185.1,      420.9,      434.0,      2.0);
323      ( 493499.2, 3711082.7,      433.3,      435.3,      2.0);      ( 493554.5,
324      3711024.3,      436.8,      436.8,      2.0);
325      ( 493145.7, 3710681.9,      403.2,      403.2,      2.0);      ( 492923.0,
326      3710820.1,      392.1,      429.1,      2.0);
327      ( 492834.6, 3711140.9,      388.9,      439.0,      2.0);      ( 493071.7,
328      3711045.1,      399.4,      436.9,      2.0);
329
330 *** AERMOD - VERSION 24142 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
331 Akash Winery\17103 Cons L ***      06/26/26
332 *** AERMET - VERSION 22112 ***
333 ***
334 12:20:52
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	YR	MO	DY	JDY	HR	HO		U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	ZO	BOWEN	ALBEDO
	REF	WS		WD		HT	REF	TA		HT							
366	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
368	19	01	01	1	01	-5.1	0.084	-9.000	-9.000	-9.000	-999.	59.	10.1	0.00	0.82	1.00	
	2.17	88.			10.0	276.4	9.0										
369	19	01	01	1	02	-15.4	0.166	-9.000	-9.000	-9.000	-999.	163.	30.4	0.03	0.82	1.00	
	2.65	91.			10.0	277.0	9.0										
370	19	01	01	1	03	-4.1	0.075	-9.000	-9.000	-9.000	-999.	54.	9.0	0.00	0.82	1.00	
	1.94	79.			10.0	276.5	9.0										
371	19	01	01	1	04	-3.2	0.067	-9.000	-9.000	-9.000	-999.	42.	8.1	0.00	0.82	1.00	
	1.72	87.			10.0	276.1	9.0										
372	19	01	01	1	05	-2.0	0.055	-9.000	-9.000	-9.000	-999.	31.	7.3	0.00	0.82	1.00	
	1.29	87.			10.0	276.2	9.0										
373	19	01	01	1	06	-1.9	0.056	-9.000	-9.000	-9.000	-999.	32.	7.9	0.00	0.82	1.00	
	1.18	55.			10.0	275.7	9.0										
374	19	01	01	1	07	-6.0	0.092	-9.000	-9.000	-9.000	-999.	67.	11.0	0.00	0.82	1.00	
	2.35	89.			10.0	274.7	9.0										
375	19	01	01	1	08	-3.5	0.084	-9.000	-9.000	-9.000	-999.	59.	14.7	0.03	0.82	0.54	
	1.39	95.			10.0	275.8	9.0										
376	19	01	01	1	09	23.0	0.073	0.448	0.005	135.	48.	-1.5	0.00	0.82	0.33		
	1.27	74.			10.0	277.5	9.0										
377	19	01	01	1	10	64.8	0.161	0.759	0.005	233.	155.	-5.6	0.03	0.82	0.26		
	1.78	320.			10.0	279.2	9.0										
378	19	01	01	1	11	93.6	0.144	1.206	0.005	648.	131.	-2.8	0.06	0.82	0.24		
	1.23	342.			10.0	281.7	9.0										
379	19	01	01	1	12	107.3	0.193	1.380	0.005	846.	203.	-5.8	0.11	0.82	0.23		
	1.51	218.			10.0	282.9	9.0										
380	19	01	01	1	13	105.3	0.259	1.425	0.005	949.	317.	-14.3	0.13	0.82	0.23		
	2.23	265.			10.0	283.5	9.0										
381	19	01	01	1	14	87.7	0.343	1.377	0.005	1027.	481.	-39.5	0.09	0.82	0.24		
	3.60	174.			10.0	283.9	9.0										
382	19	01	01	1	15	55.5	0.347	1.200	0.005	1073.	490.	-64.6	0.11	0.82	0.28		
	3.55	216.			10.0	284.5	9.0										
383	19	01	01	1	16	11.3	0.305	0.709	0.005	1082.	405.	-215.4	0.10	0.82	0.37		
	3																

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392
393
394 First hour of profile data
395 YR MO DY HR HEIGHT F WDIR WSPD AMB_TMP sigmaA sigmaW sigmaV
396 19 01 01 01 9.0 0 -999. -99.00 276.5 99.0 -99.00 -99.00
397 19 01 01 01 10.0 1 88. 2.17 -999.0 99.0 -99.00 -99.00
398
399 F indicates top of profile (=1) or below (=0)
400 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26
401 *** AERMET - VERSION 22112 ***
***
12:20:52
402
403 *** MODELOPTs: RegDFAULT PAGE 11
404 CONC ELEV FLGPOL URBAN ADJ_U*
405
406 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES
407 FOR SOURCE GROUP: EXH ***
408 INCLUDING SOURCE(S): VOL1 ,
409
410 *** DISCRETE CARTESIAN RECEPTOR POINTS ***
411
412 ** CONC OF OTHER IN
MICROGRAMS/M**3 **
413
414 X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M)
Y-COORD (M) CONC (YYMMDDHH)
415 - - - - -
416 493111.39 3711065.38 129.77195 (20120316) 493352.66
3711185.11 75.92017 (21121316)
417 493499.23 3711082.74 52.21914 (22123016) 493554.53
3711024.34 27.17735 (19121016)
418 493145.68 3710681.86 73.61693 (20120216) 492922.95
3710820.08 42.17871 (19011512)
419 492834.61 3711140.88 24.46346 (23121516) 493071.72
3711045.08 114.32999 (19112216)
420 FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26
421 *** AERMET - VERSION 22112 ***
***
12:20:52
422
423 *** MODELOPTs: RegDFAULT PAGE 12
424 CONC ELEV FLGPOL URBAN ADJ_U*
425
426 *** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES
427 FOR SOURCE GROUP: DUST ***
428 INCLUDING SOURCE(S): AREA1 ,
429
430 *** DISCRETE CARTESIAN RECEPTOR POINTS ***
431
432 ** CONC OF OTHER IN
MICROGRAMS/M**3 **
433
434 X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M)
Y-COORD (M) CONC (YYMMDDHH)
435 - - - - -
436 493111.39 3711065.38 149.94172 (23010413) 493352.66
3711185.11 95.81234 (21121316)
437 493499.23 3711082.74 56.75906 (19121016) 493554.53
3711024.34 30.88329 (21120916)
438 493145.68 3710681.86 79.86277 (20122416) 492922.95
3710820.08 61.59769 (23121816)

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435          492834.61    3711140.88          32.21220    (23112116)          493071.72
          3711045.08          136.39265    (19112216)
436 FF *** AERMOD - VERSION 24142 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L ***      06/26/26
437      *** AERMET - VERSION 22112 ***
      ***
      12:20:52
438
          PAGE 13
439      *** MODELOPTs:      RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
440
441          *** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES
          FOR SOURCE GROUP: EXH      ***
          INCLUDING SOURCE(S):      VOL1      ,
442
443          *** DISCRETE CARTESIAN RECEPTOR POINTS ***
444
445          ** CONC OF OTHER      IN
446          MICROGRAMS/M**3      **
447
448          X-COORD (M) Y-COORD (M)      CONC      (YYMMDDHH)      X-COORD (M)
          Y-COORD (M)      CONC      (YYMMDDHH)
449      - - - - -
450          493111.39    3711065.38          42.08150    (22121216)          493352.66
          3711185.11          28.14075    (21041316)
451          493499.23    3711082.74          17.30118    (22123016)          493554.53
          3711024.34          10.44610    (23022816)
452          493145.68    3710681.86          11.41197    (23120416)          492922.95
          3710820.08          14.30100    (20120816)
453          492834.61    3711140.88          8.80108    (23121516)          493071.72
          3711045.08          39.60098    (20120316)
454 FF *** AERMOD - VERSION 24142 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L ***      06/26/26
455      *** AERMET - VERSION 22112 ***
      ***
      12:20:52
456
          PAGE 14
457      *** MODELOPTs:      RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
458
459          *** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES
          FOR SOURCE GROUP: DUST      ***
          INCLUDING SOURCE(S):      AREA1      ,
460
461          *** DISCRETE CARTESIAN RECEPTOR POINTS ***
462
463          ** CONC OF OTHER      IN
464          MICROGRAMS/M**3      **
465
466          X-COORD (M) Y-COORD (M)      CONC      (YYMMDDHH)      X-COORD (M)
          Y-COORD (M)      CONC      (YYMMDDHH)
467      - - - - -
468          493111.39    3711065.38          59.73297    (22121216)          493352.66
          3711185.11          30.55923    (19092716)
469          493499.23    3711082.74          19.32952    (22123016)          493554.53
          3711024.34          12.37546    (23022816)
470          493145.68    3710681.86          11.80480    (23121816)          492922.95
          3710820.08          17.17105    (20120816)
471          492834.61    3711140.88          11.90597    (23121516)          493071.72
          3711045.08          49.94338    (19011416)
472 FF *** AERMOD - VERSION 24142 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L ***      06/26/26
473      *** AERMET - VERSION 22112 ***
      ***

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12:20:52

474

475 *** MODELOPTs: RegDFAULT PAGE 15
476 CONC ELEV FLGPOL URBAN ADJ_U*
477

478 *** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES
479 FOR SOURCE GROUP: EXH ***
480 INCLUDING SOURCE(S): VOL1 ,

481 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

482 ** CONC OF OTHER IN
483 MICROGRAMS/M**3 **

484 X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M)
485 Y-COORD (M) CONC (YYMMDDHH)

486 493111.39 3711065.38 14.02717 (22121224) 493352.66
3711185.11 9.38025 (21041324)
487 493499.23 3711082.74 5.76706 (22123024) 493554.53
3711024.34 3.48203 (23022824)
488 493145.68 3710681.86 3.80399 (23120424) 492922.95
3710820.08 4.76700 (20120824)
489 492834.61 3711140.88 2.93369 (23121524) 493071.72
3711045.08 13.20033 (20120324)

490 **FF** *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26

491 *** AERMET - VERSION 22112 ***

12:20:52

492

493 *** MODELOPTs: RegDFAULT PAGE 16
494 CONC ELEV FLGPOL URBAN ADJ_U*
495

496 *** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES
497 FOR SOURCE GROUP: DUST ***
498 INCLUDING SOURCE(S): AREA1 ,

499 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

500 ** CONC OF OTHER IN
501 MICROGRAMS/M**3 **

502 X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M)
503 Y-COORD (M) CONC (YYMMDDHH)

504 493111.39 3711065.38 19.91099 (22121224) 493352.66
3711185.11 10.18641 (19092724)
505 493499.23 3711082.74 6.44317 (22123024) 493554.53
3711024.34 4.12515 (23022824)
506 493145.68 3710681.86 3.93493 (23121824) 492922.95
3710820.08 5.72368 (20120824)
507 492834.61 3711140.88 3.96866 (23121524) 493071.72
3711045.08 16.64779 (19011424)

508 **FF** *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26

509 *** AERMET - VERSION 22112 ***

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510

511 *** MODELOPTs: RegDFAULT PAGE 17
512 CONC ELEV FLGPOL URBAN ADJ_U*
513

*** THE SUMMARY OF HIGHEST 1-HR RESULTS

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** CONC OF OTHER IN
MICROGRAMS/M**3 **

DATE

GROUP ID	AVERAGE CONC	NETWORK	RECEPTOR (XR,
YR, ZELEV, ZHILL, ZFLAG)	OF TYPE GRID-ID	(YYMMDDHH)	
- - - - -			
- - - - -			
EXH HIGH 1ST HIGH VALUE IS	129.77195	ON 20120316: AT (	493111.39,
3711065.38, 402.31, 436.85,	2.00) DC		
DUST HIGH 1ST HIGH VALUE IS	149.94172	ON 23010413: AT (	493111.39,
3711065.38, 402.31, 436.85,	2.00) DC		
*** RECEPTOR TYPES: GC = GRIDCART			
	GP = GRIDPOLR		
	DC = DISCCART		
	DP = DISCPOLR		
*** AERMOD - VERSION 24142 ***		*** C:\Users\Michael Tirohn\Desktop\HRAs\17103	
Akash Winery\17103 Cons L ***		06/26/26	
*** AERMET - VERSION 22112 ***			
***			***
12:20:52			
PAGE 18			
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*			
*** THE SUMMARY OF HIGHEST 8-HR RESULTS			

GROUP ID	AVERAGE CONC	NETWORK	RECEPTOR (XR,
YR, ZELEV, ZHILL, ZFLAG)	OF TYPE GRID-ID	(YYMMDDHH)	
- - - - -			
- - - - -			
EXH HIGH 1ST HIGH VALUE IS	42.08150	ON 22121216: AT (	493111.39,
3711065.38, 402.31, 436.85,	2.00) DC		
DUST HIGH 1ST HIGH VALUE IS	59.73297	ON 22121216: AT (	493111.39,
3711065.38, 402.31, 436.85,	2.00) DC		
*** RECEPTOR TYPES: GC = GRIDCART			
	GP = GRIDPOLR		
	DC = DISCCART		
	DP = DISCPOLR		
*** AERMOD - VERSION 24142 ***		*** C:\Users\Michael Tirohn\Desktop\HRAs\17103	
Akash Winery\17103 Cons L ***		06/26/26	
*** AERMET - VERSION 22112 ***			
***			***

12:20:52

556

PAGE 19

557 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

558

559

*** THE SUMMARY OF HIGHEST 24-HR RESULTS

560

561

562

** CONC OF OTHER IN
MICROGRAMS/M**3 **

563

564

DATE

565 GROUP ID AVERAGE CONC NETWORK RECEPTOR (XR,
YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID (YYMMDDHH)
566 - - - - -
567 - - - - -

567

568 EXH HIGH 1ST HIGH VALUE IS 14.02717 ON 22121224: AT (493111.39,
3711065.38, 402.31, 436.85, 2.00) DC

569

570 DUST HIGH 1ST HIGH VALUE IS 19.91099 ON 22121224: AT (493111.39,
3711065.38, 402.31, 436.85, 2.00) DC

571

572

573 *** RECEPTOR TYPES: GC = GRIDCART

574 GP = GRIDPOLR

575 DC = DISCCART

576 DP = DISCPOLR

577 **FF** *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\17103
Akash Winery\17103 Cons L *** 06/26/26

578

*** AERMET - VERSION 22112 ***

12:20:52

579

PAGE 20

580 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

581

582 *** Message Summary : AERMOD Model Execution ***

583

584 ----- Summary of Total Messages -----

585

586 A Total of 0 Fatal Error Message(s)

587 A Total of 138 Warning Message(s)

588 A Total of 655 Informational Message(s)

589

590 A Total of 43824 Hours Were Processed

591

592 A Total of 7 Calm Hours Identified

593

594 A Total of 648 Missing Hours Identified (1.48 Percent)

595

596

597 ***** FATAL ERROR MESSAGES *****

598

*** NONE ***

599

600

601 ***** WARNING MESSAGES *****

602 ME W186 101 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
used 0.50

603 ME W187 101 MEOPEN: ADJ_U* Option for Stable Low Winds used in
AERMET

604 CN W733 5320 AVER: 8-hr avg, < 6 hours of data, calms policy used.

605	2019081016 CN W732 5328 2019081024	AVER: 24-hr avg, < 18 hours of data, calms policy used.
606	CN W733 10504 2020031316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
607	CN W732 10512 2020031324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
608	CN W733 10528 2020031416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
609	CN W732 10536 2020031424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
610	CN W733 10552 2020031516	AVER: 8-hr avg, < 6 hours of data, calms policy used.
611	CN W732 10560 2020031524	AVER: 24-hr avg, < 18 hours of data, calms policy used.
612	CN W733 10576 2020031616	AVER: 8-hr avg, < 6 hours of data, calms policy used.
613	CN W732 10584 2020031624	AVER: 24-hr avg, < 18 hours of data, calms policy used.
614	CN W733 10984 2020040216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
615	CN W732 10992 2020040224	AVER: 24-hr avg, < 18 hours of data, calms policy used.
616	CN W733 11008 2020040316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
617	CN W732 11016 2020040324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
618	CN W733 11104 2020040716	AVER: 8-hr avg, < 6 hours of data, calms policy used.
619	CN W732 11112 2020040724	AVER: 24-hr avg, < 18 hours of data, calms policy used.
620	CN W733 11416 2020042016	AVER: 8-hr avg, < 6 hours of data, calms policy used.
621	CN W732 11424 2020042024	AVER: 24-hr avg, < 18 hours of data, calms policy used.
622	CN W733 15408 2020100324	AVER: 8-hr avg, < 6 hours of data, calms policy used.
623	CN W733 15416 2020100408	AVER: 8-hr avg, < 6 hours of data, calms policy used.
624	CN W733 15496 2020100716	AVER: 8-hr avg, < 6 hours of data, calms policy used.
625	CN W732 15504 2020100724	AVER: 24-hr avg, < 18 hours of data, calms policy used.
626	CN W733 15568 2020101016	AVER: 8-hr avg, < 6 hours of data, calms policy used.
627	CN W732 15576 2020101024	AVER: 24-hr avg, < 18 hours of data, calms policy used.
628	CN W733 16360 2020111216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
629	CN W732 16368 2020111224	AVER: 24-hr avg, < 18 hours of data, calms policy used.
630	CN W733 16504 2020111816	AVER: 8-hr avg, < 6 hours of data, calms policy used.
631	CN W732 16512 2020111824	AVER: 24-hr avg, < 18 hours of data, calms policy used.
632	CN W733 16552 2020112016	AVER: 8-hr avg, < 6 hours of data, calms policy used.
633	CN W732 16560 2020112024	AVER: 24-hr avg, < 18 hours of data, calms policy used.
634	CN W733 16576 2020112116	AVER: 8-hr avg, < 6 hours of data, calms policy used.
635	CN W732 16584 2020112124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
636	CN W733 16600 2020112216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
637	CN W732 16608	AVER: 24-hr avg, < 18 hours of data, calms policy used.

638	2020112224 CN W733 16624 2020112316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
639	CN W732 16632 2020112324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
640	CN W733 16648 2020112416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
641	CN W732 16656 2020112424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
642	CN W733 16672 2020112516	AVER: 8-hr avg, < 6 hours of data, calms policy used.
643	CN W732 16680 2020112524	AVER: 24-hr avg, < 18 hours of data, calms policy used.
644	CN W733 17152 2020121516	AVER: 8-hr avg, < 6 hours of data, calms policy used.
645	CN W732 17160 2020121524	AVER: 24-hr avg, < 18 hours of data, calms policy used.
646	CN W733 17296 2020122116	AVER: 8-hr avg, < 6 hours of data, calms policy used.
647	CN W732 17304 2020122124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
648	CN W733 17752 2021010916	AVER: 8-hr avg, < 6 hours of data, calms policy used.
649	CN W732 17760 2021010924	AVER: 24-hr avg, < 18 hours of data, calms policy used.
650	CN W733 17776 2021011016	AVER: 8-hr avg, < 6 hours of data, calms policy used.
651	CN W732 17784 2021011024	AVER: 24-hr avg, < 18 hours of data, calms policy used.
652	CN W733 17800 2021011116	AVER: 8-hr avg, < 6 hours of data, calms policy used.
653	CN W732 17808 2021011124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
654	CN W733 17824 2021011216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
655	CN W732 17832 2021011224	AVER: 24-hr avg, < 18 hours of data, calms policy used.
656	CN W733 18088 2021012316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
657	CN W732 18096 2021012324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
658	CN W733 18112 2021012416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
659	CN W732 18120 2021012424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
660	CN W733 18136 2021012516	AVER: 8-hr avg, < 6 hours of data, calms policy used.
661	CN W732 18144 2021012524	AVER: 24-hr avg, < 18 hours of data, calms policy used.
662	CN W733 19288 2021031416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
663	CN W732 19296 2021031424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
664	CN W733 19672 2021033016	AVER: 8-hr avg, < 6 hours of data, calms policy used.
665	CN W732 19680 2021033024	AVER: 24-hr avg, < 18 hours of data, calms policy used.
666	CN W733 19768 2021040316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
667	CN W732 19776 2021040324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
668	CN W733 21232 2021060316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
669	CN W732 21240 2021060324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
670	CN W733 23392	AVER: 8-hr avg, < 6 hours of data, calms policy used.

671	2021090116 CN W732 23400 2021090124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
672	CN W733 24280 2021100816	AVER: 8-hr avg, < 6 hours of data, calms policy used.
673	CN W732 24288 2021100824	AVER: 24-hr avg, < 18 hours of data, calms policy used.
674	CN W733 24304 2021100916	AVER: 8-hr avg, < 6 hours of data, calms policy used.
675	CN W732 24312 2021100924	AVER: 24-hr avg, < 18 hours of data, calms policy used.
676	CN W733 29512 2022051416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
677	CN W732 29520 2022051424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
678	CN W733 30232 2022061316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
679	CN W732 30240 2022061324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
680	CN W733 31648 2022081116	AVER: 8-hr avg, < 6 hours of data, calms policy used.
681	CN W732 31656 2022081124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
682	CN W733 32344 2022090916	AVER: 8-hr avg, < 6 hours of data, calms policy used.
683	CN W732 32352 2022090924	AVER: 24-hr avg, < 18 hours of data, calms policy used.
684	CN W733 33880 2022111216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
685	CN W732 33888 2022111224	AVER: 24-hr avg, < 18 hours of data, calms policy used.
686	CN W733 33904 2022111316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
687	CN W732 33912 2022111324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
688	CN W733 33928 2022111416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
689	CN W732 33936 2022111424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
690	CN W733 33952 2022111516	AVER: 8-hr avg, < 6 hours of data, calms policy used.
691	CN W732 33960 2022111524	AVER: 24-hr avg, < 18 hours of data, calms policy used.
692	CN W733 34384 2022120316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
693	CN W732 34392 2022120324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
694	CN W733 36112 2023021316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
695	CN W732 36120 2023021324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
696	CN W733 36184 2023021616	AVER: 8-hr avg, < 6 hours of data, calms policy used.
697	CN W732 36192 2023021624	AVER: 24-hr avg, < 18 hours of data, calms policy used.
698	CN W733 36712 2023031016	AVER: 8-hr avg, < 6 hours of data, calms policy used.
699	CN W732 36720 2023031024	AVER: 24-hr avg, < 18 hours of data, calms policy used.
700	CN W733 36736 2023031116	AVER: 8-hr avg, < 6 hours of data, calms policy used.
701	CN W732 36744 2023031124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
702	CN W733 36760 2023031216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
703	CN W732 36768	AVER: 24-hr avg, < 18 hours of data, calms policy used.

704	2023031224 CN W733 36856 2023031616	AVER: 8-hr avg, < 6 hours of data, calms policy used.
705	CN W732 36864 2023031624	AVER: 24-hr avg, < 18 hours of data, calms policy used.
706	CN W733 37216 2023033116	AVER: 8-hr avg, < 6 hours of data, calms policy used.
707	CN W732 37224 2023033124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
708	CN W733 37384 2023040716	AVER: 8-hr avg, < 6 hours of data, calms policy used.
709	CN W732 37392 2023040724	AVER: 24-hr avg, < 18 hours of data, calms policy used.
710	CN W733 38392 2023051916	AVER: 8-hr avg, < 6 hours of data, calms policy used.
711	CN W732 38400 2023051924	AVER: 24-hr avg, < 18 hours of data, calms policy used.
712	CN W733 39736 2023071416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
713	CN W732 39744 2023071424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
714	CN W733 40200 2023080224	AVER: 8-hr avg, < 6 hours of data, calms policy used.
715	CN W733 40208 2023080308	AVER: 8-hr avg, < 6 hours of data, calms policy used.
716	CN W733 41416 2023092216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
717	CN W732 41424 2023092224	AVER: 24-hr avg, < 18 hours of data, calms policy used.
718	CN W733 41968 2023101516	AVER: 8-hr avg, < 6 hours of data, calms policy used.
719	CN W732 41976 2023101524	AVER: 24-hr avg, < 18 hours of data, calms policy used.
720	CN W733 42376 2023110116	AVER: 8-hr avg, < 6 hours of data, calms policy used.
721	CN W732 42384 2023110124	AVER: 24-hr avg, < 18 hours of data, calms policy used.
722	CN W733 42400 2023110216	AVER: 8-hr avg, < 6 hours of data, calms policy used.
723	CN W732 42408 2023110224	AVER: 24-hr avg, < 18 hours of data, calms policy used.
724	CN W733 42424 2023110316	AVER: 8-hr avg, < 6 hours of data, calms policy used.
725	CN W732 42432 2023110324	AVER: 24-hr avg, < 18 hours of data, calms policy used.
726	CN W733 42448 2023110416	AVER: 8-hr avg, < 6 hours of data, calms policy used.
727	CN W733 42456 2023110424	AVER: 8-hr avg, < 6 hours of data, calms policy used.
728	CN W732 42456 2023110424	AVER: 24-hr avg, < 18 hours of data, calms policy used.
729	CN W733 42464 2023110508	AVER: 8-hr avg, < 6 hours of data, calms policy used.
730	CN W733 42472 2023110516	AVER: 8-hr avg, < 6 hours of data, calms policy used.
731	CN W732 42480 2023110524	AVER: 24-hr avg, < 18 hours of data, calms policy used.
732	CN W733 42496 2023110616	AVER: 8-hr avg, < 6 hours of data, calms policy used.
733	CN W732 42504 2023110624	AVER: 24-hr avg, < 18 hours of data, calms policy used.
734	CN W733 42520 2023110716	AVER: 8-hr avg, < 6 hours of data, calms policy used.
735	CN W732 42528 2023110724	AVER: 24-hr avg, < 18 hours of data, calms policy used.
736	CN W733 43240	AVER: 8-hr avg, < 6 hours of data, calms policy used.

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2023120716
737 CN W732 43248 AVER: 24-hr avg, < 18 hours of data, calms policy used.
2023120724
738 CN W733 43696 AVER: 8-hr avg, < 6 hours of data, calms policy used.
2023122616
739 CN W732 43704 AVER: 24-hr avg, < 18 hours of data, calms policy used.
2023122624
740
741 *****
742 *** AERMOD Finishes Successfully ***
743 *****
744
745
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