Majestic Thousand Palms
(GPA220004, CZ2200013, PPT220022, CEQ220033)
AIR QUALITY IMPACT ANALYSIS
COUNTY OF RIVERSIDE

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LIST OF ABBREVIATED TERMS

%	Percent
°F	Degrees Fahrenheit
(1)	Reference
μg/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
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
C_2H_3Cl	Vinyl Chloride
C_2H_4O	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
CAP	Climate Action Plan
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	*2023 CEQA Statute and Guidelines*
CH_2O	Formaldehyde
CO	Carbon Monoxide
COH	Coefficient of Haze
COHb	Carboxyhemoglobin

County	County of Riverside
Cr(VI)	Chromium
CTP	Clean Truck Program
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
EC	Elemental Carbon
EIR	Environmental Impact Report
EMFAC	Emissions FACtor Model
EPA	Environmental Protection Agency
ETW	Equivalent Test Weight
EV	Electric Vehicle
GHG	Greenhouse Gas
GVWR	Gross Vehicle Weight Rating
H_2S	Hydrogen Sulfide
HDT	Heavy-Duty Trucks
HHDT	Heavy-Heavy-Duty Trucks
HI	Hazard Index
hp	Horsepower
HPLV	High-Pressure-Low-Volume
lbs	Pounds
lbs/day	Pounds Per Day
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy-Duty Trucks
LST	Localized Significance Threshold
LST Methodology	*Final Localized Significance Threshold Methodology*
MATES	Multiple Air Toxics Exposure Study
MCY	Motorcycles
MDV	Medium-Duty Vehicles
MEIR	Maximally Exposed Individual Receptor
MHDT	Medium-Heavy-Duty Trucks
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
mph	Miles Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N_2	Nitrogen
N_2O	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
POLA	Port of Los Angeles
POLB	Port of Long Beach
ppm	Parts Per Million
Project	Majestic Thousand Palms
RECLAIM	Regional Clean Air Incentives Market
RFG-2	Reformulated Gasoline Regulation
ROG	Reactive Organic Gases
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square Feet
SIPs	State Implementation Plans
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SRA	Source Receptor Area
SSAB	Salton Sea Air Basin
TAC	Toxic Air Contaminant
Title 24	California Building Code
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
UFP	Ultrafine Particles
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
vph	Vehicles Per Hour

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Majestic Thousand Palms 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	*Potentially Significant*	*Less Than Significant*
Localized Construction Emissions	3.7	*Less Than Significant*	*n/a*
Regional Operational Emissions	3.5	*Potentially Significant*	*Significant and Unavoidable*
Localized Operational Emissions	3.7	*Less Than Significant*	*n/a*
CO “Hot Spot” Analysis	3.9	*Less Than Significant*	*n/a*
Air Quality Management Plan	3.10	*Potentially Significant*	*Significant and Unavoidable*
Sensitive Receptors	3.12	*Less Than Significant*	*n/a*
Odors	3.13	*Less Than Significant*	*n/a*
Cumulative Impacts	3.14	*Potentially Significant*	*Significant and Unavoidable*

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 SCAQMD.

SCAQMD RULES

SCAQMD Rules that are currently applicable during construction activity for 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.

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

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.

The contractor shall adhere to the following applicable measures of Rule 403 including, but not limited to:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- All access points to the Project site shall have track out devices installed.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 mph or less

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

SCAQMD RULE 1113

This rule serves to limit the VOC content of architectural coatings used on projects in the SCAQMD. 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.

SCAQMD RULE 2305

The SCAQMD adopted Rule 2305, the Warehouse Indirect Source Rule, on May 7, 2021. Owners and operators associated with warehouses 100,000 square feet (sf) or larger are required to directly reduce nitrogen oxides (NO_X) and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. The rule imposes a “Warehouse Points Compliance Obligation” (WPCO) on warehouse operators. Operators satisfy the WPCO by accumulating “Warehouse Actions and Investments to Reduce Emissions Points” (WAIRE Points) in a given 12-month period. WAIRE Points are awarded by implementing measures to reduce emissions listed on the WAIRE Menu, or by implementing a custom WAIRE Plan approved by the SCAQMD.

Although the Project would comply with Rule 2305, it should be noted that there is no way to quantify these reductions in the California Emissions Estimator Model (CalEEMod). The two most pertinent regulatory requirements that could be modeled, are Rule 403 (Fugitive Dust) (2) and Rule 1113 (Architectural Coatings) (3). Credit for Rule 403 and Rule 1113 have been taken in the analysis.

ES.3 PROJECT MITIGATION MEASURES

ES.3.1 CONSTRUCTION-SOURCE MMS

Unmitigated Project construction-source NO_X emissions would exceed applicable SCAQMD regional significance thresholds. The following measure (MM AQ-1) is designed to reduce construction source NOX emissions. With implementation of MM AQ-1, construction-source NOX emissions would not exceed the applicable SCAQMD regional significance threshold. Thus, with mitigation, Project construction-source emissions would result in a less than significant impact.

MM AQ-1

Prior to issuance of each grading permit and building permit, the applicant shall provide evidence that all offroad equipment used during construction shall meet CARB Tier 4 Interim emission standards or better.

ES.3.2 OPERATIONAL-SOURCE MMS

Unmitigated Project operational-source VOC and NO_X emissions would exceed applicable SCAQMD regional significance thresholds. The predominance of the Project's operational-source emissions are generated by passenger cars and trucks accessing the Project. Neither the Project Applicant nor the City have regulatory authority to control tailpipe emissions, and no feasible MMs beyond the measures identified herein exist that would reduce Project operational-source VOC and NO_X emissions to levels that are less-than-significant. Project operational-source VOC and NO_X emissions impacts are therefore considered significant and unavoidable.

The following measures (MM AQ-2 through MM AQ-8) are designed to reduce Project operational-source VOC and NO_X emissions. There is no way to meaningfully quantify these reductions in CalEEMod, and therefore no numeric emissions credit has been taken in the analysis. As such, even with application of MM AQ-1 through MM AQ-7, Project operational-source emissions impacts are considered significant and unavoidable.

MM AQ-2

To facilitate the possible future installation of infrastructure that would charge the batteries that power the motors of electric-powered trucks, the following shall be installed. 1) At shell building permit, an electrical room(s) and/or exterior area(s) of the site shall be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks. Conduit shall be installed from this designated area where the panel would be located to the onsite location where the charging facilities would be located and where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks. 2) At issuance of a building permit for Tenant Improvements, if the tenant is served by electric trucks, the electrical panel and charging units shall be installed, and the electrical wiring connections shall be made from the electrical panel to the charging units.

MM AQ-3

Install passenger car EV charging stations and designated carpool parking stalls per the provisions of the California Green Building Standards Code and require that each building be constructed with an adequately sized electrical panel(s) and conduit to accommodate future EV charging stations at a minimum of 5 percent of the passenger car parking spaces.

MM AQ-4

As a condition of certificates of occupancy, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, or gasoline and all indoor cargo handling equipment shall be required to be powered by electricity.

MM AQ-5

In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants with information related to SCAQMD's Carl Moyer Program, or other such programs that promote truck retrofits or "clean" vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. Tenants shall be notified about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel-fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the project vicinity; 4) access to alternative fueling stations proximate to the site that supply compressed natural gas; and 5) the United States Environmental Protection Agency's SmartWay program.

MM AQ-6

Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas of the warehouse portion of the Project that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to the issuance of an occupancy permit, the City shall conduct a site inspection to ensure that the signs are in place.

MM AQ-7

Once constructed, the project proponent shall ensure that all building tenants shall utilize electric equipment for landscape maintenance to the extent feasible, through requirements in the lease agreements.

MM AQ-8

All future operations shall adhere to the applicable policies:

1. Warehouse/distribution facilities greater than 250,000 square feet shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site

queuing for trucks that is away from sensitive receptors. The general queuing and spill-over of trucks onto surrounding public streets shall be prevented. Commercial trucks shall not be parked in the public road right-of-way or nearby residential areas.

2. Truck driveways shall generally be placed, on streets that do not have fronting sensitive receptors.
3. Sites shall clearly mark entry and exit points for trucks and service vehicles.
4. Sites shall be densely screened with landscaping along all bordering streets and adjacent sensitive receptors, with trees spaced no further apart than 25 feet on center. Fifty percent of the landscape screening shall include a minimum of 36- inch box trees. Facility operators will be responsible to establish a long-term maintenance mechanism to assure that the landscaping remains in place and functional in accordance with the approved landscaping plan.
5. Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks (“MHDT”) and Heavy-Heavy Duty Trucks (“HHD”) accessing the site use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the lead agency.
6. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations.
7. Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
8. Signs should be posted in the appropriate locations and/or handouts should be provided that show the locations of nearest food options, fueling, truck maintenance services, and other similar convenience services.
9. Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information shall be provided to the City and updated annually, and signs shall be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community. The Compliance Officer also shall coordinate with CARB and SCAQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.
10. Signs shall be posted in the appropriate locations heavy truck drivers to park and perform any maintenance of trucks in designated on-site areas and not within the surrounding community or on public streets.
11. All future warehouse/distribution facilities generally shall be designed so that truck bays and loading docks are a minimum of 300 feet, measured from the property line of the sensitive receptor to the nearest dock door using a direct straight-line method. This distance may be reduced if the site design includes berms or other similar features to appropriately shield and buffer the sensitive receptors from the active truck operations areas. Other setbacks appropriate to the site’s zoning classification shall be incorporated in the design.

12. Facility operators for sites that exceed 250 employees shall establish a rideshare program, in accordance with AQMD rule 2202, with the intent of discouraging single-occupancy vehicle trips and promote alternate modes of transportation, such as carpooling and transit where feasible.

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1 INTRODUCTION

This report presents the results of the AQIA prepared by Urban Crossroads, Inc., for the proposed Majestic Thousand Palms (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.

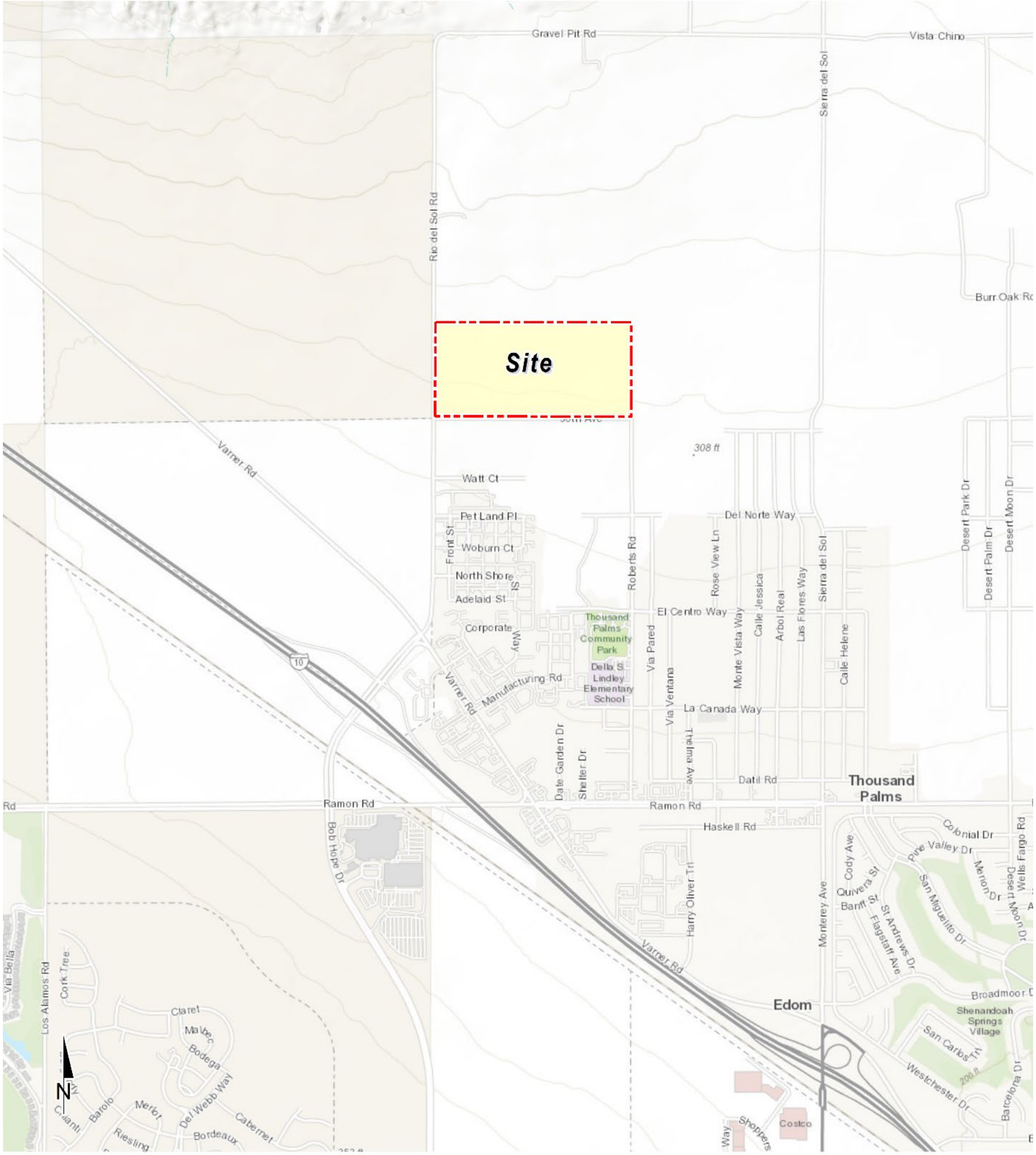
1.1 SITE LOCATION

The proposed Project is located on the northeast corner of Rio Del Sol Road and 30th Avenue in the County of Riverside, as shown on Exhibit 1-A.

1.2 PROJECT DESCRIPTION

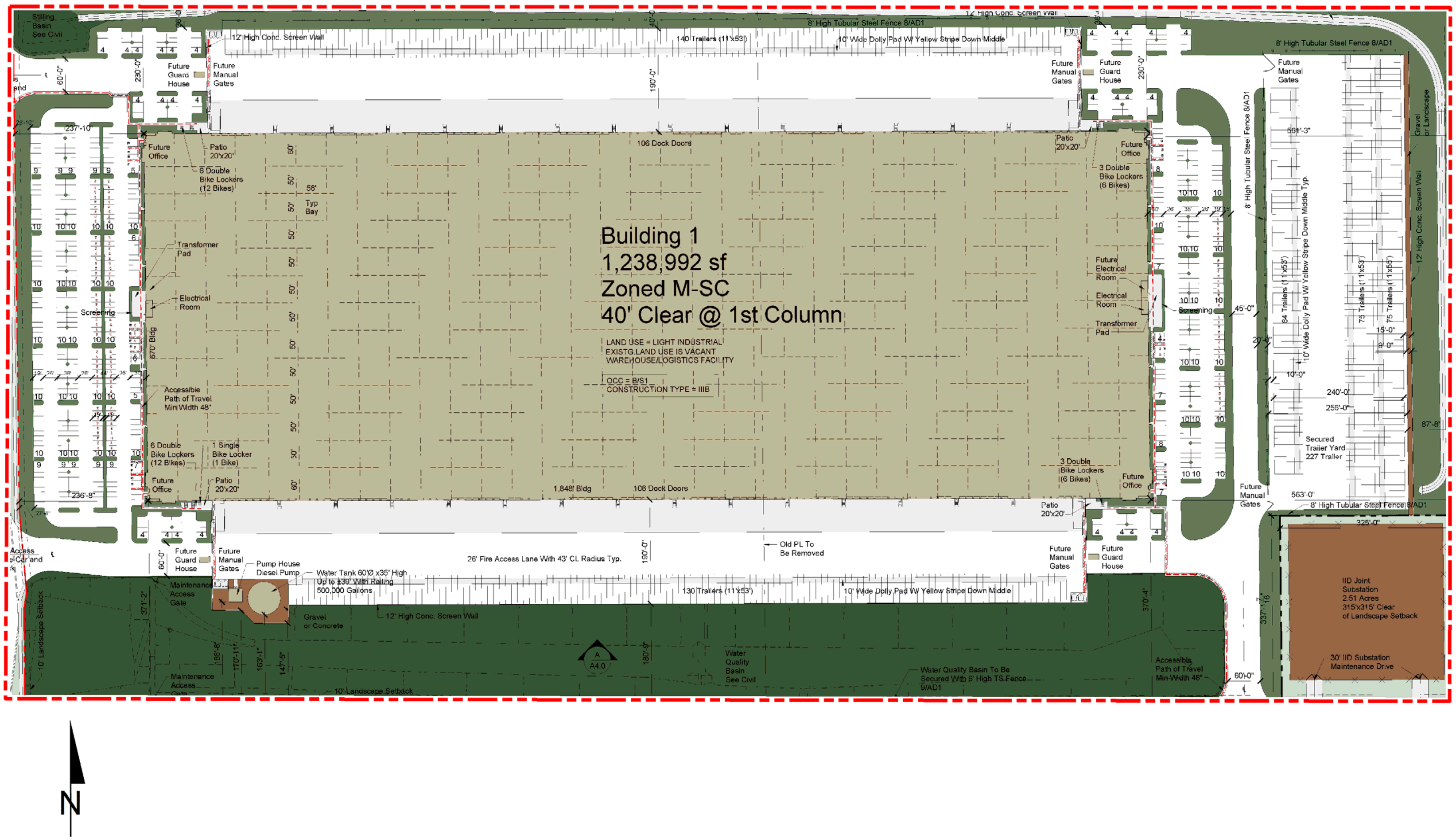
A preliminary site plan for the proposed Project is shown on Exhibit 1-B. The Project is proposed to consist of the development of a 1,238,992 square foot warehouse building and is anticipated to be fully developed by 2025. A water quality basin is proposed along the southern boundary of the site and a customer electric substation to be serviced by Imperial Irrigation District (IID) is proposed in the southeastern corner of the site, connected to the IID distribution system by off-site, above-ground, pole-mounted utility lines.

EXHIBIT 1-A: LOCATION MAP



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS

EXHIBIT 1-B: SITE PLAN



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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 ATMOSPHERIC SETTING

The Project site is located within Salton Sea Air Basin (SSAB) within the jurisdiction of the SCAQMD. The SSAB (also referred to herein as "the Basin") is aligned in a north-west-southwest orientation stretching from Banning Pass to the Mexican border. The regional climate, as well as the temperature, wind, humidity, precipitation, and amount of sunshine significantly influence the air quality in the Basin.

The climate of the Coachella Valley is a continental, desert-type climate, with hot summers, mild winters, and very little annual rainfall. Precipitation is less than six inches annually and occurs mostly in the winter months from active frontal systems and in the late summer months from thunderstorms. Almost all of the annual rainfall comes from the fringes of mid-latitude storms from late November to early April with summers often being completely dry. Temperatures exceed 100 degrees Fahrenheit (°F), on the average, for four months each year, with daily highs near 110 °F during July and August. Summer nights are cooler with minimum temperatures in the mid-70s. During the winter season, daytime highs are quite mild, but the dry air is conducive to nocturnal radiational cooling, with early morning lows around 40 °F.

The Coachella Valley and adjacent areas are exposed to frequent gusty winds. The flat terrain of the valley and strong temperature differentials, created by intense solar heating, produce moderate winds and deep thermal convection. Wind speeds exceeding 31 miles per hour (mph) occur most frequently in April and May. On an annual basis, strong winds (greater than 31 mph) are observed 0.6 percent of the time and speeds of less than 6.8 mph account for more than one-half of the observed winds. Prevailing winds are from the northwest through southwest, with secondary flows from the southeast. The strongest and most persistent winds typically occur immediately to the east of Banning Pass, which is noted as a wind power generation resource area. Aside from this locale, the wind conditions in the remainder of the Coachella Valley are geographically distinct. Stronger winds tend to occur closer to the foothills. Less frequently, widespread gusty winds occur over all areas of the Valley.

Portions of the SSAB experience surface inversions almost every day of the year. Inversions in the SSAB are attributed to strong surface heating, but are usually broken, allowing pollutants to disperse more easily. Weak surface inversions are caused by cooling of air in contact with the cold surface of the earth at night. In the valleys and low-lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. In addition, inversions in the SSAB caused by the presence of the Pacific high-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms the air to a temperature higher than the air below. This subsidence inversion can act as a nearly impenetrable lid to the vertical mixing of pollutants. These inversions can persist for one or more days, causing air stagnation and the buildup of pollutants. Subsidence inversions are common from November through June and are relatively absent from July through October.

Within the Project area, there is a natural sand migration process, called "blowsand," that has direct and indirect effects on air quality. Blowsand produces particulate matter (PM_{10}) in two ways: (1) by direct particle erosion and fragmentation as natural PM_{10}, and (2) by secondary effects, as sand deposits on road surfaces.

Also, where water has already receded around the Salton Sea, the surface areas contain a salty mix of sediments that can change from a hardened salt crust to a fluffy soft layer of dust depending upon the season. Exposed sediments could elevate PM_{10} levels throughout the region. Almost 120,000 acres of Salton Sea lakebed could be exposed as inflows to the Sea decrease in future years. Local communities may be affected by 60,000 potentially dust-blowing acres, which will cause PM_{10} levels to rise.

2.2 CRITERIA POLLUTANTS

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 (4):

TABLE 2-1: CRITERIA POLLUTANTS

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 SSAB. 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

Criteria Pollutant	Description	Sources	Health Effects
			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 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).	Coal or oil burning power plants and industries, refineries, diesel engines	A few minutes of exposure to low levels of SO_2 can result in airway constriction 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 SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 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 SO_2 levels. In these studies, efforts to separate the effects of SO_2 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.

Criteria Pollutant	Description	Sources	Health Effects
NO_X	NO_X consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with O_2. Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. NO_X is typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitoring station.	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 NO_2 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 NO_2 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 NO_2 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 O_3 exposure increases when animals are exposed to a combination of O_3 and NO_2.
O_3	O_3 is a highly reactive and unstable gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally	Formed when reactive organic gases (ROG) and NO_X react in the presence of sunlight. ROG sources	Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O_3 effects. Short-

Criteria Pollutant	Description	Sources	Health Effects
	highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.	term exposure (lasting for a few hours) to O_3 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 O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 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 live in communities with high O_3 levels. O_3 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 O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.
Particulate Matter	PM_{10}: 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	Sources of PM_{10} include road dust, windblown dust and construction. Also formed from other pollutants (acid	A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections,

Criteria Pollutant	Description	Sources	Health Effects
	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 PM_{10} is considered a criteria air pollutant. $PM_{2.5}$: A similar air pollutant to PM_{10} 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 SO_4 formed from SO_2 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 weather conditions. $PM_{2.5}$ is a criteria air pollutant.	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).	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. 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 $PM_{2.5}$.
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	Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic,	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.

Criteria Pollutant	Description	Sources	Health Effects
	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 criteria pollutant. The terms VOC and ROG (see below) interchangeably.	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.	
ROG	Similar to VOC, ROGs 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. ROGs 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.
Lead (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	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

Criteria Pollutant	Description	Sources	Health Effects
	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.		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 environmental Pb exposure of their mothers.
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 (5).	Odors can come from many sources including animals, human activities, industry, natures, 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.

2.3 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 2-2 (6).

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 May ,4 2016 and are presented in Table 2-2. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, 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 (7).

TABLE 2-2: 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 $\mu g/m^3$)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 $\mu g/m^3$)		0.070 ppm (137 $\mu g/m^3$)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 $\mu g/m^3$	Gravimetric or Beta Attenuation	150 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 $\mu g/m^3$		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 $\mu g/m^3$	Gravimetric or Beta Attenuation	12.0 $\mu g/m^3$	15 $\mu g/m^3$	
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 $\mu g/m^3$)	Gas Phase Chemiluminescence	100 ppb (188 $\mu g/m^3$)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 $\mu g/m^3$)		0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 $\mu g/m^3$)	Ultraviolet Fluorescence	75 ppb (196 $\mu g/m^3$)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 $\mu g/m^3$)	
	24 Hour	0.04 ppm (105 $\mu g/m^3$)		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 $\mu g/m^3$	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 $\mu g/m^3$ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 $\mu g/m^3$		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 $\mu g/m^3$	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu g/m^3$)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 $\mu g/m^3$)	Gas Chromatography			

See footnotes on next page ...

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TABLE 2-2: 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 $\mu g/m^3$ 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 December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ 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 $\mu g/m^3$ 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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2.4 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: CO, Pb, O_3, particulate matter (PM_{10} and $PM_{2.5}$), NO_2, and SO_2 which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Pb air monitoring sites throughout the air district (8). On December 28, 2021, CARB posted the proposed 2021 amendments to the state and national area designations. See Table 2-3 for attainment designations for the SSAB (9). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SSAB.

TABLE 2-3: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SSAB

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	-
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Attainment	Unclassifiable/Attainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Pb	Attainment	Unclassifiable/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SSAB
"-" = The national 1-hour O_3 standard was revoked effective June 15, 2005.

2.5 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 provide Southern California residents about the air quality conditions. The Project site is located within the Coachella Valley monitoring area (SRA 30). The Coachella Valley 1 monitoring station is located approximately 8.0 miles west of the Project site and reports air quality statistics for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$.

The most recent three (3) years of published data available from SCAQMD is shown on Table 2-4 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 O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2019 through 2021 was obtained from the SCAQMD Air Quality Data Tables (10). Additionally, data for SO_2 has been omitted as attainment is regularly met in the SSAB and few monitoring stations measure SO_2 concentrations.

TABLE 2-4: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2019-2021

Pollutant	Standard	Year		
		2019	**2020**	**2021**
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.100	0.119	0.110
Maximum Federal 8-Hour Concentration (ppm)		0.084	0.094	0.092
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	5	9	10
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	34	49	38
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.3	0.8	0.8
Maximum Federal 8-Hour Concentration	> 20 ppm	0.7	0.5	0.4
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.041	0.047	0.036
Annual Average		0.007	0.007	0.007
PM_{10}				
Maximum Federal 24-Hour Concentration (μg/m^3)	> 150 μg/m^3	75	48	100
Annual Federal Arithmetic Mean (μg/m^3)		29.5	20.4	21.4
Number of Days Exceeding Federal 24-Hour Standard	> 150 μg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 μg/m^3	5	0	9
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (μg/m^3)	> 35 μg/m^3	15.50	23.90	13.50
Annual Federal Arithmetic Mean (μg/m^3)	> 12 μg/m^3	6.05	6.42	6.2
Number of Days Exceeding Federal 24-Hour Standard	> 35 μg/m^3	0	0	0

μg/m^3 = Microgram per Cubic Meter
Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ was obtained from SCAQMD Air Quality Data Tables.

2.6 REGULATORY BACKGROUND

2.6.1 FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb (11). 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 (12). 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) (13) (14). 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 2-3 (previously presented) provides the NAAQS within the SSAB.

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.

2.6.2 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 SSAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (15) (11).

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 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.

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.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (16). 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 (17):

NONRESIDENTIAL MANDATORY MEASURES

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty EV supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (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 reuse 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:
  - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
  - 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).
  - 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 combine 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).
  - 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 of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (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 uses 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).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).

- 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).

2.6.3 AQMP

Currently, the NAAQS and CAAQS are exceeded in most parts of the SSAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards (18). The Coachella Valley PM_{10} State Implementation Plan (CVSIP) establishes additional controls needed to demonstrate expeditious attainment of the PM_{10} standards in the Coachella Valley, located in the Salton Sea Air Basin. This area which is under South Coast AQMD's jurisdiction has been designated as a serious non-attainment area for PM_{10}. 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. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.10.

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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 SSAB 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 also developed regional significance thresholds for other regulated pollutants, as summarized at Table 3-1 (19). The SCAQMD's *CEQA Air Quality Significance Thresholds* (March 2023) indicate that any projects in the SSAB 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: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	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

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.

In May 2023, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2022.1.1.18. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (20). 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 through 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, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following construction activities:

- Site Preparation
- Grading
- Substation Construction
- Building Construction
- Off-Site Utility and Infrastructure Improvements
- Paving
- Architectural Coating

SITE PREPARATION AND 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. It is anticipated that the Project would require approximately 101,140 cubic yards of soil import. Site preparation and grading activities are modeled as sequential phases.

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. To present a reasonable worst-case scenario, the building construction, paving, and architectural coating activities are modeled as overlapping phases.

SUBSTATION CONSTRUCTION ACTIVITIES

Construction of the electrical substation located in the southeast corner of the Project site is expected to begin prior to the building construction phase in August 2024, and would utilize the same construction equipment as will be used for the building construction phase of Project construction plus an additional crane and two off-highway trucks. With the commencement of building construction activities in October 2024, one crane and two off-highway trucks would continue to be used for substation construction, while the remaining equipment would be used for building construction of the proposed Project.

OFF-SITE UTILITY AND INFRASTRUCTURE IMPROVEMENTS

To support the Project development, there will be grading, trenching, and paving for off-site improvements associated with roadway construction and utility installation for the Project.

To connect the proposed IID Substation to the local electric grid, approximately 8,646 feet of 92 kV above-ground power line would be needed. New poles would be installed along the selected alignment. The poles would be 70 feet in height and constructed of in-line wood pole and steel poles at changes of direction. The wood poles will be 2 feet in diameter at in-line locations. The steel poles will be 7 feet in diameter at changes of direction. During installation, an approximately 10 feet wide by 10 feet long by 15 feet deep maximum ground disturbance area would occur around each pole for installation, and it would take approximately four days to install each pole. Pole installation consists of auguring and removing soil, setting/installing the pole and backfilling. After the poles are installed, electric transmission lines would be anchored to and strung between the poles. The electric line installation process would take approximately 90 working days. Electric line installation consists of pole trucks and spools of new lines at each pole anchoring and spanning from new pole to new pole.

The actual transmission line route has not yet been established; however, several transmission line extension routing options are under consideration. This includes potential off-site transmission line extensions on sections of Sierra del Sol, Avenue 30, Ramon Road, Robert Road, Sierra del Sol, and El Centro Way. This places the off-site utility improvements within a few feet of existing homes depending on the selected alignment.

It is expected that the off-site construction activities would not take place at any one location for more than four days. Construction emissions from this off-site work would, therefore, be relatively short term, not concentrated in one area, and would be reduced at any given location as construction work moves linearly along the existing public right-of-way and farther from sensitive uses. Emissions from off-site infrastructure improvements were modeled in CalEEMod assuming a total of 1.64 miles of linear construction activity.

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 are presented below in Table 3-2. Worker trips are based on CalEEMod defaults. It should be noted that for vendor trips, specifically, CalEEMod only assigns vendor trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity.

TABLE 3-2: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Site Preparation	18	40	0
Grading	20	60	140
Substation Construction	520	103	0
Building Construction	520	103	0
Off-Site Utility and Infrastructure Improvements	8	0	0
Paving	15	0	0
Architectural Coating	104	0	0

3.4.2 CONSTRUCTION DURATION

For purposes of analysis, construction of Project is expected to commence in June 2024 and would last through May 2025. The construction schedule utilized in the analysis, shown in Table 3-3, represents a "worst-case" 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 *CEQA Guidelines* (1).

TABLE 3-3: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Working Days
Site Preparation	6/1/2024	8/23/2024	60
Grading	7/1/2024	11/1/2024	90
Substation Construction	8/1/2024	2/28/2025	152
Building Construction	10/1/2024	5/1/2025	153
Off-Site Utility and Infrastructure Improvements	1/1/2025	3/31/2025	64

[1] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "Off-Road Equipment" 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	Start Date	End Date	Working Days
Paving	4/1/2025	5/1/2025	23
Architectural Coating	11/1/2024	5/1/2025	130

3.4.3 CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, with the exception of the equipment needed for Building Construction which was increased. Each piece of equipment listed in Table 3-4 would 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[1]	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Crawler Tractors	2	8
Substation Construction	Cranes	2	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
	Off-Highway Trucks	2	8
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
Off-Site Utility and Infrastructure Improvements	Excavators	1	8
	Off-Highway Trucks	1	8
	Other Construction Equipment	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8

Construction Activity	Equipment[1]	Amount	Hours Per Day
Architectural Coating	Air Compressors	1	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during the site preparation and grading phases of Project construction.

3.4.4 CONSTRUCTION EMISSIONS SUMMARY

IMPACTS WITHOUT MITIGATION

The estimated maximum daily construction emissions without mitigation are summarized on Table 3-5. Detailed construction model outputs are presented in Appendix 3.1. Without mitigation, emissions resulting from the Project construction will exceed the threshold established by the SCAQMD for emissions of NO_X.

TABLE 3-5: OVERALL CONSTRUCTION EMISSIONS SUMMARY (WITHOUT MITIGATION)

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2024	14.60	124.00	153.00	0.29	25.10	11.30
2025	64.80	27.80	108.00	0.07	12.90	3.67
Winter						
2024	66.30	91.40	144.00	0.25	28.50	9.29
2025	62.40	42.00	108.00	0.13	20.70	5.73
Maximum Daily Emissions	**66.30**	**124.00**	**153.00**	**0.29**	**28.50**	**11.30**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1.

RECOMMENDED CONSTRUCTION MITIGATION MEASURES

MM AQ-1

Prior to issuance of each grading permit and building permit, the applicant shall provide evidence that all offroad equipment used during construction shall meet CARB Tier 4 Interim emission standards or better.

IMPACTS WITH MITIGATION

The estimated maximum daily construction emissions without mitigation are summarized on Table 3-6. Detailed construction model outputs are presented in Appendix 3.1. With implementation of MM AQ-1, emissions resulting from the Project construction will not exceed the thresholds established by the SCAQMD for emissions of any criteria pollutant. Regional emissions resulting from the Project construction would not exceed the regional thresholds established for emissions of any criteria pollutant.

TABLE 3-6: OVERALL CONSTRUCTION EMISSIONS SUMMARY (WITH MITIGATION)

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2024	5.80	75.30	163.00	0.29	20.70	7.23
2025	63.20	26.00	110.00	0.07	12.20	3.09
Winter						
2024	61.20	69.90	159.00	0.25	26.10	7.15
2025	60.10	40.60	122.00	0.13	19.90	5.00
Maximum Daily Emissions	**63.20**	**75.30**	**163.00**	**0.29**	**26.10**	**7.23**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1.

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- Stationary Source Emissions
- On-Site Cargo Handling Equipment Emissions
- Transportation Refrigeration Units (TRU) Emissions

3.5.1 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, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that as 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 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

3.5.2 ENERGY SOURCE EMISSIONS

COMBUSTION EMISSIONS ASSOCIATED WITH ELECTRICITY

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 SSAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Based on information provided by the Project applicant, the site is also not expected to utilize natural gas for the building envelope, and therefore would not generate any emissions from direct energy consumption. Electricity usage associated with the Project was calculated based on client provided data and includes 20% of the building user’s electric power from renewable sources.

3.5.3 MOBILE SOURCE EMISSIONS

The Project related operational air quality emissions derive primarily from vehicle trips generated by the Project, including employee trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the *Majestic Thousand Palms (GPA220004, CZ2200013, PPT220022, CEQ220033) Traffic Analysis* were utilized in this analysis (21).

APPROACH FOR ANALYSIS OF THE PROJECT

In order to determine emissions from passenger car vehicles, CalEEMod defaults for trip length and trip purpose were utilized. Based on the *Majestic Thousand Palms Supplemental Vehicle Miles Traveled (VMT) Analysis*, a passenger vehicle trip length of 15.6 miles was utilized (22). This analysis assumes that passenger cars include Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1[2] & LDT2[3]), Medium-Duty-Vehicles (MDV), and Motorcycles (MCY) vehicle types. In order to account for emissions generated by passenger cars, the fleet mix in Table 3-7 was utilized.

[2] Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

[3] Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

TABLE 3-7: PASSENGER CAR FLEET MIX

Land Use	% Vehicle Type				
	LDA	LDT1	LDT2	MDV	MCY
High-Cube Fulfillment Center High-Cube Cold Storage	50.75%	4.55%	25.13%	17.58%	1.99%

Note: The Project-specific passenger car fleet mix used in this analysis is based on a proportional split utilizing the default CalEEMod percentages assigned to LDA, LDT1, LDT2, and MDV vehicle types.

To determine emissions from trucks for the proposed industrial uses, the analysis utilized a truck trip length of 92.8 miles based on the *Majestic Thousand Palms Supplemental Vehicle Miles Traveled (VMT) Analysis* (22) and an assumption of 100% primary trips. This trip length assumption is higher than the CalEEMod defaults for trucks. In order to be consistent with the *Majestic Thousand Palms (GPA220004, CZ2200013, PPT220022, CEQ220033) Traffic Analysis*, trucks are broken down by truck type. The truck fleet mix is estimated by rationing the trip rates for each truck type based on information provided by the SCAQMD recommended truck mix, by axle type. Heavy trucks are broken down by truck type (or axle type) and are categorized as either Light-Heavy-Duty Trucks (LHDT1[4] & LHDT2 [5])/2-axle, Medium-Heavy-Duty Trucks (MHDT)/3-axle, and Heavy-Heavy-Duty Trucks (HHDT)/4+-axle. To account for emissions generated by trucks, the fleet mix in Table 3-8 was utilized.

TABLE 3-8: TRUCK FLEET MIX

Land Use	% Vehicle Type			
	LHDT1	LHDT2	MHDT	HHDT
High-Cube Fulfillment Center High-Cube Cold Storage	14.20%	4.32%	10.73%	70.74%

Note: Project-specific truck fleet mix is based on the number of trips generated by each truck type (LHDT1, LHDT2, MHDT, and HHDT) relative to the total number of truck trips.

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 were calculated using CalEEMod.

3.5.4 ON-SITE CARGO HANDLING EQUIPMENT SOURCE EMISSIONS

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For this Project, on-site modeled operational

[4] Vehicles under the LHDT1 category have a GVWR of 8,501 to 10,000 lbs.

[5] Vehicles under the LHDT2 category have a GVWR of 10,001 to 14,000 lbs.

equipment includes up to four (4) 175 horsepower (hp), natural gas-powered cargo handling equipment – port tractor operating 4 hours a day[6] for 365 days of the year.

3.5.5 TRU EMISSIONS

In order to account for the possibility of refrigerated uses, trucks associated with the cold-storage land use are assumed to also have TRUs. For modeling purposes, 186 two-way truck trips during have been estimated to include TRUs (e.g., all truck trips that would be associated with the high-cube cold storage use, as summarized in the *Majestic Thousand Palms (GPA220004, CZ2200013, PPT220022, CEQ220033) Traffic Analysis* (21). TRUs are accounted for during on-site and off-site travel. The TRU calculations are based on EMissions FACtor Model version 2021 (EMFAC2021), developed by the CARB. EMFAC2021 does not provide emission rates per hour or mile as with the on-road emission model and only provides emission inventories. Emission results are produced in tons per day while all activity, fuel consumption and horsepower hours were reported at annual levels. The emission inventory is based on specific assumptions including the average horsepower rating of specific types of equipment and the hours of operation annually. These assumptions are not always consistent with assumptions used in the modeling of project level emissions. Therefore, the emissions inventory was converted into emission rates to accurately calculate emissions from TRU operation associated with project level details. This was accomplished by converting the annual horsepower hours to daily operational characteristics and converting the daily emission levels into hourly emission rates based on the total emission of each criteria pollutant by equipment type and the average daily hours of operations.

3.5.6 STATIONARY SOURCE EMISSIONS

The proposed Project was conservatively assumed to include installation of a 300 horsepower diesel-powered emergency fire pump, which was estimated to operate for up to 1 hour per day, 1 day per week for up to 50 hours per year for maintenance and testing purposes. Emissions associated with the stationary emergency diesel-powered fire pump were calculated using CalEEMod.

3.5.7 OPERATIONAL EMISSIONS SUMMARY

As previously stated, CalEEMod utilizes summer and winter EMFAC2021 emission factors in order to derive vehicle emissions associated with Project operational activities, which vary by season. The estimated operational-source emissions are summarized on Table 3-9. Detailed operation model outputs for the Project are presented in Appendix 3.2. As shown on Table 3-9, before mitigation, the Project would exceed the numerical thresholds of significance established by the SCAQMD for emissions of VOC and NO_X.

[6] Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.

RECOMMENDED OPERATIONAL MITIGATION MEASURES

MM AQ-2

To facilitate the possible future installation of infrastructure that would charge the batteries that power the motors of electric-powered trucks, the following shall be installed. 1) At shell building permit, an electrical room(s) and/or exterior area(s) of the site shall be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks. Conduit shall be installed from this designated area where the panel would be located to the onsite location where the charging facilities would be located and where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks. 2) At issuance of a building permit for Tenant Improvements, if the tenant is served by electric trucks, the electrical panel and charging units shall be installed, and the electrical wiring connections shall be made from the electrical panel to the charging units. If the tenant is not served by electric trucks, this requirement shall not apply.

MM AQ-3

Install passenger car EV charging stations and designated carpool parking stalls per the provisions of the California Green Building Standards Code and require that each building be constructed with an adequately sized electrical panel(s) and conduit to accommodate future EV charging stations at a minimum of 5 percent of the passenger car parking spaces.

MM AQ-4

As a condition of certificates of occupancy, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, or gasoline and all indoor cargo handling equipment shall be required to be powered by electricity.

MM AQ-5

In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants with information related to SCAQMD's Carl Moyer Program, or other such programs that promote truck retrofits or "clean" vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. Tenants shall be notified about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel-fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the project vicinity; 4) access to alternative fueling stations proximate to the site that supply compressed natural gas; and 5) the United States Environmental Protection Agency's SmartWay program.

MM AQ-6

Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas of the warehouse portion of the Project that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to the issuance of an occupancy permit, the City shall conduct a site inspection to ensure that the signs are in place.

MM AQ-7

Once constructed, the project proponent shall ensure that all building tenants shall utilize electric equipment for landscape maintenance to the extent feasible, through requirements in the lease agreements.

MM AQ-8

All future operations shall adhere to the applicable policies:

1. Warehouse/distribution facilities greater than 250,000 square feet shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors. The general queuing and spill-over of trucks onto surrounding public streets shall be prevented. Commercial trucks shall not be parked in the public road right-of-way or nearby residential areas.
2. Truck driveways shall generally be placed, on streets that do not have fronting sensitive receptors.
3. Sites shall clearly mark entry and exit points for trucks and service vehicles.
4. Sites shall be densely screened with landscaping along all bordering streets and adjacent sensitive receptors, with trees spaced no further apart than 25 feet on center. Fifty percent of the landscape screening shall include a minimum of 36- inch box trees. Facility operators will be responsible to establish a long-term maintenance mechanism to assure that the landscaping remains in place and functional in accordance with the approved landscaping plan.
5. Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks (“MHDT”) and Heavy-Heavy Duty Trucks (“HHD”) accessing the site use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the lead agency.
6. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations.
7. Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
8. Signs should be posted in the appropriate locations and/or handouts should be provided that show the locations of nearest food options, fueling, truck maintenance services, and other similar convenience services.
9. Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information shall be provided to the City and updated annually, and signs shall be

posted in visible locations providing the contact information for the Compliance Officer to the surrounding community. The Compliance Officer also shall coordinate with CARB and SCAQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.

10. Signs shall be posted in the appropriate locations heavy truck drivers to park and perform any maintenance of trucks in designated on-site areas and not within the surrounding community or on public streets.
11. All future warehouse/distribution facilities generally shall be designed so that truck bays and loading docks are a minimum of 300 feet, measured from the property line of the sensitive receptor to the nearest dock door using a direct straight-line method. This distance may be reduced if the site design includes berms or other similar features to appropriately shield and buffer the sensitive receptors from the active truck operations areas. Other setbacks appropriate to the site's zoning classification shall be incorporated in the design.
12. Facility operators for sites that exceed 250 employees shall establish a rideshare program, in accordance with AQMD rule 2202, with the intent of discouraging single-occupancy vehicle trips and promote alternate modes of transportation, such as carpooling and transit where feasible.

These strategies would contribute to reducing heavy duty truck emissions associated with the proposed Project. The proposed Project would not conflict with these strategies. Trucks onsite are required to comply with CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation, which requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated emissions.

Despite the mitigation measures provided by Project and the anticipated regulations implemented by the EPA and CARB to improve truck efficiency, the estimated long-term emissions generated under full buildout of the proposed Project would exceed the SCAQMD's regional operational significance thresholds (see Tables 3-8) and would cumulatively contribute to the nonattainment designations in the SSAB. The predominance of the Project's operational-source emissions are generated by passenger cars and trucks accessing the Project. Neither the Project Applicant nor the City have regulatory authority to control tailpipe emissions, and no feasible MMs beyond the measures identified herein exist that would reduce Project operational-source NO_X emissions to levels that are less-than-significant. On this basis, it is concluded that Project operational-source NO_X emissions cannot be definitively reduced below applicable SCQMD thresholds and therefore, the proposed Project would result in a significant and unavoidable impact in this regard.

The summary list of mitigation measures above are all designed to reduce emissions attributable to the proposed Project. Although not specifically quantifiable, these measures will result in a reduction of air quality emissions. Therefore, the operational emissions shown below is a conservative forecast of air quality emissions without implementation of mitigation measures, and as shown on Table 3-9, will exceed the applicable SCAQMD thresholds for VOCs and NO_X during operations.

TABLE 3-9: SUMMARY OF PEAK OPERATIONAL EMISSIONS (WITHOUT MITIGATION)

Source	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summer						
Mobile Source	11.40	145.00	154.00	1.66	71.60	21.00
Area Source	38.80	0.45	53.90	< 0.005	0.10	0.07
TRU Source	7.76	8.87	0.87	0.00	0.34	0.32
Stationary Source	0.98	2.75	2.51	< 0.005	0.14	0.14
On-Site Equipment	0.59	1.88	82.22	0.00	0.15	0.14
Total Maximum Daily Emissions	**59.53**	**158.95**	**293.50**	**1.66**	**72.33**	**21.67**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**
Winter						
Mobile Source	9.86	156.00	109.00	1.63	71.60	21.00
Area Source	29.90	0.00	0.00	0.00	0.00	0.00
TRU Source	7.76	8.87	0.87	0.00	0.34	0.32
Stationary Source	0.98	2.75	2.51	< 0.005	0.14	0.14
On-Site Equipment	0.59	1.88	82.22	0.00	0.15	0.14
Total Maximum Daily Emissions	**49.09**	**169.50**	**194.60**	**1.63**	**72.23**	**21.60**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod operational-source emissions are presented in Appendix 3.1.

3.6 LOCALIZED SIGNIFICANCE

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 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[7]. LSTs represent the maximum emissions from a project that would not cause

[7] 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."

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* (23).

EMISSIONS CONSIDERED

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (24)." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

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:

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 height and a 1 meter (approximately 3.28 feet) initial vertical dimension (sigma z) were utilized for fugitive dust emissions of PM_{10} and $PM_{2.5}$ consistent with SCAQMD's LST guidance.

In order to account for equipment exhaust emissions from NO_2, CO, PM_{10}, and $PM_{2.5}$ a release height of 5.0 meters was utilized consistent with SCAQMD's LST guidance.

METEOROLOGICAL DATA AND MODEL OPTIONS

In order to account for meteorological conditions at the Project site, meteorological data from the SCAQMD's Redlands 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.

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 where an individual could remain for 24 hours to the Project site has been used to determine 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.

LSTs apply, even for non-sensitive land uses, consistent with *LST Methodology* and SCAQMD guidance. 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 onsite for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 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* (24)." 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 PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8-hours.

PROJECT-RELATED RECEPTORS

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.

R1: Location R1 represents the existing residence at 72758 30th Avenue, approximately 1,329 feet southeast of the Project site. R1 is placed in the private outdoor living area (backyard) facing the Project site.

R2: Location R2 represents the existing residence at 30525 Roseview Lane, approximately 1,709 feet southeast of the Project site. R2 is placed in the private outdoor living area (backyard) facing the Project site.

R3: Location R3 represents the existing residence at 30524 Robert Road, approximately 1,396 feet south of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, R3 is placed at the building façade.

R4: Location R4 represents the Legacy Apartments at 72940 El Centro Way, approximately 1,472 feet south of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, R4 is placed at the building façade.

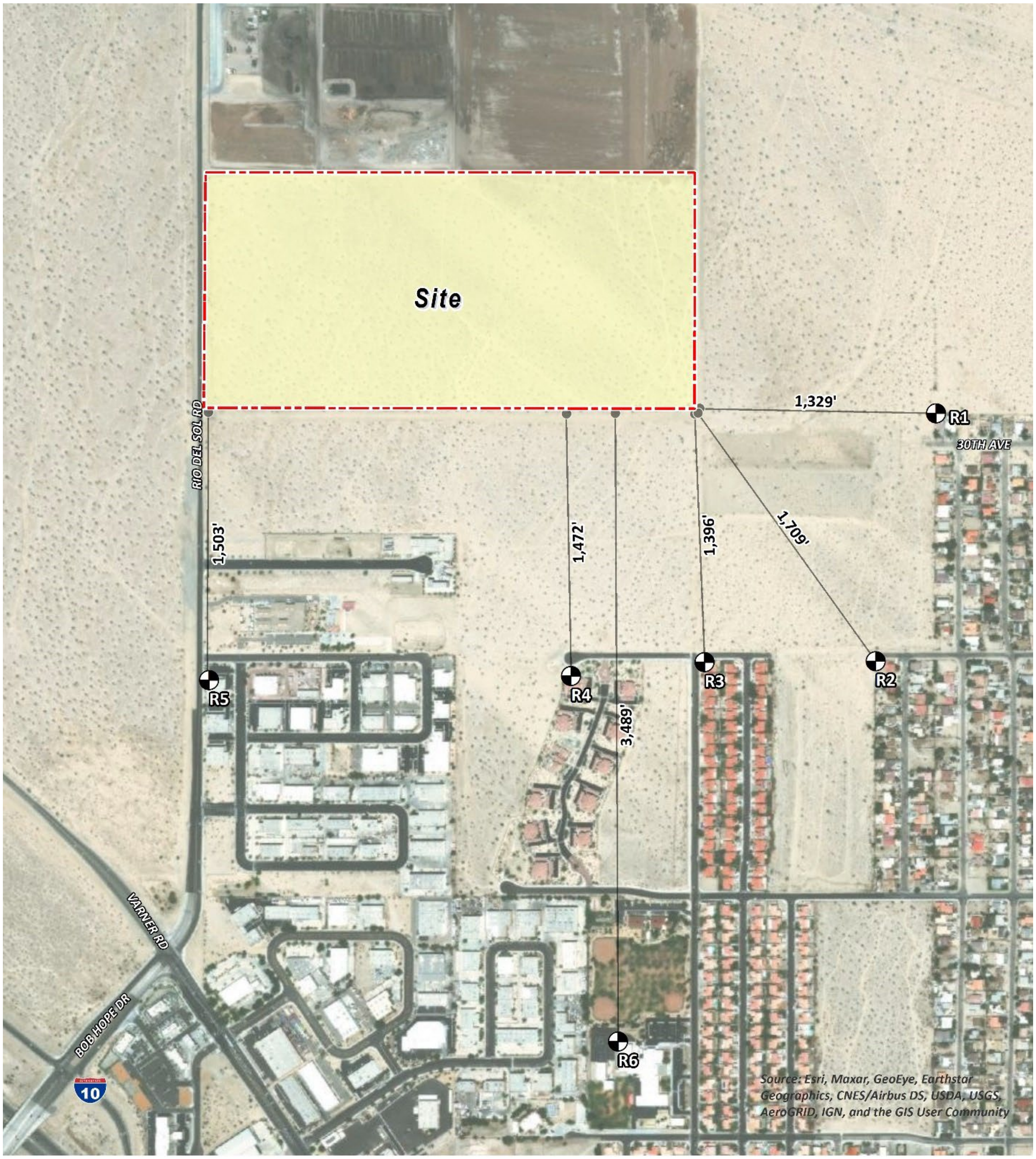
R5: Location R5 represents the potential worker receptor at the RSD – Refrigeration Supplies Distributor facility located at 30571 Front Street, approximately 1,503 feet south of the Project site.

R6: Location R6 represents Della S. Lindley Elementary School, located at 31495 Robert Road, approximately 3,489 feet south of 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).

It should be noted that for clarity purposes, the receptors presented in Exhibit 3-A do not represent all modeled receptors. A total of 97 receptors were modeled, extending up to three miles from the Project site.

EXHIBIT 3-A: RECEPTOR LOCATIONS



N

LEGEND:

Site Boundary

Distance from receptor to Project site boundary (in feet)

Receptor Locations

3.7 CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS

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 on Table 3-10 (without mitigation) and Table 3-11 (with mitigation). All other modeled locations in the study area would experience a lesser concentration and consequently a lesser impact. As such, the Project's localized impacts during construction activity would be less than significant. Outputs from the model runs for construction LSTs are provided in Appendix 3.6.

TABLE 3-10: LOCALIZED SIGNIFICANCE SUMMARY PEAK CONSTRUCTION (WITHOUT MITIGATION)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.02	0.00	1.04E-02	0.27	0.13
Background Concentration [A]	1.3	0.7	0.047		
Total Concentration	**1.32**	**0.70**	**0.06**	**0.27**	**0.13**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data. Per SCAQMD LST guidance, PM_{10} and $PM_{2.5}$ background concentrations are not considered.
Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in μg/m³. All others are expressed in ppm.

TABLE 3-11: LOCALIZED SIGNIFICANCE SUMMARY PEAK CONSTRUCTION (WITH MITIGATION)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.02	0.00	5.50E-03	0.25	0.11
Background Concentration [A]	1.3	0.7	0.047		
Total Concentration	**1.32**	**0.70**	**0.05**	**0.25**	**0.11**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data. Per SCAQMD LST guidance, PM_{10} and $PM_{2.5}$ background concentrations are not considered.
Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in μg/m³. All others are expressed in ppm.

3.8 OPERATIONAL-SOURCE EMISSIONS LST ANALYSIS

OPERATIONAL-SOURCE LOCALIZED EMISSIONS

The LST analysis generally includes on-site sources (area, energy, mobile, and on-site cargo handling equipment – are previously discussed in Section 3.5 of this report). However, it should be noted that the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. As such, to establish a maximum potential impact scenario for analytic purposes, the modeled emissions include all on-site Project-related stationary (area) sources and on-site Project-related mobile emissions. In order to account for on-site mobile emissions, a trip length of one mile was utilized for both trucks and passenger cars.

In order to account for any potential impacts to on-site receptors as a result of operational activity, a scenario conservatively assuming 2025 emissions was analyzed. As shown in Table 3-12 below, emissions would not exceed SCAQMD's localized significance thresholds at the maximally exposed on-site receptors as a result of operational activities.

TABLE 3-12: LOCALIZED SIGNIFICANCE SUMMARY PEAK OPERATIONS (WITHOUT MITIGATION)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	1.85E-02	1.23E-02	1.62E-03	0.09	0.04
Background Concentration [A]	1.3	0.7	0.047		
Total Concentration	**1.32**	**0.71**	**0.05**	**0.09**	**0.04**
SCAQMD Localized Significance Threshold	20	9	0.18	2.5	2.5
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data. Per SCAQMD LST guidance, PM_{10} and $PM_{2.5}$ background concentrations are not considered.

Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in μg/m^3. All others are expressed in ppm.

3.9 CO "HOT SPOT" ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or "hot spots." Further, detailed modeling of Project-specific CO "hot spots" is not needed to reach this conclusion.

An adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the SSAB was designated nonattainment under the CAAQS and NAAQS for CO.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in

California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SSAB is now designated as attainment, as previously noted in Table 2-3. Also, CO concentrations in the Project vicinity have steadily declined, as indicated by historical emissions data presented previously at Table 2-4. To establish a more accurate record of baseline CO concentrations affecting the SSAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards, as shown on Table 3-13.

TABLE 3-13: CO MODEL RESULTS

Intersection Location	CO Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire Boulevard/Veteran Avenue	4.6	3.5	3.7
Sunset Boulevard/Highland Avenue	4	4.5	3.5
La Cienega Boulevard/Century Boulevard	3.7	3.1	5.2
Long Beach Boulevard/Imperial Highway	3	3.1	8.4

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations
Notes: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

It should be noted that SCAQMD has not conducted specific CO hotspots analysis for the SSAB as they have conducted it for the SCAB. However, since background concentrations are similarly low in both air basins, the SSAB is located within the jurisdiction of SCAQMD, and background traffic volumes in the SSAB are lower than those in the SCAB and therefore a lesser impact would be expected, it is appropriate to apply the SCAQMD criteria developed based on the SCAB when analyzing CO hotspots within the SSAB. As identified within SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the basin were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (25). In contrast, an adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 0.8 ppm and 0.4 ppm, respectively (data from Coachella Valley 1 station for 2021). Therefore, even if the traffic volumes for the proposed Project were ten times the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, due to the on-going improvements in ambient air quality and vehicular emissions controls, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections. As noted above, only 0.7 ppm were attributable to the traffic volumes and congestion at one of the busiest intersections in the SCAB. Therefore if these traffic volumes were multiplied by ten times, it could be expected that the CO attributable to traffic would increase tenfold as well, resulting in 7 ppm – even if this were added to either the 1-hour or 8-hour CO concentrations within the Project study area, this would result in 7.8 ppm and 7.4 ppm for the 1-hr and 8-hr timeframes, respectively. Neither of which would exceed the applicable 1-hr standard of 20 ppm or the 8-hr standard of 9 ppm.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour (vph) where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The *2003 AQMP*, and as previously shown in Table 3-13, estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[8]

Traffic volumes generating the CO concentrations for the "hot spot" analysis is shown on Table 3-14. The busiest intersection evaluated for AM traffic volumes was at Wilshire Blvd. and Veteran Ave., which has an AM traffic volume of approximately 8,062 vehicles per hour. Alternatively, the busiest intersection for PM traffic volumes was at La Cienega Boulevard and Century Boulevard, which has a PM traffic volume of 8,674 vph (25).

TABLE 3-14: TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire Boulevard/Veteran Avenue	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset Boulevard/Highland Avenue	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega Boulevard/Century Boulevard	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach Boulevard/Imperial Highway	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

Source: 2003 AQMP

As summarized on Table 3-15 below, the intersection of Bob Hope Drive and Ramon Road would have the highest AM and PM traffic volumes of 4,290 vph and 4,268 vph, respectively. As such, total traffic volumes at the intersections considered are less than the traffic volumes identified in the *2003 AQMP*. As such, the Project considered herein along with background and cumulative development would not produce the volume of traffic required to generate a CO "hot spot"

[8] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO "hot spots" are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

TABLE 3-15: PEAK HOUR TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Bob Hope Dr. & Ramon Rd.	690/1,429	1,682/1,197	1,303/1,168	615/474	4,290/4,268
Bob Hope Dr. & I-10 EB Ramps	534/961	1,029/911	1,088/660	0/0	2,651/2,532
Bob Hope Dr. & I-10 WB Ramps	818/1,105	600/694	0/0	947/719	2,365/2,518
Varner Rd. & Ramon Rd.	632/436	315/665	799/445	607/558	2,353/2,104

Source: *Majestic Thousand Palms Traffic Analysis* (Urban Crossroads, Inc., 2023)

3.10 AQMP

The Project site is located within the SSAB, 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 SSAB. 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 CAAQS, 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 (26). 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 (27). The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below. The Project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (28). These indicators are discussed below:

3.10.1 CONSISTENCY CRITERION NO. 1

The proposed Project will not 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

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if localized or regional significance thresholds were exceeded. As evaluated, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds after implementation of MM AQ-1. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

The Project's localized operational-source emissions would not exceed applicable LSTs. However, Project operational-source emissions would exceed applicable regional thresholds for emissions of VOC and NO_X. Accordingly, Project operational-source VOC and NO_X emissions exceedances would therefore increase the frequency or severity of existing air quality violations and would cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

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

3.10.2 CONSISTENCY CRITERION NO. 2

The Project will not 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 with implementation of MM AQ-1, 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 (29).

The General Plan designates the Project site for "Manufacturing-Service Commercial (M-SC)" and "Residential Agriculture (R-A)" uses. Implementation of the Project will require an amendment to the General Plan Land Use designation and Zoning designation of the Project Site to change the entire site to "Manufacturing-Service Commercial (M-SC)."

Although the Project is not consistent with the current General Plan land use designations at this time, approval of the Project's proposed GPA 220004 would ensure the Project's land uses are fully consistent with the General Plan land use designations for the property. However, because the Project would result in operational VOC and NOX emissions that would exceed the SCAQMD regional thresholds, and because the Project's proposed land uses are not consistent with the land use modeling inputs used in the 2022 SCAQMD AQMP, the Project is therefore determined to be inconsistent with the second criterion.

AQMP CONSISTENCY CONCLUSION

The Project has the potential to result in or cause NAAQS or CAAQS violations. Operational-source emissions would exceed the applicable SCAQMD regional thresholds for VOC and NO_X. As such, the Project is considered to have the potential to conflict with the AQMP and a significant and unavoidable impact would occur with respect to this threshold.

3.11 TOXIC AIR CONTAMINANTS

CONSTRUCTION AND OPERATIONAL

Based on the results of the *Majestic Thousand Palms (GPA220004, CZ2200013, PPT220022, CEQ220033) Mobile Source Health Risk Assessment* (30), emissions generated from the Project during short-term construction and long-term operation will not exceed SCAQMD significance thresholds for cancer and non-cancer health risks. As such, a less than significant impact is expected.

3.12 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.

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.

Additionally, results of the Health Risk Assessment determined that at the land use with the greatest potential exposure to Project construction-source and operational-source DPM emissions, also known as the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project construction-source and operational-source DPM emissions is estimated at 0.77 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction and operational activity. All other receptors during construction and operational activity would experience less risk than what is identified for this location.

3.12.1 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, PM_{10}, 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, PM_{10}, 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.

3.13 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 (31).

3.14 CUMULATIVE IMPACTS

As previously shown in Table 2-3, the CAAQS designate the Project site as nonattainment for O_3 PM_{10}, and $PM_{2.5}$ while the NAAQS designates the Project site as nonattainment for O_3 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* (32). 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 SSAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

CONSTRUCTION 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 IMPACTS

As substantiated in this analysis, Project-level operational-source VOC and NO_X emission impacts would be significant and unavoidable. Per SCAQMD protocols, Project operational-source NO_X emissions impacts would also be cumulatively significant.

COUNTY OF RIVERSIDE GOOD NEIGHBOR POLICY

The County of Riverside adopted the Good Neighbor Policy for Logistics and Warehouse/Distribution Uses (Policy Number F-3) on November 19, 2019. (33) The goal of this policy is to provide a framework through which large-scale logistics and warehouse projects can be designed and operated in a way that lessens any impacts on surrounding communities and the environment.

Specifically, Table 3-14 identifies the following relevant guidelines that have been reviewed for consistency:

TABLE 3-14: GOOD NEIGHBOR POLICY RELEVANT GUIDELINES

Measure		Project Consistency
1.1	An "Air Quality" study shall be prepared in accordance with the Air Quality Management District (AQMD) guidelines which includes both project specific and cumulative impact analysis.	The analysis presented here conforms with applicable analytic guidelines and requirements. The analysis substantiates that all potential air quality impacts, including potential health risk impacts would be less-than-significant.
1.2	A "Health Risk Assessment" shall be prepared when a proposed warehouse/distribution facility is located within 1,000 feet of a sensitive receptor, in accordance with AQMD guidelines.	A health risk assessment has been prepared for the proposed Project in accordance with SCAQMD guidelines and is presented under a separate cover.
2.1	During construction of the warehouse/distribution facility, all heavy-duty haul trucks accessing the site shall have CARB-Compliant 2010 engines or newer approved CARB engine standards.	All heavy-duty haul trucks accessing the Project site during construction will be in compliance with the CARB Truck and Bus regulation, which requires that heavy duty trucks utilize CARB-Compliant 2010 or newer engines by January 1, 2023.
2.2	All diesel fueled off-road construction equipment greater than 50 horsepower, including but not limited to excavators, graders, rubber-tired dozers, and similar "off-road" construction equipment shall be equipped with CARB Tier 4 Compliant engines. If the operator lacks Tier 4 equipment, and it is not available for lease or short-term rental within 50 miles of the project site, Tier 3 or cleaner off-road construction equipment may be utilized subject to County approval.	All diesel-fueled off-road construction equipment rated greater than 50 horsepower will meet CARB Tier 4 standards.
2.3	The maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day. Non-Grading construction activity in areas greater than 10 acres is allowed.	The maximum daily disturbance area will not exceed 10 acres per day during demolition, site preparation and grading.
2.7	Appropriate dust control measures that meet the SCAQMD standards shall be implemented for grading and construction activity.	The Project would comply with all applicable dust control measures, including SCAQMD Rules 401, 402, and 403.
2.8	Construction equipment maintenance records and data sheets, which includes equipment design specifications and equipment emission control tier classifications, as well as any other records necessary to verify compliance, shall be kept onsite and furnished to the County upon request.	The Project will maintain records on-site during construction to demonstrate compliance with the above requirements.
2.9	Construction Contractors shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.	The Project would be required to comply with statewide anti-idling rules. Compliance with anti-idling rules diminishes the potential for localized emissions concentrations and reduces potential adverse effects at sensitive receptors.

Measure		Project Consistency
3.1	Warehouse/distribution facilities should be generally designed so that truck bays and loading docks are a minimum of 300 feet, measured from the property line of the sensitive receptor to the nearest dock door using a direct straight-line method. This distance may be reduced if the site design includes berms or other similar features to appropriately shield and buffer the sensitive receptors from the active truck operations areas. Other setbacks appropriate to the site's zoning classification shall be incorporated in the design.	As designed, the proposed Project's loading docks would not be located within 300 feet of any nearby sensitive receptors.
3.2	Warehouse/distribution facilities shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors. The general queuing and spill-over of trucks onto surrounding public streets shall be prevented. Commercial trucks shall not be parked in the public road right-of-way or nearby residential areas.	The site has been designed such that trucks would not need to queue on streets or elsewhere outside the proposed industrial building they serve. The Project design as approved by the County would act to limit on-site queuing, diminishing the potential for localized emissions concentrations and reduces potential adverse effects at sensitive receptors.
3.11	Warehouse/distribution facilities shall install electrical panels and conduit to facilitate future electrical connections, to eliminate idling of main and auxiliary engines during the loading and unloading process. At all cold storage facilities electrical connections shall be provided to each dock.	Loading docks would be wired for electrical hook-ups, allowing future users to seamlessly integrate electric charging for trucks, when such technology becomes readily available.
4.1	Facility operators shall maintain records of their facility owned and operated fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty ("HHD") trucks with a gross vehicle weight rating greater than 19,500 pounds accessing the site use year CARB compliant 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the County.	The proposed Project will comply with the CARB Truck and Bus regulation, which requires the use of CARB compliant 2010 or newer engines.
4.2	Facility operators shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.	The Project would be required to comply with statewide anti-idling rules. Compliance with anti-idling rules diminishes the potential for localized emissions concentrations and reduces potential adverse effects at sensitive receptors.
4.4	Facility operators shall coordinate with CARB and SCAQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.	The operator of the proposed facility will be required to remain in compliance with applicable air quality, health risk, and trucking regulations.

Measure		Project Consistency
4.5	On-site equipment, such as forklifts, shall be electric with the necessary electrical charging stations provided.	All on-site equipment utilized for the operation of the proposed Project will be electrically powered and charging stations will be provided on-site.
4.6	Facility operators shall establish specific truck routes between the facility and regular destinations, identifying the most direct routes to the nearest highway/freeway and avoid traveling near sensitive receptors.	The operator of the proposed facility will be required to provide this information to drivers accessing the facility.
4.9	A minimum of 5% or as required by the Cal Green Code, whichever is greater of employee parking spaces shall be designated for electric or other alternative fueled vehicles.	As designed, the proposed Project would meet or exceed California Green Building code requirements and provide parking spaces designated for EV charging at a minimum of 5% of the total auto parking stalls.
5.5	Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information should be provided to the County and updated annually, and signs should be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community. These signs shall also identify the website and contact information for the SCAQMD.	A designated Compliance Officer will be appointed for the facility to ensure compliance with these and other applicable requirements and contact information will be provided to the County on an annual basis. Signs will be posted in order to identify the Compliance Officer's contact information, as well as contact information for the SCAQMD.

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5 CERTIFICATIONS

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Majestic Thousand Palms. 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

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

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PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Professionals
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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

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.

Ambient Air Quality Standards

(Updated 5/4/16)

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 $\mu g/m^3$)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 $\mu g/m^3$)		0.070 ppm (137 $\mu g/m^3$)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 $\mu g/m^3$	Gravimetric or Beta Attenuation	150 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 $\mu g/m^3$		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 $\mu g/m^3$	Gravimetric or Beta Attenuation	12.0 $\mu g/m^3$	15 $\mu g/m^3$	
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 $\mu g/m^3$)	Gas Phase Chemiluminescence	100 ppb (188 $\mu g/m^3$)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 $\mu g/m^3$)		0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 $\mu g/m^3$)	Ultraviolet Fluorescence	75 ppb (196 $\mu g/m^3$)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 $\mu g/m^3$)	
	24 Hour	0.04 ppm (105 $\mu g/m^3$)		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 $\mu g/m^3$	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 $\mu g/m^3$ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 $\mu g/m^3$		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 $\mu g/m^3$	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu g/m^3$)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 $\mu g/m^3$)	Gas Chromatography			

See footnotes on next page ...

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 $\mu g/m^3$ 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 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 December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ 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 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 $\mu g/m^3$ 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 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.

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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:

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.

FIGURE 1


2018
Area Designations for State
Ambient Air Quality Standards
OZONE
N
0
50
100
200
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Humboldt
Trinity
Tehema
SACRAMENTO VALLEY
Plumas
SUTTER BUTTES
Butte
Glenn
Mendocino
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
LAKE COUNTY
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Alpine
Sonoma
Napa
Sac
Amador
SAN FRANCISCO BAY AREA
Marin
Solano
Calaveras
San Joaquin
Contra Costa
Tuolumne
Mono
San Francisco
GREAT BASIN VALLEYS
Alameda
Mariposa
San Mateo
Stanislaus
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Los Angeles
MOJAVE DESERT
Ventura
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
Unclassified
Attainment
Nonattainment-Transitional
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 1

California Ambient Air Quality Standards
Area Designations for Ozone [1]

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

(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 2

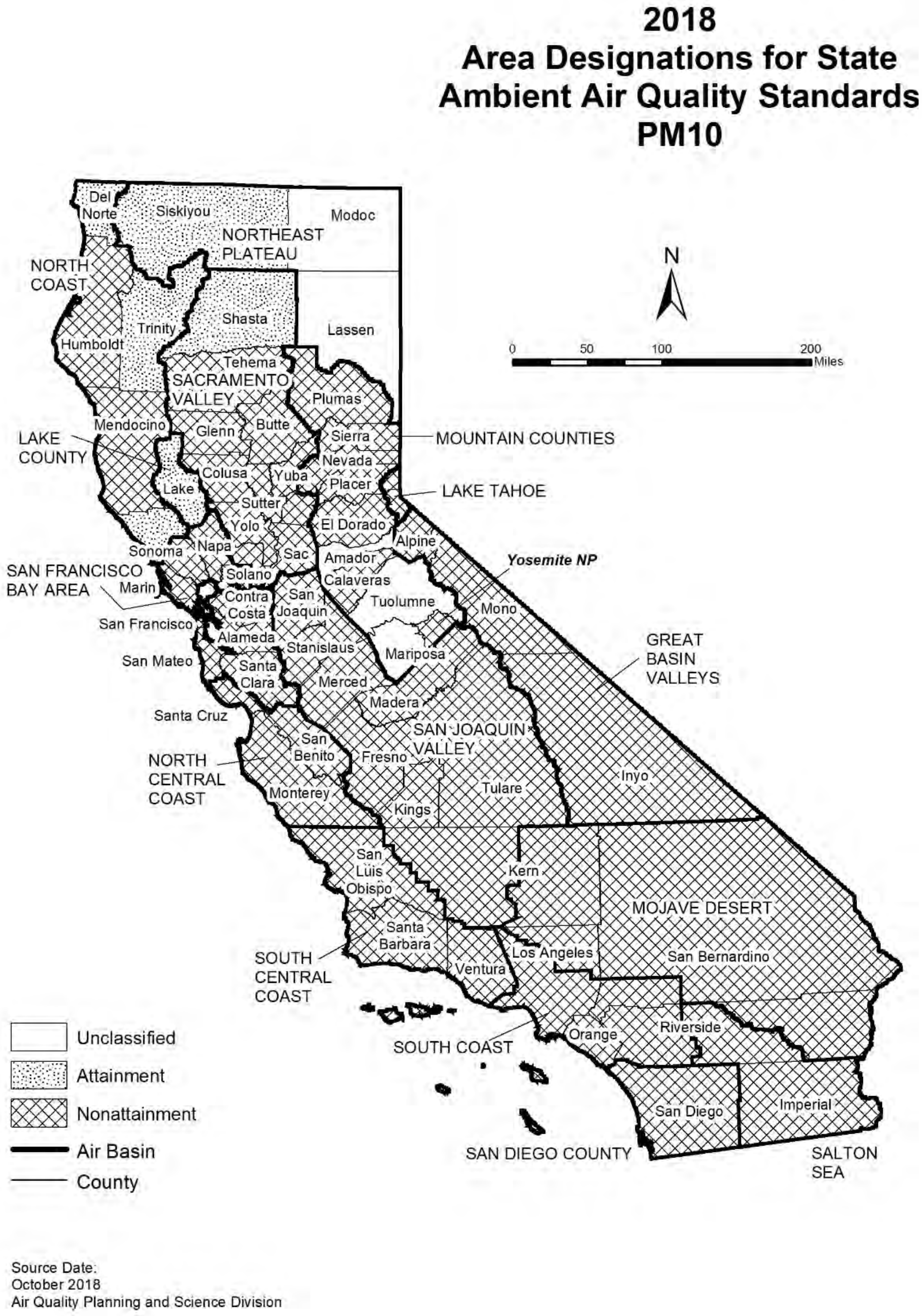

2018
Area Designations for State
Ambient Air Quality Standards
PM10
N
0 50 100 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
LAKE COUNTY
Nevada
Colusa
Yuba
Placer
Lake
LAKE TAHOE
Sutter
Yolo
El Dorado
Alpine
Sonoma
Napa
Sac
Amador
Yosemite NP
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Stanislaus
Mariposa
GREAT BASIN VALLEYS
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
NORTH CENTRAL COAST
Fresno
Inyo
Monterey
Tulare
Kings
San Luis Obispo
Kern
MOJAVE DESERT
Santa Barbara
Los Angeles
San Bernardino
Ventura
SOUTH CENTRAL COAST
Orange
Riverside
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
Unclassified
Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 2

California Ambient Air Quality Standards
Area Designation for Suspended Particulate Matter (PM10)

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

FIGURE 3

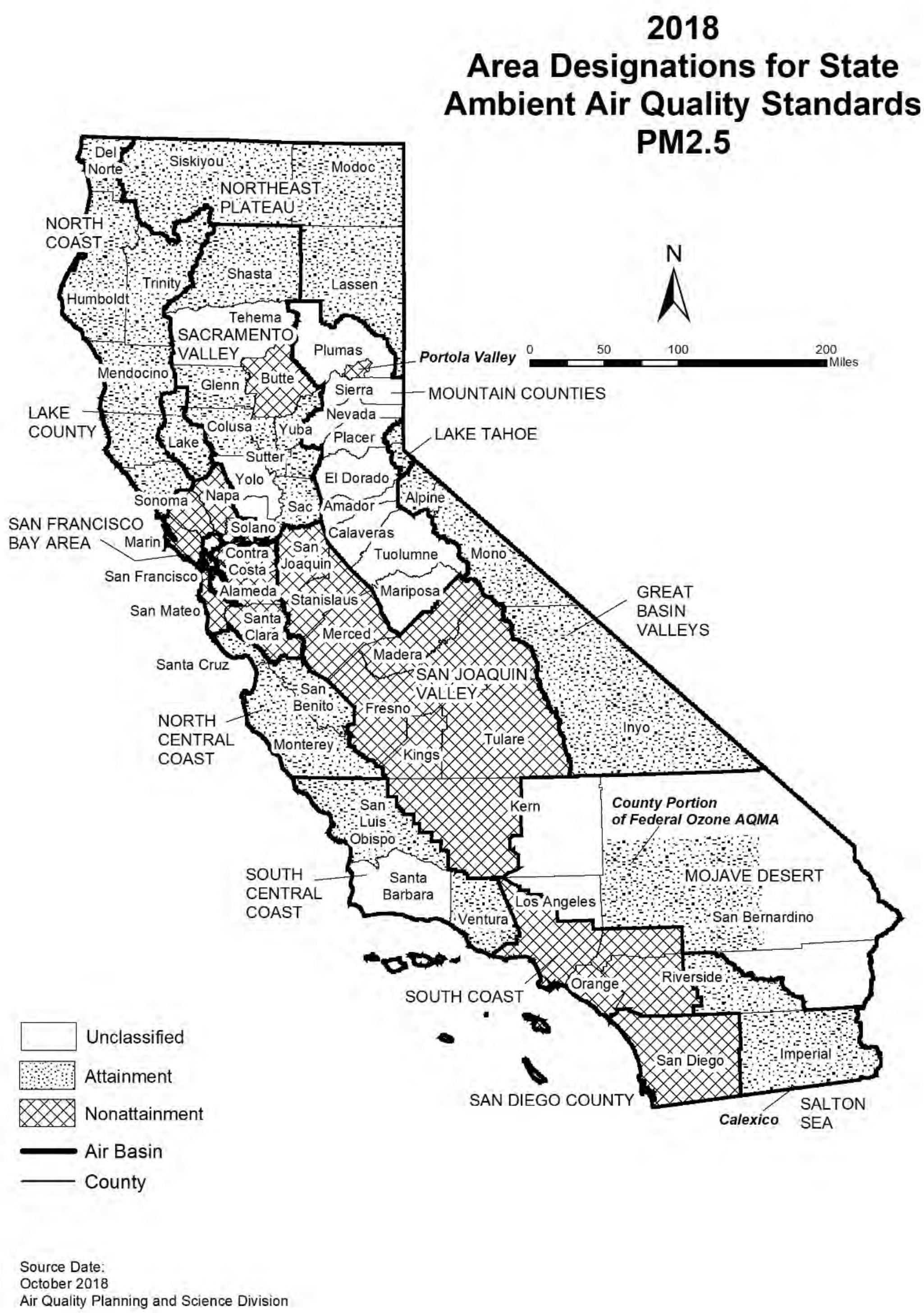

2018
Area Designations for State
Ambient Air Quality Standards
PM2.5
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Portola Valley
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
LAKE COUNTY
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
Lake
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Stanislaus
Mariposa
GREAT BASIN VALLEYS
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Monterey
Kings
Tulare
San Luis Obispo
Kern
County Portion of Federal Ozone AQMA
MOJAVE DESERT
SOUTH CENTRAL COAST
Santa Barbara
Los Angeles
Ventura
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Calexico
SALTON SEA
N
0
50
100
200
Miles
Unclassified
Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 3

California Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SALTON SEA AIR BASIN			
LAKE COUNTY AIR BASIN			X	Imperial County			
LAKE TAHOE AIR BASIN			X	- City of Calexico (3)	X		
MOJAVE DESERT AIR BASIN				Remainder of Air Basin			X
San Bernardino County				SAN DIEGO AIR BASIN	X		
- County portion of federal Southeast Desert Modified AQMA for Ozone (1)			X	SAN FRANCISCO BAY AREA AIR BASIN	X		
				SAN JOAQUIN VALLEY AIR BASIN	X		
Remainder of Air Basin		X		SOUTH CENTRAL COAST AIR BASIN			
MOUNTAIN COUNTIES AIR BASIN				San Luis Obispo County			X
Plumas County				Santa Barbara County		X	
- Portola Valley (2)	X			Ventura County			X
Remainder of Air Basin		X		SOUTH COAST AIR BASIN	X		
NORTH CENTRAL COAST AIR BASIN			X				
NORTH COAST AIR BASIN			X				
NORTHEAST PLATEAU AIR BASIN			X				
SACRAMENTO VALLEY AIR BASIN							
Butte County	X						
Colusa County			X				
Glenn County			X				
Placer County (portion)			X				
Sacramento County			X				
Shasta County			X				
Sutter and Yuba Counties			X				
Remainder of Air Basin		X					

(1) California Code of Regulations, title 17, section 60200(b)

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

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

FIGURE 4

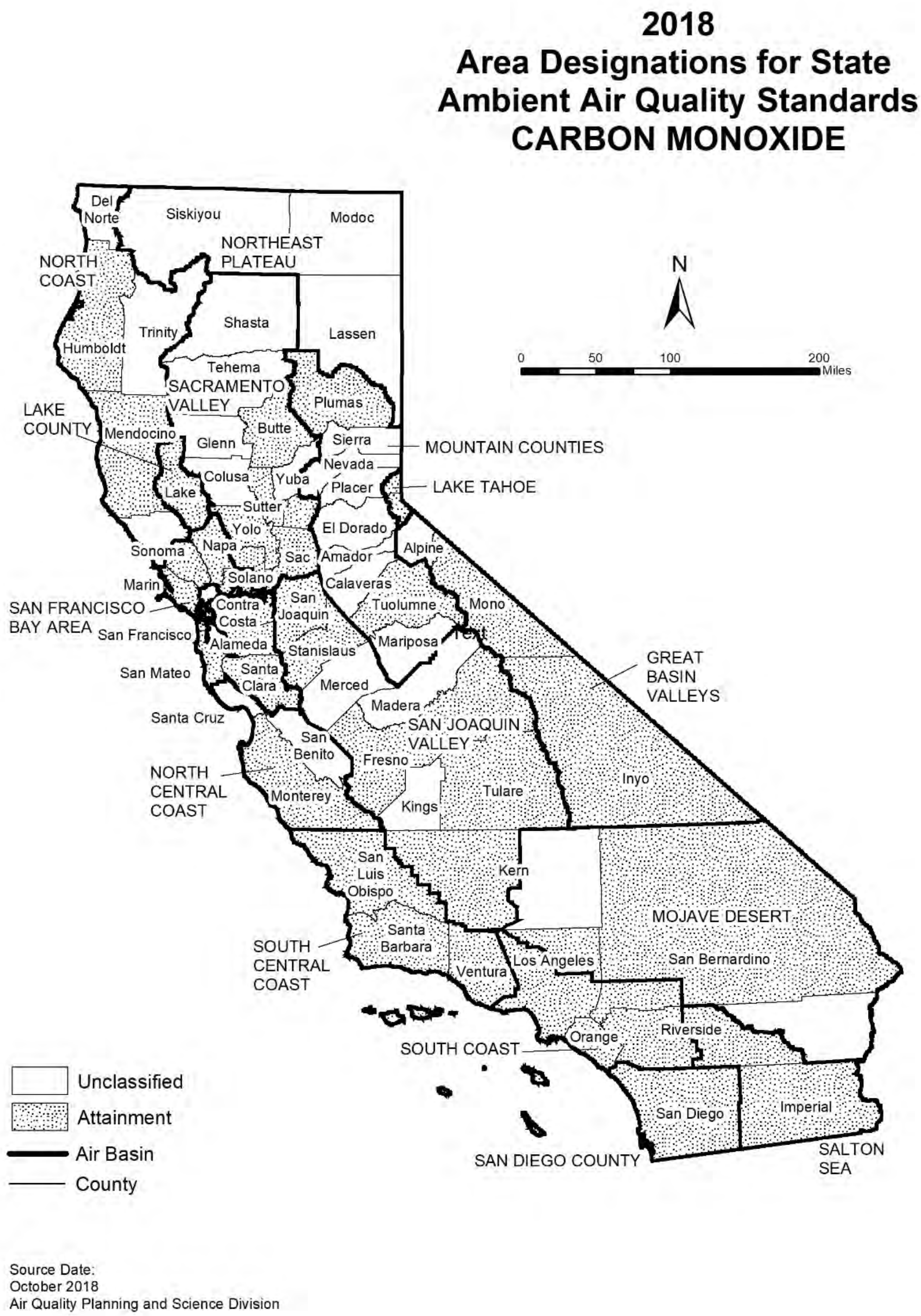

2018
Area Designations for State
Ambient Air Quality Standards
CARBON MONOXIDE
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
LAKE COUNTY
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
Lake
Sutter
Yolo
El Dorado
Napa
Sonoma
Sac
Amador
Alpine
Solano
Marin
Calaveras
SAN FRANCISCO BAY AREA
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
GREAT BASIN VALLEYS
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Monterey
Kings
Tulare
Inyo
San Luis Obispo
Kern
MOJAVE DESERT
Santa Barbara
SOUTH CENTRAL COAST
Ventura
Los Angeles
San Bernardino
Orange
Riverside
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
N
0
50
100
200
Miles
Unclassified
Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 4

California Ambient Air Quality Standards
Area Designation for Carbon Monoxide*

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					SACRAMENTO VALLEY AIR BASIN				
Alpine County			X		Butte County				X
Inyo County				X	Colusa County			X	
Mono County				X	Glenn County			X	
LAKE COUNTY AIR BASIN				X	Placer County (portion)				X
LAKE TAHOE AIR BASIN				X	Sacramento County				X
MOJAVE DESERT AIR BASIN					Shasta County			X	
Kern County (portion)			X		Solano County (portion)				X
Los Angeles County (portion)				X	Sutter County				X
Riverside County (portion)			X		Tehama County			X	
San Bernardino County (portion)				X	Yolo County				X
MOUNTAIN COUNTIES AIR BASIN					Yuba County			X	
Amador County			X		SALTON SEA AIR BASIN				X
Calaveras County			X		SAN DIEGO AIR BASIN				X
El Dorado County (portion)			X		SAN FRANCISCO BAY AREA AIR BASIN				X
Mariposa County			X		SAN JOAQUIN VALLEY AIR BASIN				
Nevada County			X		Fresno County				X
Placer County (portion)			X		Kern County (portion)				X
Plumas County				X	Kings County			X	
Sierra County			X		Madera County			X	
Tuolumne County				X	Merced County			X	
NORTH CENTRAL COAST AIR BASIN					San Joaquin County				X
Monterey County				X	Stanislaus County				X
San Benito County			X		Tulare County				X
Santa Cruz County			X		SOUTH CENTRAL COAST AIR BASIN				X
NORTH COAST AIR BASIN					SOUTH COAST AIR BASIN				X
Del Norte County			X						
Humboldt County				X					
Mendocino County				X					
Sonoma County (portion)			X						
Trinity County			X						
NORTHEAST PLATEAU AIR BASIN			X						

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

FIGURE 5


2018
Area Designations for State
Ambient Air Quality Standards
NITROGEN DIOXIDE
N
0 50 100 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Butte
Glenn
Mendocino
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
LAKE COUNTY
Lake
Sutter
Placer
LAKE TAHOE
El Dorado
Yolo
Napa
Sac
Alpine
Sonoma
Amador
SAN FRANCISCO BAY AREA
Marin
Solano
Calaveras
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Mariposa
GREAT BASIN VALLEYS
San Mateo
Santa Clara
Stanislaus
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Monterey
Tulare
Inyo
Kings
San Luis Obispo
Kern
MOJAVE DESERT
Santa Barbara
SOUTH CENTRAL COAST
Los Angeles
Ventura
San Bernardino
Orange
Riverside
SOUTH COAST
CA 60 (Portion)
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
Los Angeles
San Bernardino
CA 60 (Portion)
Riverside
Orange
Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 5

California Ambient Air Quality Standards
Area Designation for Nitrogen Dioxide

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

FIGURE 6

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 6

California Ambient Air Quality Standards
Area Designation for Sulfur Dioxide*

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

* The area designated for sulfur dioxide is a county or portion of a county

FIGURE 7

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 7

California Ambient Air Quality Standards
Area Designation for Sulfates

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

FIGURE 8

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 8

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

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

* 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 9

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 9

California Ambient Air Quality Standards
Area Designation for Hydrogen Sulfide*

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					NORTH CENTRAL COAST AIR BASIN			X	
Alpine County			X		NORTH COAST AIR BASIN				
Inyo County				X	Del Norte County			X	
Mono County				X	Humboldt County				X
LAKE COUNTY AIR BASIN				X	Mendocino County			X	
LAKE TAHOE AIR BASIN			X		Sonoma County (portion)				
MOJAVE DESERT AIR BASIN					- Geyser Geothermal Area (2)				X
Kern County (portion)			X		- Remainder of County			X	
Los Angeles County (portion)			X		Trinity County			X	
Riverside County (portion)			X		NORTHEAST PLATEAU AIR BASIN			X	
San Bernardino County (portion)					SACRAMENTO VALLEY AIR BASIN			X	
- Searles Valley Planning Area (1)	X				SALTON SEA AIR BASIN			X	
- Remainder of County			X		SAN DIEGO AIR BASIN			X	
MOUNTAIN COUNTIES AIR BASIN					SAN FRANCISCO BAY AREA AIR BASIN			X	
Amador County					SAN JOAQUIN VALLEY AIR BASIN			X	
- City of Sutter Creek	X				SOUTH CENTRAL COAST AIR BASIN				
- Remainder of County			X		San Luis Obispo County				X
Calaveras County			X		Santa Barbara County				X
El Dorado County (portion)			X		Ventura County			X	
Mariposa County			X		SOUTH COAST AIR BASIN			X	
Nevada County			X						
Placer County (portion)			X						
Plumas County			X						
Sierra County			X						
Tuolumne County			X						

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

(1) 52 Federal Register 29384 (August 7, 1987)

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

FIGURE 10


2018
Area Designations for State
Ambient Air Quality Standards
VISIBILITY REDUCING PARTICLES
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
LAKE COUNTY
Colusa
Yuba
Nevada
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
GREAT BASIN VALLEYS
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Monterey
Kings
Inyo
San Luis Obispo
Kern
MOJAVE DESERT
SOUTH CENTRAL COAST
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
N
0
50
100
200
Miles
Unclassified
Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 10

California Ambient Air Quality Standards
Area Designation for Visibility Reducing Particles

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

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. Additional information about the federal area designations is available on the U.S. EPA website:

https://www.epa.gov/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:

https://www.epa.gov/criteria-air-pollutants

<u>Designation Categories</u>

Suspended Particulate Matter (PM_{10}). The U.S. EPA uses three categories to designate areas with respect to PM_{10}:

- Attainment
- Nonattainment
- Unclassifiable

Ozone, Fine Suspended Particulate Matter ($PM_{2.5}$), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_2). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment
- Unclassifiable/Attainment

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Original designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary $PM_{2.5}$ standard of 12.0 $\mu g/m^3$. New area designations reflecting this revised standard became final in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 $\mu g/m^3$ as well as the 24-hour standard of 35 $\mu g/m^3$, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO_2 standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO_2 standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO_2). 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,
- Unclassifiable, and
- Attainment/Unclassifiable.

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO_2 standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual average standards. Area designations for the 1-hour SO_2 standard were finalized on December 21, 2017 and are reflected in the area designations map.

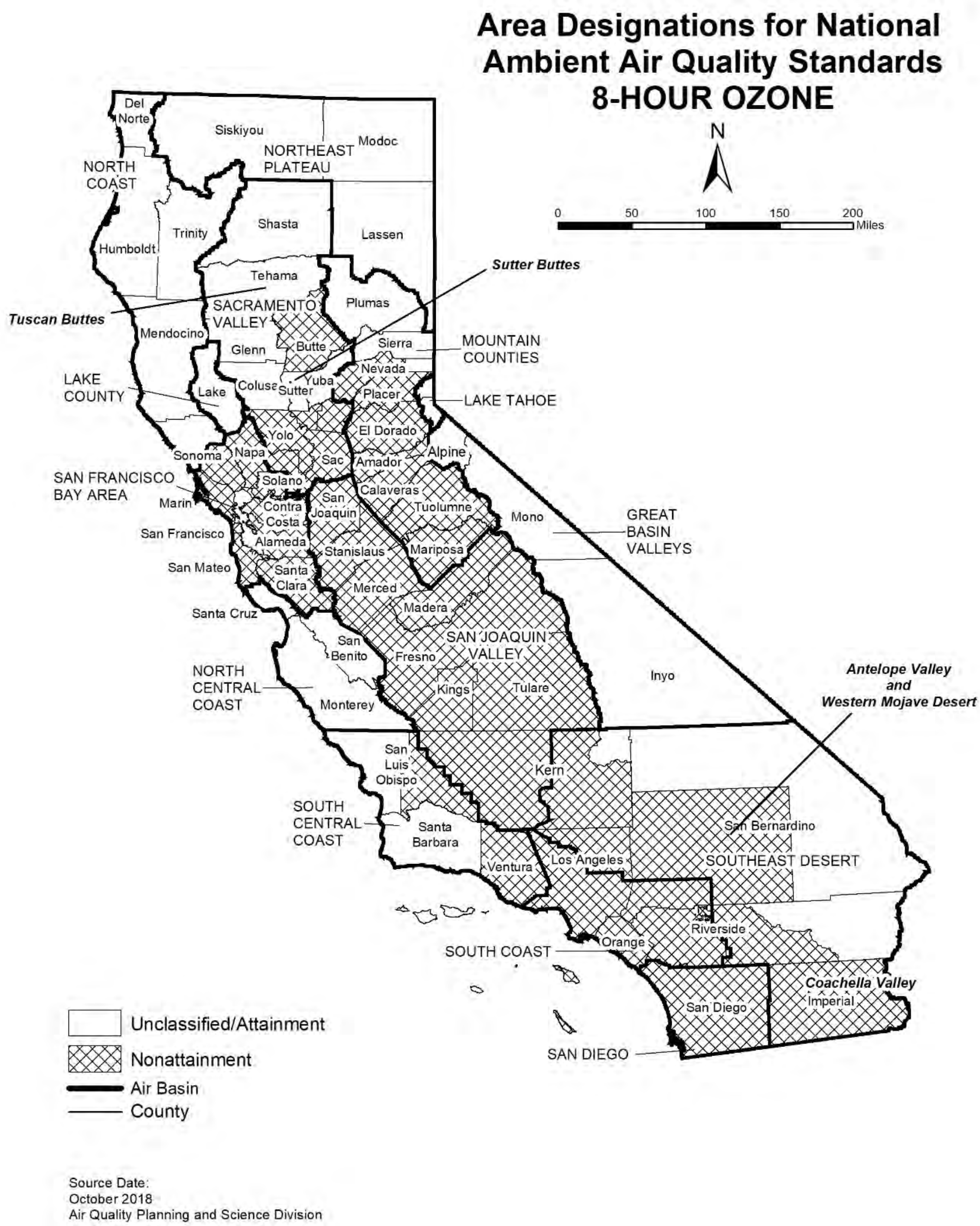
Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 $\mu g/m^3$. Designations were made for this standard in November 2010.

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:

https://ecfr.io/Title-40/se40.20.81_1305

FIGURE 11



Area Designations for National Ambient Air Quality Standards
8-HOUR OZONE
N
0
50
100
150
200
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
Sutter Buttes
Tuscan Buttes
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Sutter
Yuba
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Alpine
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
San Joaquin
Calaveras
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Antelope Valley and Western Mojave Desert
NORTH CENTRAL COAST
Inyo
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
SOUTHEAST DESERT
Riverside
SOUTH COAST
Orange
Coachella Valley
Imperial
San Diego
SAN DIEGO
Unclassified/Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 11

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

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN (cont.)		
LAKE COUNTY AIR BASIN		X	Yolo County (2)	X	
LAKE TAHOE AIR BASIN		X	Yuba County		X
MOUNTAIN COUNTIES AIR BASIN			SAN DIEGO COUNTY	X	
Amador County	X		SAN FRANCISCO BAY AREA AIR BASIN	X	
Calaveras County	X		SAN JOAQUIN VALLEY AIR BASIN	X	
El Dorado County (portion) (2)	X		SOUTH CENTRAL COAST AIR BASIN (1)		
Mariposa County	X		San Luis Obispo County		
Nevada County			- Eastern San Luis Obispo County	X	
- Western Nevada County	X		- Remainder of County		X
- Remainder of County		X	Santa Barbara County		X
Placer County (portion) (2)	X		Ventura County		
Plumas County		X	- Area excluding Anacapa and San Nicolas Islands	X	
Sierra County		X	- Channel Islands (1)		X
Tuolumne County	X		SOUTH COAST AIR BASIN (1)	X	
NORTH CENTRAL COAST AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
NORTH COAST AIR BASIN		X	Kern County (portion)	X	
NORTHEAST PLATEAU AIR BASIN		X	- Indian Wells Valley		X
SACRAMENTO VALLEY AIR BASIN			Imperial County	X	
Butte County	X		Los Angeles County (portion)	X	
Colusa County		X	Riverside County (portion)		
Glenn County		X	- Coachella Valley	X	
Sacramento Metro Area (2)	X		- Non-AQMA portion		X
Shasta County		X	San Bernardino County		
Sutter County			- Western portion (AQMA)	X	
- Sutter Buttes	X		- Eastern portion (non-AQMA)		X
- Southern portion of Sutter County (2)	X				
- Remainder of Sutter County		X			
Tehama County					
- Tuscan Buttes	X				
- Remainder of Tehama County		X			

* 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.

(1) 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.

(2) 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.

FIGURE 12

Area Designations for National Ambient Air Quality Standards PM10
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Alpine
Sacramento County
Sonoma
Napa
Sac
Amador
SAN FRANCISCO BAY AREA
Marin
Solano
Mono
Mono Basin
Calaveras
San Joaquin
Contra Costa
Tuolumne
Mammoth Lake
San Francisco
GREAT BASIN VALLEYS
Alameda
Mariposa
Stanislaus
San Mateo
Santa Clara
Merced
Madera
Inyo
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Owens Valley
Tulare
Coso Junction
NORTH CENTRAL COAST
Monterey
Kings
Trona
San Luis Obispo
Kern
Indian Wells Valley
San Bernardino
SOUTHEAST DESERT
SOUTH CENTRAL COAST
Santa Barbara
Ventura
Los Angeles
Riverside
Coachella Valley
SOUTH COAST
Orange
Imperial
San Diego
SAN DIEGO COUNTY
Unclassified
Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 12

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

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN				SAN DIEGO COUNTY		X	
Alpine County		X		SAN FRANCISCO BAY AREA AIR BASIN		X	
Inyo County				SAN JOAQUIN VALLEY AIR BASIN			X
- Owens Valley Planning Area	X			SOUTH CENTRAL COAST AIR BASIN		X	
- Coso Junction			X	SOUTH COAST AIR BASIN			X
- Remainder of County		X		SOUTHEAST DESERT AIR BASIN			
Mono County				Eastern Kern County			
- Mammoth Lake Planning Area			X	- Indian Wells Valley			X
- Mono Lake Basin	X			- Portion within San Joaquin Valley Planning Area	X		
- Remainder of County		X		- Remainder of County		X	
LAKE COUNTY AIR BASIN		X		Imperial County			
LAKE TAHOE AIR BASIN		X		- Imperial Valley Planning Area	X		
MOUNTAIN COUNTIES AIR BASIN				- Remainder of County		X	
Placer County (portion) (2)		X		Los Angeles County (portion)		X	
Remainder of Air Basin		X		Riverside County (portion)			
NORTH CENTRAL COAST AIR BASIN		X		- Coachella Valley (3)	X		
NORTH COAST AIR BASIN		X		- Non-AQMA portion		X	
NORTHEAST PLATEAU AIR BASIN		X		San Bernardino County			
SACRAMENTO VALLEY AIR BASIN				- Trona	X		
Butte County		X		- Remainder of County	X		
Colusa County		X					
Glenn County		X					
Placer County (portion) (2)		X					
Sacramento County (1)			X				
Shasta County		X					
Solano County (portion)		X					
Sutter County		X					
Tehama County		X					
Yolo County		X					
Yuba County		X					

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
(1) Air quality in Sacramento County meets the national PM10 standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.
(2) U.S. EPA designation puts the Sacramento Valley Air Basin portion of Placer County in the Mountain Counties Air Basin.
(3) Air quality in Coachella Valley meets the national PM10 standards. A request for redesignation to attainment has been submitted to U.S. EPA.

FIGURE 13


Area Designations for National Ambient Air Quality Standards PM2.5
N
0
50
100
150
200
Miles
NORTH COAST
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
Humboldt
Trinity
Shasta
Lassen
Tehama
SACRAMENTO VALLEY
Plumas
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Mendocino
Nevada
LAKE COUNTY
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sacramento
Alpine
Amador
Solano
Calaveras
GREAT BASIN VALLEYS
SAN FRANCISCO BAY AREA
Marin
Tuolumne
Contra Costa
San Joaquin
Mono
Alameda
Stanislaus
Mariposa
San Mateo
Merced
Santa Clara
Madera
Santa Cruz
Fresno
NORTH CENTRAL COAST
San Benito
SAN JOAQUIN VALLEY
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 13

National Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN (2)	X	
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN	X	
MOUNTAIN COUNTIES AIR BASIN			SOUTH CENTRAL COAST AIR BASIN		X
Plumas County			SOUTH COAST AIR BASIN (3)	X	
- Portola Valley Portion of Plumas	X		SOUTHEAST DESERT AIR BASIN		
- Remainder of Plumas County		X	Imperial County (portion) (4)	X	
Remainder of Air Basin		X	Remainder of Air Basin		X
NORTH CENTRAL COAST AIR BASIN		X			
NORTH COAST AIR BASIN		X			
NORTHEAST PLATEAU AIR BASIN		X			
SACRAMENTO VALLEY AIR BASIN					
Sacramento Metro Area (1)	X				
Sutter County		X			
Yuba County (portion)		X			
Remainder of Air Basin		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour PM2.5 standard as well as the 1997 and 2012 PM2.5 annual standards.

(1) 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 PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

(2) Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

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

(4) 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 PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

FIGURE 14


Area Designations for National Ambient Air Quality Standards CARBON MONOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTHEAST DESERT
SOUTH CENTRAL COAST
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 14

National Ambient Air Quality Standards
Area Designations for Carbon Monoxide*

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

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

FIGURE 15


Area Designations for National Ambient Air Quality Standards NITROGEN DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
Colusa
Yuba
LAKE COUNTY
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Napa
Sonoma
Alpine
Sac
Amador
SAN FRANCISCO BAY AREA
Marin
Solano
Contra Costa
San Joaquin
Calaveras
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
NORTH CENTRAL COAST
Fresno
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

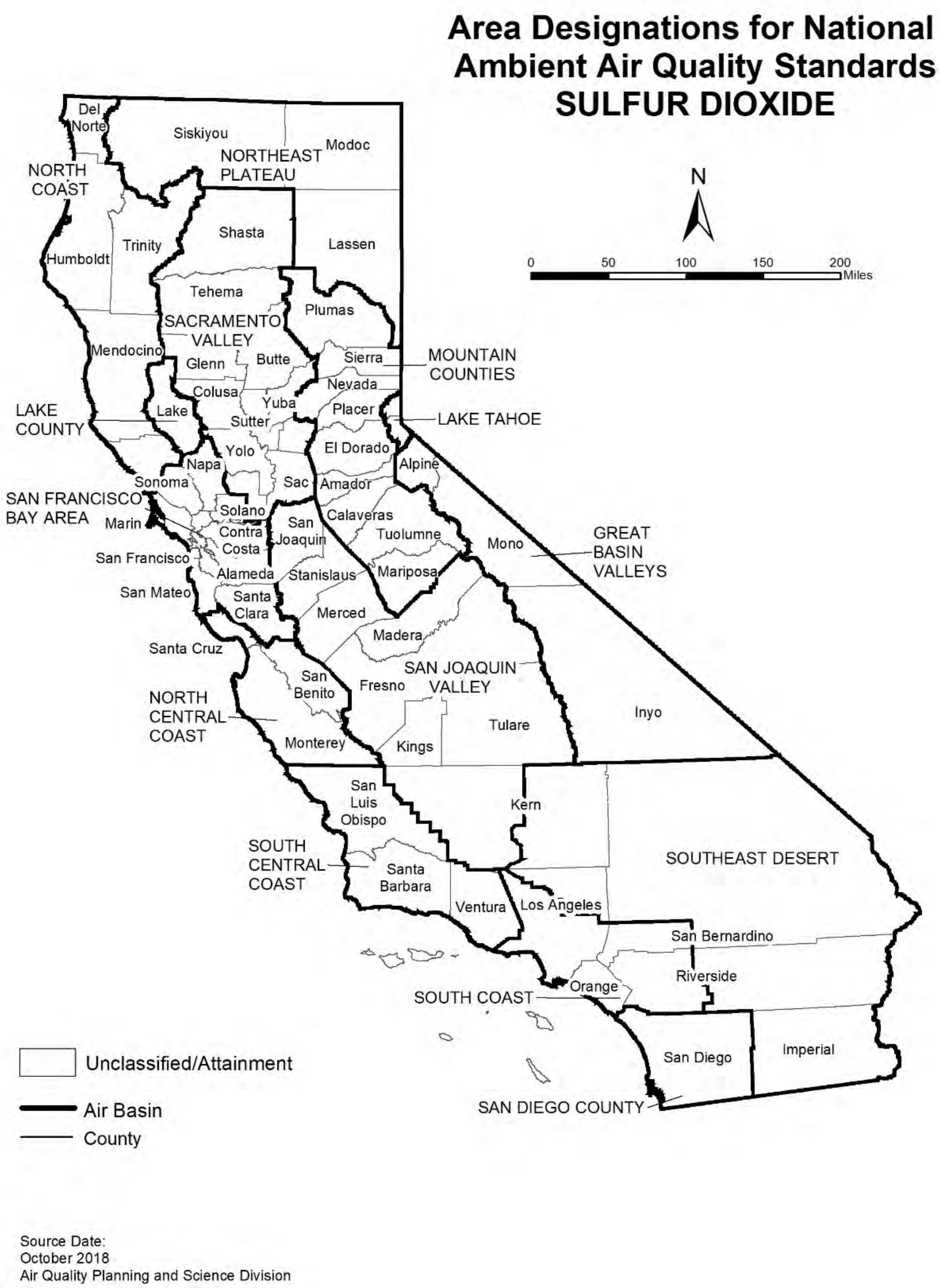
TABLE 15

National Ambient Air Quality Standards
Area Designations for Nitrogen Dioxide*

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

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

FIGURE 16



Area Designations for National Ambient Air Quality Standards SULFUR DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
Contra Costa
San Joaquin
Calaveras
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 16

National Ambient Air Quality Standards
Area Designations for Sulfur Dioxide*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		
LAKE COUNTY AIR BASIN		X	San Luis Obispo County		X
LAKE TAHOE AIR BASIN		X	Santa Barbara County		X
MOUNTAIN COUNTIES AIR BASIN		X	Ventura County		X
NORTH CENTRAL COAST AIR BASIN		X	Channel Islands (1)		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
SACRAMENTO VALLEY AIR BASIN		X	Imperial County		X
SAN DIEGO COUNTY		X	Remainder of Air Basin		X
SAN FRANCISCO BAY AREA AIR BASIN		X			
SAN JOAQUIN VALLEY AIR BASIN					
Fresno County		X			
Kern County (portion)		X			
Kings County		X			
Madera County		X			
Merced County		X			
San Joaquin County		X			
Stanislaus County		X			
Tulare County		X			

* 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 SO_2 standard of 75 ppb.

(1) 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 17


Area Designations for National Ambient Air Quality Standards
LEAD
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Colusa
Nevada
Lake
Sutter
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
El Dorado
Yolo
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 17

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

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH COAST AIR BASIN		
NORTH COAST AIR BASIN		X	Los Angeles County (portion) (1)	X	
NORTHEAST PLATEAU AIR BASIN		X	Remainder of Air Basin		X
SACRAMENTO VALLEY AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

(1) Portion of County in Air Basin, not including Channel Islands

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APPENDIX 3.1:

CALEEMOD PROJECT CONSTRUCTION EMISSIONS MODEL OUTPUTS

14174 Thousand Palms Construction without Mitigation Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14174 Thousand Palms Construction without Mitigation
Construction Start Date	6/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	10.0
Location	33.83358558681118, -116.4020496214669
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5690
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.21

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
Refrigerated Warehouse-No Rail	248	1000sqft	5.69	247,798	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	991	1000sqft	22.8	991,194	718,010	—	—	—
Parking Lot	38.1	Acre	38.1	0.00	0.00	—	—	—
User Defined Linear	1.64	Mile	1.98	0.00	0.00	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	64.8	124	153	0.29	5.22	19.9	25.1	4.83	6.51	11.3	—	43,283	43,283	1.24	2.87	70.1	44,238
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.6	66.3	91.4	144	0.25	3.04	25.5	28.5	2.82	6.47	9.29	—	49,230	49,230	1.59	3.51	3.15	50,320
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.74	14.7	30.2	44.0	0.08	1.16	6.63	7.80	1.08	1.90	2.98	—	13,190	13,190	0.41	0.88	12.0	13,474
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	2.69	5.51	8.03	0.01	0.21	1.21	1.42	0.20	0.35	0.54	—	2,184	2,184	0.07	0.15	1.99	2,231

2.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	17.1	14.6	124	153	0.29	5.22	19.9	25.1	4.83	6.51	11.3	—	43,283	43,283	1.24	2.87	70.1	44,238
2025	7.64	64.8	27.8	108	0.07	0.90	12.0	12.9	0.83	2.84	3.67	—	20,167	20,167	0.71	0.89	52.5	20,503
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	15.6	66.3	91.4	144	0.25	3.04	25.5	28.5	2.82	6.47	9.29	—	49,230	49,230	1.59	3.51	3.15	50,320
2025	10.4	62.4	42.0	108	0.13	1.17	19.5	20.7	1.08	4.66	5.73	—	31,973	31,973	1.24	1.62	2.28	32,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.74	10.4	30.2	44.0	0.08	1.16	6.63	7.80	1.08	1.90	2.98	—	13,190	13,190	0.41	0.88	12.0	13,474
2025	2.04	14.7	8.04	24.6	0.02	0.24	3.68	3.92	0.22	0.87	1.09	—	6,151	6,151	0.23	0.29	7.12	6,250
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.86	1.90	5.51	8.03	0.01	0.21	1.21	1.42	0.20	0.35	0.54	—	2,184	2,184	0.07	0.15	1.99	2,231
2025	0.37	2.69	1.47	4.49	< 0.005	0.04	0.67	0.71	0.04	0.16	0.20	—	1,018	1,018	0.04	0.05	1.18	1,035

3. Construction Emissions Details

3.1. Transmission Line (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	5.32	6.11	0.02	0.23	—	0.23	0.21	—	0.21	—	1,794	1,794	0.07	0.01	—	1,800
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.93	1.07	< 0.005	0.04	—	0.04	0.04	—	0.04	—	315	315	0.01	< 0.005	—	316
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.17	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.1	52.1	< 0.005	< 0.005	—	52.3
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	94.8	94.8	< 0.005	< 0.005	0.01	96.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.03	18.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.94	2.94	< 0.005	< 0.005	< 0.005	2.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.35	4.49	42.5	35.3	0.05	2.25	—	2.25	2.07	—	2.07	—	5,529	5,529	0.22	0.04	—	5,548
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.99	5.80	0.01	0.37	—	0.37	0.34	—	0.34	—	909	909	0.04	0.01	—	912
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.44	0.44	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.28	1.06	< 0.005	0.07	—	0.07	0.06	—	0.06	—	150	150	0.01	< 0.005	—	151
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.81	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	266	266	0.01	0.01	0.99	269
Vendor	0.07	0.05	1.40	0.63	0.01	0.02	0.34	0.36	0.02	0.09	0.11	—	1,287	1,287	0.02	0.18	3.50	1,344
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.02	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.7	39.7	< 0.005	< 0.005	0.07	40.2
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	212	212	< 0.005	0.03	0.25	221
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.57	6.57	< 0.005	< 0.005	0.01	6.66
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	< 0.005	0.04	36.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.69	3.94	37.6	31.4	0.06	1.77	—	1.77	1.63	—	1.63	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.69	2.69	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.69	3.94	37.6	31.4	0.06	1.77	—	1.77	1.63	—	1.63	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.69	2.69	—	0.98	0.98	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	0.97	9.26	7.73	0.02	0.44	—	0.44	0.40	—	0.40	—	1,656	1,656	0.07	0.01	—	1,661
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.69	1.41	< 0.005	0.08	—	0.08	0.07	—	0.07	—	274	274	0.01	< 0.005	—	275
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.11	2.07	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	304	304	0.01	0.01	1.13	308
Vendor	0.10	0.07	2.10	0.95	0.01	0.03	0.51	0.54	0.03	0.14	0.17	—	1,931	1,931	0.02	0.27	5.25	2,017
Hauling	0.30	0.20	11.0	2.48	0.07	0.19	2.54	2.73	0.19	0.65	0.84	—	9,757	9,757	0.09	1.53	20.8	10,237
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.18	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	261
Vendor	0.09	0.07	2.27	0.97	0.01	0.03	0.51	0.54	0.03	0.14	0.17	—	1,933	1,933	0.02	0.27	0.14	2,013

Hauling	0.28	0.18	11.8	2.54	0.07	0.19	2.54	2.73	0.19	0.65	0.84	—	9,766	9,766	0.09	1.54	0.54	10,226
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.36	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	68.1	68.1	< 0.005	< 0.005	0.12	69.0
Vendor	0.02	0.02	0.55	0.24	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	476	476	0.01	0.07	0.56	497
Hauling	0.07	0.05	2.85	0.62	0.02	0.05	0.62	0.67	0.05	0.16	0.21	—	2,407	2,407	0.02	0.38	2.21	2,522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.4
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.9	78.9	< 0.005	0.01	0.09	82.2
Hauling	0.01	0.01	0.52	0.11	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	398	398	< 0.005	0.06	0.37	418

3.7. Building Construction (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	12.2	14.2	0.03	0.54	—	0.54	0.49	—	0.49	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	2.19	2.56	< 0.005	0.10	—	0.10	0.09	—	0.09	—	474	474	0.02	< 0.005	—	475
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.47	< 0.005	0.02	—	0.02	0.02	—	0.02	—	78.4	78.4	< 0.005	< 0.005	—	78.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.63	2.15	3.17	30.7	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,717	6,717	0.33	0.26	0.76	6,803
Vendor	0.15	0.11	3.89	1.66	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,318	3,318	0.04	0.46	0.23	3,456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.53	6.87	0.00	0.00	1.22	1.22	0.00	0.29	0.29	—	1,293	1,293	0.06	0.05	2.29	1,311
Vendor	0.03	0.02	0.68	0.30	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	597	597	0.01	0.08	0.70	623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.25	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	214	214	0.01	0.01	0.38	217
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.8	98.8	< 0.005	0.01	0.12	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	11.3	14.1	0.03	0.47	—	0.47	0.43	—	0.43	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.68	3.35	0.01	0.11	—	0.11	0.10	—	0.10	—	623	623	0.03	0.01	—	625
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.49	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	103	103	< 0.005	< 0.005	—	103
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.98	2.74	2.72	49.6	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	7,728	7,728	0.30	0.26	26.7	7,839
Vendor	0.17	0.12	3.44	1.53	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,260	3,260	0.04	0.44	8.98	3,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.05	2.94	28.2	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,575	6,575	0.32	0.26	0.69	6,661
Vendor	0.15	0.11	3.70	1.56	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,263	3,263	0.04	0.44	0.23	3,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.51	0.64	8.36	0.00	0.00	1.60	1.60	0.00	0.37	0.37	—	1,664	1,664	0.07	0.06	2.73	1,686
Vendor	0.04	0.03	0.86	0.37	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	772	772	0.01	0.10	0.92	804
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.12	1.53	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	276	276	0.01	0.01	0.45	279
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	128	128	< 0.005	0.02	0.15	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Substation Construction (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	22.4	23.4	0.06	0.92	—	0.92	0.85	—	0.85	—	6,280	6,280	0.25	0.05	—	6,302
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.64	2.76	0.01	0.11	—	0.11	0.10	—	0.10	—	740	740	0.03	0.01	—	742
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.48	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	122	122	< 0.005	< 0.005	—	123
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.13	2.89	2.96	53.8	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	7,899	7,899	0.30	0.26	29.4	8,013
Vendor	0.17	0.13	3.61	1.63	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,315	3,315	0.04	0.46	9.01	3,462
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.35	4.50	0.00	0.00	0.80	0.80	0.00	0.19	0.19	—	846	846	0.04	0.03	1.50	858
Vendor	0.02	0.01	0.45	0.19	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	391	391	< 0.005	0.05	0.46	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.82	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	140	140	0.01	0.01	0.25	142
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.7	64.7	< 0.005	0.01	0.08	67.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Substation Overlap (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.57	1.32	10.2	9.18	0.03	0.38	—	0.38	0.35	—	0.35	—	3,650	3,650	0.15	0.03	—	3,663
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.24	1.84	1.65	0.01	0.07	—	0.07	0.06	—	0.06	—	657	657	0.03	0.01	—	659
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.34	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	109	109	< 0.005	< 0.005	—	109
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.63	2.15	3.17	30.7	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,717	6,717	0.33	0.26	0.76	6,803
Vendor	0.15	0.11	3.89	1.66	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,318	3,318	0.04	0.46	0.23	3,456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.53	6.87	0.00	0.00	1.22	1.22	0.00	0.29	0.29	—	1,293	1,293	0.06	0.05	2.29	1,311
Vendor	0.03	0.02	0.68	0.30	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	597	597	0.01	0.08	0.70	623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.25	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	214	214	0.01	0.01	0.38	217
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.8	98.8	< 0.005	0.01	0.12	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Substation Overlap (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	1.27	9.13	9.04	0.03	0.34	—	0.34	0.32	—	0.32	—	3,654	3,654	0.15	0.03	—	3,667
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.17	0.15	1.05	1.04	< 0.005	0.04	—	0.04	0.04	—	0.04	—	422	422	0.02	< 0.005	—	423
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.19	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	69.9	69.9	< 0.005	< 0.005	—	70.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.05	2.94	28.2	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,575	6,575	0.32	0.26	0.69	6,661
Vendor	0.15	0.11	3.70	1.56	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,263	3,263	0.04	0.44	0.23	3,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.31	4.08	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	812	812	0.04	0.03	1.33	822
Vendor	0.02	0.01	0.42	0.18	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	377	377	< 0.005	0.05	0.45	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	134	134	0.01	< 0.005	0.22	136
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.3	62.3	< 0.005	0.01	0.07	64.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	4.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.63	< 0.005	0.02	—	0.02	0.02	—	0.02	—	95.2	95.2	< 0.005	< 0.005	—	95.6
Paving	—	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Paving	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	223	223	0.01	0.01	0.77	226

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	12.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.11	2.11	< 0.005	< 0.005	< 0.005	2.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.21	1.53	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.14	0.18	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	21.3	21.3	< 0.005	< 0.005	—	21.3
Architectural Coatings	—	6.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.52	3.52	< 0.005	< 0.005	—	3.53
Architectural Coatings	—	1.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.29	1.90	18.4	0.00	0.00	4.08	4.08	0.00	0.96	0.96	—	4,030	4,030	0.20	0.15	0.46	4,082
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.21	2.73	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	514	514	0.02	0.02	0.91	521
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.50	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	85.2	85.2	< 0.005	< 0.005	0.15	86.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.04	0.28	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.2	42.2	< 0.005	< 0.005	—	42.3
Architectural Coatings	—	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.98	6.98	< 0.005	< 0.005	—	7.00
Architectural Coatings	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.79	1.64	1.63	29.8	0.00	0.00	4.08	4.08	0.00	0.96	0.96	—	4,637	4,637	0.18	0.15	16.0	4,703
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.39	1.23	1.76	16.9	0.00	0.00	4.08	4.08	0.00	0.96	0.96	—	3,945	3,945	0.19	0.15	0.42	3,996
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.31	0.38	5.02	0.00	0.00	0.96	0.96	0.00	0.22	0.22	—	999	999	0.04	0.04	1.64	1,012
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.92	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	165	165	0.01	0.01	0.27	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Transmission Line	Linear, Drainage, Utilities, & Sub-Grade	1/1/2025	3/31/2025	5.00	64.0	—
Site Preparation	Site Preparation	6/1/2024	8/23/2024	5.00	60.0	—
Grading	Grading	7/1/2024	11/1/2024	5.00	90.0	—
Building Construction	Building Construction	10/1/2024	5/01/2025	5.00	153	—
Substation Construction	Building Construction	8/1/2024	9/30/2024	5.00	43.0	—
Substation Overlap	Building Construction	10/1/2024	2/28/2025	5.00	109	—

Paving	Paving	4/1/2025	5/1/2025	5.00	23.0	—
Architectural Coating	Architectural Coating	11/1/2024	5/1/2025	5.00	130	—

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
Transmission Line	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Transmission Line	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Transmission Line	Other Construction Equipment	Diesel	Average	1.00	8.00	82.0	0.42
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Substation Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Substation Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Substation Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Substation Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45

Substation Construction	Tractors/Loaders/Backh	Diesel	Average	3.00	8.00	84.0	0.37
Substation Construction	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38
Substation Overlap	Cranes	Diesel	Average	1.00	8.00	367	0.29
Substation Overlap	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	40.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	13.9	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	60.0	10.2	HHDT,MHDT
Grading	Hauling	140	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	520	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	103	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	312	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Substation Construction	—	—	—	—
Substation Construction	Worker	520	18.5	LDA,LDT1,LDT2
Substation Construction	Vendor	103	10.2	HHDT,MHDT
Substation Construction	Hauling	0.00	20.0	HHDT
Substation Construction	Onsite truck	—	—	HHDT
Substation Overlap	—	—	—	—
Substation Overlap	Worker	520	18.5	LDA,LDT1,LDT2
Substation Overlap	Vendor	103	10.2	HHDT,MHDT
Substation Overlap	Hauling	0.00	20.0	HHDT
Substation Overlap	Onsite truck	—	—	HHDT
Transmission Line	—	—	—	—
Transmission Line	Worker	7.50	18.5	LDA,LDT1,LDT2
Transmission Line	Vendor	0.00	10.2	HHDT,MHDT
Transmission Line	Hauling	0.00	20.0	HHDT
Transmission Line	Onsite truck	—	—	HHDT

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	0.00	0.00	1,858,488	619,496	260,053

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)
Transmission Line	—	—	1.98	0.00	—
Site Preparation	—	—	210	0.00	—
Grading	101,140	0.00	360	0.00	—
Paving	0.00	0.00	0.00	0.00	40.1

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

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%

Parking Lot	38.1	100%
User Defined Linear	1.98	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	457	0.03	< 0.005
2025	0.00	457	0.03	< 0.005

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

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

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	23.3	annual days of extreme heat
Extreme Precipitation	0.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.09	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 ¾ 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	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	88.7

AQ-PM	6.81
AQ-DPM	53.7
Drinking Water	45.4
Lead Risk Housing	34.0
Pesticides	0.00
Toxic Releases	4.18
Traffic	87.4
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	22.1
Haz Waste Facilities/Generators	4.94
Impaired Water Bodies	0.00
Solid Waste	84.7
Sensitive Population	—
Asthma	43.6
Cardio-vascular	73.5
Low Birth Weights	8.69
Socioeconomic Factor Indicators	—
Education	59.3
Housing	47.6
Linguistic	55.6
Poverty	61.6
Unemployment	64.5

7.2. Healthy Places Index Scores

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.

Indicator	Result for Project Census Tract

Economic	—
Above Poverty	15.42409855
Employed	6.480174516
Median HI	24.1498781
Education	—
Bachelor's or higher	29.56499423
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	39.18901578
Active commuting	18.54228153
Social	—
2-parent households	98.8836135
Voting	37.73899654
Neighborhood	—
Alcohol availability	70.39650969
Park access	14.37187219
Retail density	33.04247402
Supermarket access	15.79622738
Tree canopy	0.487617092
Housing	—
Homeownership	64.04465546
Housing habitability	62.59463621
Low-inc homeowner severe housing cost burden	10.07314256
Low-inc renter severe housing cost burden	86.00025664
Uncrowded housing	44.45014757
Health Outcomes	—

Insured adults	15.50109072
Arthritis	0.0
Asthma ER Admissions	57.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	31.3
Cognitively Disabled	6.7
Physically Disabled	2.8
Heart Attack ER Admissions	52.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	43.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8

Elderly	19.6
English Speaking	66.9
Foreign-born	47.5
Outdoor Workers	11.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	70.2
Traffic Density	65.2
Traffic Access	23.0
Other Indices	—
Hardship	60.4
Other Decision Support	—
2016 Voting	51.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	41.0
Healthy Places Index Score for Project Location (b)	16.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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

Screen	Justification
Construction: Construction Phases	Construction schedule based on input from the Project team.
Construction: Off-Road Equipment	Crawler tractors will be used in lieu of tractors/loaders/backhoes during site preparation and grading. All equipment will operate for 8 hours per day.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction. Haul truck distance based on data provided by the Project team.
Construction: Architectural Coatings	SCAQMD Rule 1113 limits

14174 Thousand Palms Construction with Mitigation Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14174 Thousand Palms Construction with Mitigation
Construction Start Date	6/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	10.0
Location	33.83358558681118, -116.4020496214669
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5690
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.21

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
Refrigerated Warehouse-No Rail	248	1000sqft	5.69	247,798	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	991	1000sqft	22.8	991,194	718,010	—	—	—
Parking Lot	38.1	Acre	38.1	0.00	0.00	—	—	—
User Defined Linear	1.64	Mile	1.98	0.00	0.00	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.25	63.2	75.3	163	0.29	0.73	19.9	20.7	0.72	6.51	7.23	—	43,283	43,283	1.24	2.87	70.1	44,238
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.22	61.2	69.9	159	0.25	0.69	25.5	26.1	0.68	6.47	7.15	—	49,230	49,230	1.59	3.51	3.15	50,320
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.29	14.3	20.3	47.3	0.08	0.19	6.63	6.83	0.19	1.90	2.09	—	13,190	13,190	0.41	0.88	12.0	13,474
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	2.60	3.70	8.64	0.01	0.04	1.21	1.25	0.03	0.35	0.38	—	2,184	2,184	0.07	0.15	1.99	2,231

2.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.25	5.80	75.3	163	0.29	0.73	19.9	20.7	0.72	6.51	7.23	—	43,283	43,283	1.24	2.87	70.1	44,238
2025	5.63	63.2	26.0	110	0.07	0.26	12.0	12.2	0.25	2.84	3.09	—	20,167	20,167	0.71	0.89	52.5	20,503
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	9.22	61.2	69.9	159	0.25	0.69	25.5	26.1	0.68	6.47	7.15	—	49,230	49,230	1.59	3.51	3.15	50,320
2025	7.39	60.1	40.6	122	0.13	0.36	19.5	19.9	0.35	4.66	5.00	—	31,973	31,973	1.24	1.62	2.28	32,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.29	8.47	20.3	47.3	0.08	0.19	6.63	6.83	0.19	1.90	2.09	—	13,190	13,190	0.41	0.88	12.0	13,474
2025	1.46	14.3	7.69	26.6	0.02	0.07	3.68	3.75	0.07	0.87	0.94	—	6,151	6,151	0.23	0.29	7.12	6,250
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.42	1.55	3.70	8.64	0.01	0.04	1.21	1.25	0.03	0.35	0.38	—	2,184	2,184	0.07	0.15	1.99	2,231
2025	0.27	2.60	1.40	4.86	< 0.005	0.01	0.67	0.68	0.01	0.16	0.17	—	1,018	1,018	0.04	0.05	1.18	1,035

3. Construction Emissions Details

3.1. Transmission Line (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.22	5.65	9.79	0.02	0.06	—	0.06	0.06	—	0.06	—	1,794	1,794	0.07	0.01	—	1,800
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.99	1.72	< 0.005	0.01	—	0.01	0.01	—	0.01	—	315	315	0.01	< 0.005	—	316
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.18	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.1	52.1	< 0.005	< 0.005	—	52.3
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	94.8	94.8	< 0.005	< 0.005	0.01	96.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.03	18.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.94	2.94	< 0.005	< 0.005	< 0.005	2.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.68	15.7	30.0	0.05	0.10	—	0.10	0.10	—	0.10	—	5,529	5,529	0.22	0.04	—	5,548
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	2.58	4.92	0.01	0.02	—	0.02	0.02	—	0.02	—	909	909	0.04	0.01	—	912
Dust From Material Movemen	—	—	—	—	—	—	0.93	0.93	—	0.44	0.44	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.47	0.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	150	150	0.01	< 0.005	—	151
Dust From Material Movemen	—	—	—	—	—	—	0.17	0.17	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.81	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	266	266	0.01	0.01	0.99	269
Vendor	0.07	0.05	1.40	0.63	0.01	0.02	0.34	0.36	0.02	0.09	0.11	—	1,287	1,287	0.02	0.18	3.50	1,344
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.02	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.7	39.7	< 0.005	< 0.005	0.07	40.2
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	212	212	< 0.005	0.03	0.25	221
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.57	6.57	< 0.005	< 0.005	0.01	6.66
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	< 0.005	0.04	36.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.82	19.9	36.2	0.06	0.18	—	0.18	0.18	—	0.18	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.69	2.69	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.82	19.9	36.2	0.06	0.18	—	0.18	0.18	—	0.18	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.69	2.69	—	0.98	0.98	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	4.91	8.92	0.02	0.05	—	0.05	0.04	—	0.04	—	1,656	1,656	0.07	0.01	—	1,661
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.90	1.63	< 0.005	0.01	—	0.01	0.01	—	0.01	—	274	274	0.01	< 0.005	—	275
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.11	2.07	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	304	304	0.01	0.01	1.13	308
Vendor	0.10	0.07	2.10	0.95	0.01	0.03	0.51	0.54	0.03	0.14	0.17	—	1,931	1,931	0.02	0.27	5.25	2,017
Hauling	0.30	0.20	11.0	2.48	0.07	0.19	2.54	2.73	0.19	0.65	0.84	—	9,757	9,757	0.09	1.53	20.8	10,237
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.18	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	261
Vendor	0.09	0.07	2.27	0.97	0.01	0.03	0.51	0.54	0.03	0.14	0.17	—	1,933	1,933	0.02	0.27	0.14	2,013

Hauling	0.28	0.18	11.8	2.54	0.07	0.19	2.54	2.73	0.19	0.65	0.84	—	9,766	9,766	0.09	1.54	0.54	10,226
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.36	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	68.1	68.1	< 0.005	< 0.005	0.12	69.0
Vendor	0.02	0.02	0.55	0.24	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	476	476	0.01	0.07	0.56	497
Hauling	0.07	0.05	2.85	0.62	0.02	0.05	0.62	0.67	0.05	0.16	0.21	—	2,407	2,407	0.02	0.38	2.21	2,522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.4
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.9	78.9	< 0.005	0.01	0.09	82.2
Hauling	0.01	0.01	0.52	0.11	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	398	398	< 0.005	0.06	0.37	418

3.7. Building Construction (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	9.48	15.7	0.03	0.09	—	0.09	0.09	—	0.09	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.71	2.82	< 0.005	0.02	—	0.02	0.02	—	0.02	—	474	474	0.02	< 0.005	—	475
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.31	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	78.4	78.4	< 0.005	< 0.005	—	78.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.63	2.15	3.17	30.7	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,717	6,717	0.33	0.26	0.76	6,803
Vendor	0.15	0.11	3.89	1.66	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,318	3,318	0.04	0.46	0.23	3,456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.53	6.87	0.00	0.00	1.22	1.22	0.00	0.29	0.29	—	1,293	1,293	0.06	0.05	2.29	1,311
Vendor	0.03	0.02	0.68	0.30	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	597	597	0.01	0.08	0.70	623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.25	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	214	214	0.01	0.01	0.38	217
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.8	98.8	< 0.005	0.01	0.12	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	9.48	15.7	0.03	0.09	—	0.09	0.09	—	0.09	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	9.48	15.7	0.03	0.09	—	0.09	0.09	—	0.09	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.25	3.71	0.01	0.02	—	0.02	0.02	—	0.02	—	623	623	0.03	0.01	—	625
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.41	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	103	103	< 0.005	< 0.005	—	103
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.98	2.74	2.72	49.6	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	7,728	7,728	0.30	0.26	26.7	7,839
Vendor	0.17	0.12	3.44	1.53	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,260	3,260	0.04	0.44	8.98	3,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.05	2.94	28.2	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,575	6,575	0.32	0.26	0.69	6,661
Vendor	0.15	0.11	3.70	1.56	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,263	3,263	0.04	0.44	0.23	3,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.51	0.64	8.36	0.00	0.00	1.60	1.60	0.00	0.37	0.37	—	1,664	1,664	0.07	0.06	2.73	1,686
Vendor	0.04	0.03	0.86	0.37	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	772	772	0.01	0.10	0.92	804
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.12	1.53	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	276	276	0.01	0.01	0.45	279
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	128	128	< 0.005	0.02	0.15	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Substation Construction (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.76	18.4	33.7	0.06	0.16	—	0.16	0.16	—	0.16	—	6,280	6,280	0.25	0.05	—	6,302
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.17	3.97	0.01	0.02	—	0.02	0.02	—	0.02	—	740	740	0.03	0.01	—	742
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.40	0.72	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	122	122	< 0.005	< 0.005	—	123
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.13	2.89	2.96	53.8	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	7,899	7,899	0.30	0.26	29.4	8,013
Vendor	0.17	0.13	3.61	1.63	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,315	3,315	0.04	0.46	9.01	3,462
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.35	4.50	0.00	0.00	0.80	0.80	0.00	0.19	0.19	—	846	846	0.04	0.03	1.50	858
Vendor	0.02	0.01	0.45	0.19	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	391	391	< 0.005	0.05	0.46	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.82	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	140	140	0.01	0.01	0.25	142
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.7	64.7	< 0.005	0.01	0.08	67.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Substation Overlap (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.42	8.92	18.0	0.03	0.07	—	0.07	0.07	—	0.07	—	3,650	3,650	0.15	0.03	—	3,663
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	1.61	3.24	0.01	0.01	—	0.01	0.01	—	0.01	—	657	657	0.03	0.01	—	659
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.29	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	109	109	< 0.005	< 0.005	—	109
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.63	2.15	3.17	30.7	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,717	6,717	0.33	0.26	0.76	6,803
Vendor	0.15	0.11	3.89	1.66	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,318	3,318	0.04	0.46	0.23	3,456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.53	6.87	0.00	0.00	1.22	1.22	0.00	0.29	0.29	—	1,293	1,293	0.06	0.05	2.29	1,311
Vendor	0.03	0.02	0.68	0.30	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	597	597	0.01	0.08	0.70	623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.25	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	214	214	0.01	0.01	0.38	217
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.8	98.8	< 0.005	0.01	0.12	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Substation Overlap (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.42	8.92	18.0	0.03	0.07	—	0.07	0.07	—	0.07	—	3,654	3,654	0.15	0.03	—	3,667
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.05	1.03	2.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	422	422	0.02	< 0.005	—	423
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.19	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	69.9	69.9	< 0.005	< 0.005	—	70.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.05	2.94	28.2	0.00	0.00	6.80	6.80	0.00	1.59	1.59	—	6,575	6,575	0.32	0.26	0.69	6,661
Vendor	0.15	0.11	3.70	1.56	0.03	0.05	0.88	0.93	0.05	0.24	0.29	—	3,263	3,263	0.04	0.44	0.23	3,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.31	4.08	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	812	812	0.04	0.03	1.33	822
Vendor	0.02	0.01	0.42	0.18	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	377	377	< 0.005	0.05	0.45	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	134	134	0.01	< 0.005	0.22	136
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.3	62.3	< 0.005	0.01	0.07	64.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.21	10.6	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	4.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.45	0.67	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.2	95.2	< 0.005	< 0.005	—	95.6
Paving	—	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Paving	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	223	223	0.01	0.01	0.77	226

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	12.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.11	2.11	< 0.005	< 0.005	< 0.005	2.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	1.43	1.28	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.17	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.3	21.3	< 0.005	< 0.005	—	21.3
Architectural Coatings	—	6.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.52	3.52	< 0.005	< 0.005	—	3.53
Architectural Coatings	—	1.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.29	1.90	18.4	0.00	0.00	4.08	4.08	0.00	0.96	0.96	—	4,030	4,030	0.20	0.15	0.46	4,082
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.21	2.73	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	514	514	0.02	0.02	0.91	521
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.50	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	85.2	85.2	< 0.005	< 0.005	0.15	86.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	1.43	1.28	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	1.43	1.28	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.34	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.2	42.2	< 0.005	< 0.005	—	42.3
Architectural Coatings	—	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.98	6.98	< 0.005	< 0.005	—	7.00
Architectural Coatings	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.79	1.64	1.63	29.8	0.00	0.00	4.08	4.08	0.00	0.96	0.96	—	4,637	4,637	0.18	0.15	16.0	4,703
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.39	1.23	1.76	16.9	0.00	0.00	4.08	4.08	0.00	0.96	0.96	—	3,945	3,945	0.19	0.15	0.42	3,996
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.31	0.38	5.02	0.00	0.00	0.96	0.96	0.00	0.22	0.22	—	999	999	0.04	0.04	1.64	1,012
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.92	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	165	165	0.01	0.01	0.27	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Transmission Line	Linear, Drainage, Utilities, & Sub-Grade	1/1/2025	3/31/2025	5.00	64.0	—
Site Preparation	Site Preparation	6/1/2024	8/23/2024	5.00	60.0	—
Grading	Grading	7/1/2024	11/1/2024	5.00	90.0	—
Building Construction	Building Construction	10/1/2024	5/01/2025	5.00	153	—
Substation Construction	Building Construction	8/1/2024	9/30/2024	5.00	43.0	—
Substation Overlap	Building Construction	10/1/2024	2/28/2025	5.00	109	—

Paving	Paving	4/1/2025	5/1/2025	5.00	23.0	—
Architectural Coating	Architectural Coating	11/1/2024	5/1/2025	5.00	130	—

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
Transmission Line	Excavators	Diesel	Tier 4 Interim	1.00	8.00	36.0	0.38
Transmission Line	Off-Highway Trucks	Diesel	Tier 4 Interim	1.00	8.00	376	0.38
Transmission Line	Other Construction Equipment	Diesel	Tier 4 Interim	1.00	8.00	82.0	0.42
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Tier 4 Interim	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Tier 4 Interim	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Interim	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Interim	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
Substation Construction	Forklifts	Diesel	Tier 4 Interim	3.00	8.00	82.0	0.20
Substation Construction	Generator Sets	Diesel	Tier 4 Interim	1.00	8.00	14.0	0.74
Substation Construction	Cranes	Diesel	Tier 4 Interim	2.00	8.00	367	0.29
Substation Construction	Welders	Diesel	Tier 4 Interim	1.00	8.00	46.0	0.45

Substation Construction	Tractors/Loaders/Backh	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
Substation Construction	Off-Highway Trucks	Diesel	Tier 4 Interim	2.00	8.00	376	0.38
Substation Overlap	Cranes	Diesel	Tier 4 Interim	1.00	8.00	367	0.29
Substation Overlap	Off-Highway Trucks	Diesel	Tier 4 Interim	2.00	8.00	376	0.38
Paving	Pavers	Diesel	Tier 4 Interim	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	40.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	13.9	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	60.0	10.2	HHDT,MHDT
Grading	Hauling	140	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	520	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	103	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	312	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Substation Construction	—	—	—	—
Substation Construction	Worker	520	18.5	LDA,LDT1,LDT2
Substation Construction	Vendor	103	10.2	HHDT,MHDT
Substation Construction	Hauling	0.00	20.0	HHDT
Substation Construction	Onsite truck	—	—	HHDT
Substation Overlap	—	—	—	—
Substation Overlap	Worker	520	18.5	LDA,LDT1,LDT2
Substation Overlap	Vendor	103	10.2	HHDT,MHDT
Substation Overlap	Hauling	0.00	20.0	HHDT
Substation Overlap	Onsite truck	—	—	HHDT
Transmission Line	—	—	—	—
Transmission Line	Worker	7.50	18.5	LDA,LDT1,LDT2
Transmission Line	Vendor	0.00	10.2	HHDT,MHDT
Transmission Line	Hauling	0.00	20.0	HHDT
Transmission Line	Onsite truck	—	—	HHDT

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	0.00	0.00	1,858,488	619,496	260,053

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)
Transmission Line	—	—	1.98	0.00	—
Site Preparation	—	—	210	0.00	—
Grading	101,140	0.00	360	0.00	—
Paving	0.00	0.00	0.00	0.00	40.1

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

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%

Parking Lot	38.1	100%
User Defined Linear	1.98	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	457	0.03	< 0.005
2025	0.00	457	0.03	< 0.005

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

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

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	23.3	annual days of extreme heat
Extreme Precipitation	0.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.09	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 ¾ 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	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	88.7

AQ-PM	6.81
AQ-DPM	53.7
Drinking Water	45.4
Lead Risk Housing	34.0
Pesticides	0.00
Toxic Releases	4.18
Traffic	87.4
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	22.1
Haz Waste Facilities/Generators	4.94
Impaired Water Bodies	0.00
Solid Waste	84.7
Sensitive Population	—
Asthma	43.6
Cardio-vascular	73.5
Low Birth Weights	8.69
Socioeconomic Factor Indicators	—
Education	59.3
Housing	47.6
Linguistic	55.6
Poverty	61.6
Unemployment	64.5

7.2. Healthy Places Index Scores

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.

Indicator	Result for Project Census Tract

Economic	—
Above Poverty	15.42409855
Employed	6.480174516
Median HI	24.1498781
Education	—
Bachelor's or higher	29.56499423
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	39.18901578
Active commuting	18.54228153
Social	—
2-parent households	98.8836135
Voting	37.73899654
Neighborhood	—
Alcohol availability	70.39650969
Park access	14.37187219
Retail density	33.04247402
Supermarket access	15.79622738
Tree canopy	0.487617092
Housing	—
Homeownership	64.04465546
Housing habitability	62.59463621
Low-inc homeowner severe housing cost burden	10.07314256
Low-inc renter severe housing cost burden	86.00025664
Uncrowded housing	44.45014757
Health Outcomes	—

Insured adults	15.50109072
Arthritis	0.0
Asthma ER Admissions	57.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	31.3
Cognitively Disabled	6.7
Physically Disabled	2.8
Heart Attack ER Admissions	52.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	43.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8

Elderly	19.6
English Speaking	66.9
Foreign-born	47.5
Outdoor Workers	11.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	70.2
Traffic Density	65.2
Traffic Access	23.0
Other Indices	—
Hardship	60.4
Other Decision Support	—
2016 Voting	51.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	41.0
Healthy Places Index Score for Project Location (b)	16.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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

Screen	Justification
Construction: Construction Phases	Construction schedule based on input from the Project team.
Construction: Off-Road Equipment	Crawler tractors will be used in lieu of tractors/loaders/backhoes during site preparation and grading. All equipment will operate for 8 hours per day.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction. Haul truck distance based on data provided by the Project team.
Construction: Architectural Coatings	SCAQMD Rule 1113 limits

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APPENDIX 3.2:

CALEEMOD PROJECT OPERATIONAL EMISSIONS MODEL OUTPUTS

14174 Thousand Palms Ops Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14174 Thousand Palms Ops
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	10.0
Location	33.833382637667754, -116.40211615660678
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5690
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.18

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
Refrigerated Warehouse-No Rail	248	1000sqft	5.69	247,798	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	991	1000sqft	22.8	991,194	718,010	—	—	—
User Defined Industrial	1,239	User Defined Unit	0.00	0.00	0.00	—	—	—
Parking Lot	38.1	Acre	38.1	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. 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.	24.1	51.1	148	211	1.67	3.39	68.4	71.8	3.22	17.9	21.2	1,177	181,651	182,827	122	23.8	770	193,743
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.0	40.8	159	112	1.63	3.29	68.4	71.7	3.15	17.9	21.1	1,177	177,916	179,093	122	23.9	266	189,524
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.5	44.1	146	144	1.56	3.06	64.6	67.6	2.92	16.9	19.9	1,177	170,454	171,631	122	22.8	465	181,922
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.01	8.05	26.7	26.2	0.29	0.56	11.8	12.3	0.53	3.09	3.63	195	28,221	28,415	20.1	3.77	77.0	30,119

2.5. 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	13.4	11.4	145	154	1.66	3.15	68.4	71.6	3.01	17.9	21.0	—	174,843	174,843	1.68	22.4	517	182,073
Area	9.58	38.8	0.45	53.9	< 0.005	0.10	—	0.10	0.07	—	0.07	—	222	222	0.01	< 0.005	—	222
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,228	5,228	0.77	0.09	—	5,275
Water	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Waste	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	24.1	51.1	148	211	1.67	3.39	68.4	71.8	3.22	17.9	21.2	1,177	181,651	182,827	122	23.8	770	193,743
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.9	9.86	156	109	1.63	3.15	68.4	71.6	3.01	17.9	21.0	—	171,330	171,330	1.70	22.5	13.4	178,077
Area	—	29.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,228	5,228	0.77	0.09	—	5,275
Water	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Waste	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	13.0	40.8	159	112	1.63	3.29	68.4	71.7	3.15	17.9	21.1	1,177	177,916	179,093	122	23.9	266	189,524
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.6	9.70	146	117	1.56	2.99	64.6	67.6	2.86	16.9	19.8	—	164,193	164,193	1.59	21.3	212	170,802
Area	4.72	34.3	0.22	26.6	< 0.005	0.05	—	0.05	0.04	—	0.04	—	109	109	< 0.005	< 0.005	—	110

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,228	5,228	0.77	0.09	—	5,275
Water	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Waste	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Stationary	0.15	0.13	0.38	0.34	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	69.0	69.0	< 0.005	< 0.005	0.00	69.2
Total	16.5	44.1	146	144	1.56	3.06	64.6	67.6	2.92	16.9	19.9	1,177	170,454	171,631	122	22.8	465	181,922
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.12	1.77	26.6	21.3	0.28	0.55	11.8	12.3	0.52	3.09	3.62	—	27,184	27,184	0.26	3.53	35.2	28,278
Area	0.86	6.26	0.04	4.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	865	865	0.13	0.02	—	873
Water	—	—	—	—	—	—	—	—	—	—	—	90.9	142	232	9.34	0.22	—	533
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	364
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.8	41.8
Stationary	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	3.01	8.05	26.7	26.2	0.29	0.56	11.8	12.3	0.53	3.09	3.63	195	28,221	28,415	20.1	3.77	77.0	30,119

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No Rail	1.53	1.40	0.94	20.2	0.04	0.02	3.68	3.70	0.01	0.93	0.94	—	4,087	4,087	0.12	0.09	13.2	4,131
Unrefrigerated Warehouse-No Rail	7.81	7.15	4.79	103	0.21	0.08	18.8	18.9	0.07	4.74	4.81	—	20,866	20,866	0.59	0.47	67.2	21,088
User Defined Industrial	4.09	2.82	139	31.2	1.42	3.05	45.9	49.0	2.92	12.3	15.2	—	149,889	149,889	0.97	21.8	437	156,855
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.4	11.4	145	154	1.66	3.15	68.4	71.6	3.01	17.9	21.0	—	174,843	174,843	1.68	22.4	517	182,073
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	1.29	1.17	1.04	12.9	0.03	0.02	3.68	3.70	0.01	0.93	0.94	—	3,508	3,508	0.12	0.10	0.34	3,541
Unrefrigerated Warehouse-No Rail	6.61	5.97	5.31	65.7	0.18	0.08	18.8	18.9	0.07	4.74	4.81	—	17,909	17,909	0.62	0.50	1.74	18,075
User Defined Industrial	3.99	2.72	150	30.8	1.42	3.05	45.9	49.0	2.92	12.3	15.2	—	149,913	149,913	0.97	21.9	11.3	156,461
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.9	9.86	156	109	1.63	3.15	68.4	71.6	3.01	17.9	21.0	—	171,330	171,330	1.70	22.5	13.4	178,077
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehou Rail	0.22	0.20	0.15	2.41	0.01	< 0.005	0.58	0.59	< 0.005	0.15	0.15	—	540	540	0.02	0.01	0.82	546
Unrefrigerated Warehouse-No Rail	1.21	1.09	0.87	13.5	0.03	0.01	3.27	3.28	0.01	0.82	0.84	—	3,026	3,026	0.09	0.08	4.60	3,056
User Defined Industrial	0.70	0.48	25.6	5.40	0.25	0.53	7.94	8.47	0.51	2.12	2.63	—	23,618	23,618	0.15	3.44	29.7	24,677
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.12	1.77	26.6	21.3	0.28	0.55	11.8	12.3	0.52	3.09	3.62	—	27,184	27,184	0.26	3.53	35.2	28,278

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,369	1,369	0.20	0.02	—	1,382
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.43	0.05	—	2,902

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	982	982	0.15	0.02	—	991
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,228	5,228	0.77	0.09	—	5,275
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,369	1,369	0.20	0.02	—	1,382
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.43	0.05	—	2,902
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	982	982	0.15	0.02	—	991
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,228	5,228	0.77	0.09	—	5,275
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	227	227	0.03	< 0.005	—	229
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	476	476	0.07	0.01	—	480

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	163	163	0.02	< 0.005	—	164
Total	—	—	—	—	—	—	—	—	—	—	—	—	865	865	0.13	0.02	—	873

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehou Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

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	—	26.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	9.58	8.84	0.45	53.9	< 0.005	0.10	—	0.10	0.07	—	0.07	—	222	222	0.01	< 0.005	—	222
Total	9.58	38.8	0.45	53.9	< 0.005	0.10	—	0.10	0.07	—	0.07	—	222	222	0.01	< 0.005	—	222
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	26.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	29.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.86	0.80	0.04	4.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Total	0.86	6.26	0.04	4.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2

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)

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	110	166	276	11.3	0.27	—	638
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	439	689	1,129	45.1	1.08	—	2,580
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	—	110	166	276	11.3	0.27	—	638
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	439	689	1,129	45.1	1.08	—	2,580
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.2	27.4	45.6	1.87	0.04	—	106
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	72.7	114	187	7.47	0.18	—	427
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	90.9	142	232	9.34	0.22	—	533

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	126	0.00	126	12.5	0.00	—	439
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	502	0.00	502	50.2	0.00	—	1,757
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	126	0.00	126	12.5	0.00	—	439
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	502	0.00	502	50.2	0.00	—	1,757

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.08	0.00	—	72.7
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	83.1	0.00	83.1	8.31	0.00	—	291
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	364

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)

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.8	41.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.8	41.8

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5

Total	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

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
Refrigerated Warehouse-No Rail	340	193	185	108,368	5,304	3,015	2,888	1,690,534
Unrefrigerated Warehouse-No Rail	1,736	1,489	1,476	607,077	27,075	23,225	23,024	9,470,395
User Defined Industrial	564	471	466	195,816	52,315	43,692	43,232	18,171,770
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	0.00	1,858,488	619,496	99,578

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO_2 and CH_4 and N_2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	2,243,230	223	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	4,711,274	223	0.0330	0.0040	0.00
User Defined Industrial	0.00	223	0.0330	0.0040	0.00
Parking Lot	1,609,230	223	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	57,303,288	0.00
Unrefrigerated Warehouse-No Rail	229,213,613	13,473,898
User Defined Industrial	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	233	—
Unrefrigerated Warehouse-No Rail	932	—
User Defined Industrial	0.00	—

Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50.0	300	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

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	23.3	annual days of extreme heat
Extreme Precipitation	0.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.09	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 ¾ 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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
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	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	88.7
AQ-PM	6.81
AQ-DPM	53.7
Drinking Water	45.4
Lead Risk Housing	34.0
Pesticides	0.00
Toxic Releases	4.18
Traffic	87.4
Effect Indicators	—

CleanUp Sites	0.00
Groundwater	22.1
Haz Waste Facilities/Generators	4.94
Impaired Water Bodies	0.00
Solid Waste	84.7
Sensitive Population	—
Asthma	43.6
Cardio-vascular	73.5
Low Birth Weights	8.69
Socioeconomic Factor Indicators	—
Education	59.3
Housing	47.6
Linguistic	55.6
Poverty	61.6
Unemployment	64.5

7.2. Healthy Places Index Scores

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.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.42409855
Employed	6.480174516
Median HI	24.1498781
Education	—
Bachelor's or higher	29.56499423
High school enrollment	100
Preschool enrollment	1.873476197

Transportation	—
Auto Access	39.18901578
Active commuting	18.54228153
Social	—
2-parent households	98.8836135
Voting	37.73899654
Neighborhood	—
Alcohol availability	70.39650969
Park access	14.37187219
Retail density	33.04247402
Supermarket access	15.79622738
Tree canopy	0.487617092
Housing	—
Homeownership	64.04465546
Housing habitability	62.59463621
Low-inc homeowner severe housing cost burden	10.07314256
Low-inc renter severe housing cost burden	86.00025664
Uncrowded housing	44.45014757
Health Outcomes	—
Insured adults	15.50109072
Arthritis	0.0
Asthma ER Admissions	57.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	31.3
Cognitively Disabled	6.7
Physically Disabled	2.8
Heart Attack ER Admissions	52.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	43.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8
Elderly	19.6
English Speaking	66.9
Foreign-born	47.5
Outdoor Workers	11.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	70.2
Traffic Density	65.2
Traffic Access	23.0

Other Indices	—
Hardship	60.4
Other Decision Support	—
2016 Voting	51.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	41.0
Healthy Places Index Score for Project Location (b)	16.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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

Screen	Justification
Operations: Vehicle Data	Trip rate and trip length based on Project traffic and VMT analysis.
Operations: Fleet Mix	Fleet mix adjusted in order to separate passenger vehicles and heavy duty trucks using the User Defined Industrial land use.

Operations: Energy Use	Project will not use natural gas. Electricity usage estimates provided by Project team and assume 20% of Project electrical demand will be met by solar.
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

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APPENDIX 3.3:

ON-SITE CARGO HANDLING EQUIPMENT EMISSION CALCULATIONS

Operational Off-Road Equipment Emissions Calculation

Year:	2025	*2022-2030*
Fuel:	Nat Gas	*Nat Gas or Diesel*

Region	Year	Vehicle Category	Fuel	BHP	Emission Factor (lbs/hour)						
					ROG	NOX	CO	SOX	PM10	PM2.5	CO2
South Coast AQMD	2025	Cargo Handling Equipment - Port Tractor	Nat Gas	175	0.03	0.09	4.11	0.00	0.01	0.01	71.54

Equipment Qty:	5
Hours/day:	4

Region	Year	Vehicle Category	Fuel	BHP	Emissions (lbs/day)						
					ROG	NOX	CO	SOX	PM10	PM2.5	CO2
South Coast AQMD	2025	Cargo Handling Equipment - Port Tractor	Nat Gas	175	0.59	1.88	82.22	0.00	0.15	0.14	1,430.74

Model Output: OFFROAD2021 (v1.0.2) Emissions Inventory
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Y	Vehicle Category	Model Yea	Horsepowe	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consur	Total_Activ	Total_Popu	Horsepower_Hours_hhpy
South Coast AQMD	2025	Cargo Handling Equipment - Port Tractor	Aggregate	175	Nat Gas	0.00019156	0.00023185	0.00027598	0.032484752	0.000741237	0.565251	0.000058063	0.000053518	0	1.2643E-08	18338.937	5768.099	5.952631	0

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APPENDIX 3.4:

TRU EMISSION CALCULATIONS

TRU Type	TRU - Instate Truck TRU
Number of Units	42
Operating Time Each Unit	4
TRU Type	TRU - Instate Trailer TRU
Number of Units	51
Operating Time Each Unit	4
TRU Type	TRU - Out-of-State Genset TRU
Number of Units	0
Operating Time Each Unit	4
TRU Type	TRU - Instate Trailer TRU
Number of Units	0
Operating Time Each Unit	4

Unit	Emissions Pounds per Day						Annual
	ROG	NO_X	CO	SOX	PM10	PM2.5	MT CO_2
TRU - Instate Truck TRU	3.93	5.01	0.43	0.00	0.26	0.24	800.31
TRU - Instate Trailer TRU	3.83	3.86	0.45	0.00	0.09	0.08	670.74
TRU - Out-of-State Genset TRU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TRU - Instate Trailer TRU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.76	8.87	0.87	0.00	0.34	0.32	1471.05

Total Two Way Truck Trips	186

TRU Emission Calculation

The TRU calculations are based on the 2021 Offroad Emissions model, developed by the California Air Resources Board. The following parameters were used to generate the emissions database:

Region: County

Scenario: All Adopted Rules – Exhaust

Vehicle Classification: Types – All TRU Types

Orion does not provide emission rates per hour or mile as with the on-road emission model and only provides emission inventories. Emission results are produced in tons per day while all activity, fuel consumption and horsepower hours were reported at annual levels. The emission inventory is based on specific assumptions including the average horsepower rating of specific types of equipment and the hours of operation annually. These assumptions are not always consistent with assumptions used in the modeling of project level emissions. Therefore, the emissions inventory was converted into emission rates to accurately calculate emissions from TRU operation associated with project level details. This was accomplished by converting the annual horsepower hours to daily operational characteristics and converting the daily emission levels into hourly emission rates based on the total emission of each criteria pollutant by equipment type and the average daily hours of operation.

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SS)
Calendar Year: 2025
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Ye	Vehicle Category	Model Yea	Horsepowe	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consum	Total_Activity_	Total_Populatior	Horsepower_Hours_hhpy
Riverside (S	2025	Transport Refrigeration Unit - Instate Genset	Aggregate	Aggregate	Diesel	0.000513	0.005242	0.000739	0.00057	0.006925	1.157004	0.000195	0.00018	1816.21	2.59488E-08	37633.6	76701.67	98.07136	0
Riverside (S	2025	Transport Refrigeration Unit - Instate Trailer	Aggregate	Aggregate	Diesel	0.015118	0.144668	0.021768	0.016803	0.145845	25.32639	0.003263	0.003002	39759.23	5.67774E-07	823785.54	1151560.73	646.11	0
Riverside (S	2025	Transport Refrigeration Unit - Instate Truck	Aggregate	Aggregate	Diesel	0.001079	0.011015	0.001552	0.001199	0.014046	2.243665	0.000722	0.000665	3522.19	5.03015E-08	72979.19	131732	138.28	0
Riverside (S	2025	Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	Aggregate	Diesel	0.000435	0.004445	0.000627	0.000484	0.005735	0.924185	0.000188	0.000173	1450.72	2.07029E-08	30060.75	61476.06	495.63757	0
Riverside (S	2025	Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	Aggregate	Diesel	0.008753	0.089335	0.012604	0.009724	0.085782	13.9615	0.002642	0.002431	21917.68	3.13032E-07	454122.61	664508.32	2442.82	0
Riverside (S	2025	Transport Refrigeration Unit - Railcar TRU	Aggregate	Aggregate	Diesel	0.000337	0.003444	0.000485	0.000374	0.003269	0.539261	0.000112	0.000103	846.43	1.20837E-08	17540.42	26247.65	80.09099	0

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APPENDIX 3.5:

CALEEMOD PROJECT LOCALIZED OPERATIONAL EMISSIONS MODEL OUTPUTS

14174 Thousand Palms Ops LST Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14174 Thousand Palms Ops LST
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	10.0
Location	33.833382637667754, -116.40211615660678
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5690
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.18

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
Refrigerated Warehouse-No Rail	248	1000sqft	5.69	247,798	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	991	1000sqft	22.8	991,194	718,010	—	—	—
User Defined Industrial	1,239	User Defined Unit	0.00	0.00	0.00	—	—	—
Parking Lot	38.1	Acre	38.1	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. 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.	18.0	46.8	13.0	83.3	0.05	0.29	1.94	2.23	0.26	0.50	0.76	1,177	11,210	12,386	120	2.01	262	16,256
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.06	36.6	13.2	28.5	0.05	0.20	1.94	2.13	0.19	0.50	0.69	1,177	10,790	11,966	120	2.01	253	15,829
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.8	40.1	10.1	50.3	0.04	0.11	1.82	1.94	0.10	0.47	0.57	1,177	10,316	11,492	120	1.97	257	15,345
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.98	7.32	1.85	9.18	0.01	0.02	0.33	0.35	0.02	0.09	0.10	195	1,708	1,903	19.9	0.33	42.5	2,541

2.5. 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	7.35	7.04	9.78	26.9	0.04	0.05	1.94	1.99	0.05	0.50	0.54	—	4,402	4,402	0.41	0.56	9.86	4,587
Area	9.58	38.8	0.45	53.9	< 0.005	0.10	—	0.10	0.07	—	0.07	—	222	222	0.01	< 0.005	—	222
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,228	5,228	0.77	0.09	—	5,275
Water	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Waste	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	18.0	46.8	13.0	83.3	0.05	0.29	1.94	2.23	0.26	0.50	0.76	1,177	11,210	12,386	120	2.01	262	16,256
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.98	5.65	10.4	26.0	0.04	0.05	1.94	1.99	0.05	0.50	0.54	—	4,203	4,203	0.47	0.56	0.26	4,382
Area	—	29.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,228	5,228	0.77	0.09	—	5,275
Water	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Waste	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	7.06	36.6	13.2	28.5	0.05	0.20	1.94	2.13	0.19	0.50	0.69	1,177	10,790	11,966	120	2.01	253	15,829
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.97	5.68	9.53	23.4	0.04	0.05	1.82	1.87	0.05	0.47	0.51	—	4,055	4,055	0.41	0.52	4.04	4,225
Area	4.72	34.3	0.22	26.6	< 0.005	0.05	—	0.05	0.04	—	0.04	—	109	109	< 0.005	< 0.005	—	110

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,228	5,228	0.77	0.09	—	5,275
Water	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Waste	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Stationary	0.15	0.13	0.38	0.34	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	69.0	69.0	< 0.005	< 0.005	0.00	69.2
Total	10.8	40.1	10.1	50.3	0.04	0.11	1.82	1.94	0.10	0.47	0.57	1,177	10,316	11,492	120	1.97	257	15,345
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.09	1.04	1.74	4.27	0.01	0.01	0.33	0.34	0.01	0.09	0.09	—	671	671	0.07	0.09	0.67	699
Area	0.86	6.26	0.04	4.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	865	865	0.13	0.02	—	873
Water	—	—	—	—	—	—	—	—	—	—	—	90.9	142	232	9.34	0.22	—	533
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	364
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.8	41.8
Stationary	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	1.98	7.32	1.85	9.18	0.01	0.02	0.33	0.35	0.02	0.09	0.10	195	1,708	1,903	19.9	0.33	42.5	2,541

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigera Warehouse-No Rail	1.09	1.06	0.25	3.35	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	315	315	0.05	0.03	0.84	326
Unrefrigerated Warehouse-No Rail	5.58	5.44	1.29	17.1	0.02	0.01	1.20	1.22	0.01	0.30	0.32	—	1,610	1,610	0.26	0.15	4.31	1,664
User Defined Industrial	0.68	0.54	8.23	6.44	0.02	0.04	0.49	0.53	0.03	0.13	0.17	—	2,477	2,477	0.10	0.38	4.71	2,597
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.35	7.04	9.78	26.9	0.04	0.05	1.94	1.99	0.05	0.50	0.54	—	4,402	4,402	0.41	0.56	9.86	4,587
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.88	0.85	0.26	3.17	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	279	279	0.06	0.03	0.02	289
Unrefrigerated Warehouse-No Rail	4.50	4.34	1.33	16.2	0.01	0.01	1.20	1.22	0.01	0.30	0.32	—	1,423	1,423	0.31	0.15	0.11	1,475
User Defined Industrial	0.59	0.46	8.85	6.67	0.02	0.04	0.49	0.53	0.03	0.13	0.17	—	2,501	2,501	0.10	0.38	0.12	2,618
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.98	5.65	10.4	26.0	0.04	0.05	1.94	1.99	0.05	0.50	0.54	—	4,203	4,203	0.47	0.56	0.26	4,382
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehou Rail	0.15	0.14	0.04	0.48	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	42.3	42.3	0.01	< 0.005	0.05	43.8
Unrefrigerated Warehouse-No Rail	0.83	0.81	0.22	2.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	237	237	0.04	0.02	0.30	245
User Defined Industrial	0.11	0.09	1.48	1.13	< 0.005	0.01	0.09	0.09	0.01	0.02	0.03	—	392	392	0.02	0.06	0.32	410
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.09	1.04	1.74	4.27	0.01	0.01	0.33	0.34	0.01	0.09	0.09	—	671	671	0.07	0.09	0.67	699

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,369	1,369	0.20	0.02	—	1,382
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.43	0.05	—	2,902

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	982	982	0.15	0.02	—	991
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,228	5,228	0.77	0.09	—	5,275
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,369	1,369	0.20	0.02	—	1,382
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.43	0.05	—	2,902
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	982	982	0.15	0.02	—	991
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,228	5,228	0.77	0.09	—	5,275
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	227	227	0.03	< 0.005	—	229
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	476	476	0.07	0.01	—	480

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	163	163	0.02	< 0.005	—	164
Total	—	—	—	—	—	—	—	—	—	—	—	—	865	865	0.13	0.02	—	873

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehou Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

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	—	26.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	9.58	8.84	0.45	53.9	< 0.005	0.10	—	0.10	0.07	—	0.07	—	222	222	0.01	< 0.005	—	222
Total	9.58	38.8	0.45	53.9	< 0.005	0.10	—	0.10	0.07	—	0.07	—	222	222	0.01	< 0.005	—	222
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	26.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	29.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.86	0.80	0.04	4.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Total	0.86	6.26	0.04	4.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2

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)

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	110	166	276	11.3	0.27	—	638
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	439	689	1,129	45.1	1.08	—	2,580
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	—	110	166	276	11.3	0.27	—	638
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	439	689	1,129	45.1	1.08	—	2,580
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	549	855	1,404	56.4	1.35	—	3,218
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.2	27.4	45.6	1.87	0.04	—	106
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	72.7	114	187	7.47	0.18	—	427
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	90.9	142	232	9.34	0.22	—	533

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	126	0.00	126	12.5	0.00	—	439
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	502	0.00	502	50.2	0.00	—	1,757
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	126	0.00	126	12.5	0.00	—	439
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	502	0.00	502	50.2	0.00	—	1,757

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	628	0.00	628	62.7	0.00	—	2,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.08	0.00	—	72.7
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	83.1	0.00	83.1	8.31	0.00	—	291
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	364

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)

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	253	253
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.8	41.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.8	41.8

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5

Total	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

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
Refrigerated Warehouse-No Rail	340	193	185	108,368	340	193	185	108,368
Unrefrigerated Warehouse-No Rail	1,736	1,489	1,476	607,077	1,736	1,489	1,476	607,077
User Defined Industrial	564	471	466	195,816	564	471	466	195,816
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	0.00	1,858,488	619,496	99,578

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
Refrigerated Warehouse-No Rail	2,243,230	223	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	4,711,274	223	0.0330	0.0040	0.00
User Defined Industrial	0.00	223	0.0330	0.0040	0.00
Parking Lot	1,609,230	223	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	57,303,288	0.00
Unrefrigerated Warehouse-No Rail	229,213,613	13,473,898
User Defined Industrial	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	233	—
Unrefrigerated Warehouse-No Rail	932	—
User Defined Industrial	0.00	—

Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50.0	300	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

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	23.3	annual days of extreme heat
Extreme Precipitation	0.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.09	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 ¾ 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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
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	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	88.7
AQ-PM	6.81
AQ-DPM	53.7
Drinking Water	45.4
Lead Risk Housing	34.0
Pesticides	0.00
Toxic Releases	4.18
Traffic	87.4
Effect Indicators	—

CleanUp Sites	0.00
Groundwater	22.1
Haz Waste Facilities/Generators	4.94
Impaired Water Bodies	0.00
Solid Waste	84.7
Sensitive Population	—
Asthma	43.6
Cardio-vascular	73.5
Low Birth Weights	8.69
Socioeconomic Factor Indicators	—
Education	59.3
Housing	47.6
Linguistic	55.6
Poverty	61.6
Unemployment	64.5

7.2. Healthy Places Index Scores

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.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.42409855
Employed	6.480174516
Median HI	24.1498781
Education	—
Bachelor's or higher	29.56499423
High school enrollment	100
Preschool enrollment	1.873476197

Transportation	—
Auto Access	39.18901578
Active commuting	18.54228153
Social	—
2-parent households	98.8836135
Voting	37.73899654
Neighborhood	—
Alcohol availability	70.39650969
Park access	14.37187219
Retail density	33.04247402
Supermarket access	15.79622738
Tree canopy	0.487617092
Housing	—
Homeownership	64.04465546
Housing habitability	62.59463621
Low-inc homeowner severe housing cost burden	10.07314256
Low-inc renter severe housing cost burden	86.00025664
Uncrowded housing	44.45014757
Health Outcomes	—
Insured adults	15.50109072
Arthritis	0.0
Asthma ER Admissions	57.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	31.3
Cognitively Disabled	6.7
Physically Disabled	2.8
Heart Attack ER Admissions	52.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	43.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8
Elderly	19.6
English Speaking	66.9
Foreign-born	47.5
Outdoor Workers	11.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	70.2
Traffic Density	65.2
Traffic Access	23.0

Other Indices	—
Hardship	60.4
Other Decision Support	—
2016 Voting	51.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	41.0
Healthy Places Index Score for Project Location (b)	16.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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

Screen	Justification
Operations: Vehicle Data	Trip rate based on Project traffic analysis. Trip length set to 1 mile to account for on-site activity only.
Operations: Fleet Mix	Fleet mix adjusted in order to separate passenger vehicles and heavy duty trucks using the User Defined Industrial land use.

Operations: Energy Use	Project will not use natural gas. Electricity usage estimates provided by Project team and assume 20% of Project electrical demand will be met by solar.
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

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APPENDIX 3.6:

AERMOD LST MODELING OUTPUTS

```
** Lakes Environmental AERMOD MPI
**
***************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons CO\14174 Cons
CO.ADI
**
***************************************
**
**
***************************************
** AERMOD Control Pathway
***************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2189641 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons CO.err"
CO FINISHED
**
***************************************
** AERMOD Source Pathway
***************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1          VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2          VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3          VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4          VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5          VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6          VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7          VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8          VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9          VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10         VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL2          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL3          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL4          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL5          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL6          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL7          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL8          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL9          0.141905113     5.000    45.398     1.400
   SRCPARAM VOL10         0.141905113     5.000    45.398     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

```
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons CO.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "14174 CONS CO.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "14174 CONS CO.AD\08H1GALL.PLT" 32
   SUMMFILE "14174 Cons CO.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
```

```
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       10:54:26

                     PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                           ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: CO

 **Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR

 **This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
```

```
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing
                                                                 Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
 0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                  ;  Emission Rate
                 Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:
 aermod.inp
 **Output Print File:
 aermod.out

 **Detailed Error/Message File:   14174 Cons
 CO.err
 **File for Summary of Results:   14174 Cons
 CO.sum
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        10:54:26

                         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      ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1              0   0.14191E+00  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL2              0   0.14191E+00  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL3              0   0.14191E+00  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL4              0   0.14191E+00  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL5              0   0.14191E+00  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL6              0   0.14191E+00  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL7              0   0.14191E+00  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL8              0   0.14191E+00  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL9              0   0.14191E+00  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES   HRDOW             NO
 VOL10             0   0.14191E+00  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES   HRDOW             NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
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Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        10:54:26

                      PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                SOURCE IDs
 -----------                                                ----------


  ALL        VOL1       , VOL2       , VOL3       , VOL4       , VOL5       , VOL6       ,
  VOL7       , VOL8       ,

             VOL9       , VOL10      ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        10:54:26

                      PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                      SOURCE IDs
  --------   ---------                                      ----------


              2189641.   VOL1       , VOL2       , VOL3       , VOL4       , VOL5       ,
              VOL6       , VOL7       ,
 VOL8       ,

             VOL9       , VOL10      ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        10:54:26

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL1        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
```

```
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        10:54:26

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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        10:54:26

                     PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
```

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

- -

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .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
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

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

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL6 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

- -

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .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
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

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                    PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        10:54:26

                    PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
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    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        10:54:26

                      PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        10:54:26

                      PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        10:54:26

                      PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                               *** DISCRETE CARTESIAN RECEPTORS ***
                                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                               (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,      96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,      94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,      94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,      93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,      92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,      91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,      90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,      89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,      88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,      88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,      88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,      80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,      85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,      69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,      68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,      68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,      68.6,      68.6,       2.0);
     ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);         ( 555467.6,
     3742088.8,      69.0,      69.0,       2.0);
     ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);         ( 555322.6,
     3742026.1,      69.9,      69.9,       2.0);
     ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);         ( 552518.6,
     3742635.9,      96.0,      96.0,       2.0);
     ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);         ( 552104.6,
     3743002.8,      97.0,      97.0,       2.0);
```

```
( 552147.9, 3743107.3,      96.4,      96.4,       2.0);         ( 552511.0,
3742386.0,      98.0,      98.0,       2.0);
( 552396.2, 3742346.6,      99.0,      99.0,       2.0);         ( 554748.7,
3741897.7,      73.0,      73.0,       2.0);
( 554624.5, 3741840.5,      75.0,      75.0,       2.0);         ( 555067.2,
3742375.2,      71.0,      71.0,       2.0);
( 554920.6, 3742586.4,      72.4,      72.4,       2.0);         ( 554947.3,
3742550.2,      72.0,      72.0,       2.0);
( 554864.4, 3742535.0,      72.0,      72.0,       2.0);         ( 554941.3,
3742393.6,      72.0,      72.0,       2.0);
( 555037.0, 3742730.7,      73.9,      73.9,       2.0);         ( 555018.2,
3742600.8,      72.0,      72.0,       2.0);
( 555688.4, 3742524.3,      77.2,      77.2,       2.0);         ( 555640.6,
3742489.1,      76.0,      76.0,       2.0);
( 555702.5, 3742734.3,      80.3,      80.3,       2.0);         ( 555658.9,
3742351.2,      73.5,      73.5,       2.0);
( 555468.8, 3742309.4,      72.0,      72.0,       2.0);         ( 555024.8, 3744296.7,
114.4,     434.0,       2.0);
( 556539.9, 3743618.8,      97.0,      97.0,       2.0);         ( 556518.2,
3743768.2,      99.0,      99.0,       2.0);
( 556624.2, 3743711.6,      98.0,      98.0,       2.0);         ( 556613.1, 3743868.5,
101.1,     101.1,       2.0);
( 556893.9, 3743856.0,     100.7,     100.7,       2.0);         ( 556507.2, 3744010.1,
103.8,     103.8,       2.0);
( 557195.9, 3744195.4,     107.0,     107.0,       2.0);         ( 557240.6, 3744050.6,
103.0,     103.0,       2.0);
( 551720.2, 3743871.9,     100.0,     478.0,       2.0);         ( 551713.1, 3743823.3,
100.0,     478.0,       2.0);
( 551720.9, 3743686.9,     100.0,     100.0,       2.0);         ( 551723.5, 3743526.6,
100.0,     100.0,       2.0);
( 553601.7, 3741280.8,     104.0,     104.0,       2.0);         ( 554152.4, 3741075.6,
106.0,     106.0,       2.0);
( 554291.4, 3741227.5,     104.0,     104.0,       2.0);         ( 554094.6, 3741115.8,
106.0,     106.0,       2.0);
( 554501.8, 3741076.6,     102.9,     102.9,       2.0);         ( 553871.8, 3741110.8,
105.0,     105.0,       2.0);
( 554124.3, 3741453.2,      97.4,      97.4,       2.0);         ( 555828.5,
3742342.5,      73.2,      73.2,       2.0);
( 555821.5, 3742752.9,      81.9,      81.9,       2.0);         ( 555475.0,
3742811.6,      79.9,      79.9,       2.0);
( 555504.8, 3742898.0,      81.4,      81.4,       2.0);         ( 557195.2, 3744349.7,
111.1,     111.1,       2.0);
( 557198.5, 3744248.2,     108.8,     108.8,       2.0);         ( 557193.3, 3744425.8,
112.7,     112.7,       2.0);
( 555470.6, 3745232.9,     144.6,     434.0,       2.0);         ( 550726.9, 3743617.4,
110.0,     110.0,       2.0);
( 550066.6, 3744391.9,     113.9,     113.9,       2.0);         ( 557807.5, 3744815.6,
130.0,     422.0,       2.0);
```


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

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
3741918.5,      68.3,      68.3,       2.0);
( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
3742292.0,      71.0,      71.0,       2.0);
( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
3741731.3,      66.0,      66.0,       2.0);
```

(556637.8, 3741538.0, 65.0, 65.0,
2.0);

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

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

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

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file:
KPSP_V9_ADJU\KPSP_v9.SFC Met
Version: 16216
Profile file:
KPSP_V9_ADJU\KPSP_v9.PFL
Surface format:
FREE

Profile format:
FREE

Surface station no.: 93138 Upper air station no.: 3190
Name: UNKNOWN Name:
UNKNOWN
Year: 2012 Year: 2012

First 24 hours of scalar data

```
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - -
 12 01 01   1 01  -28.7  0.293 -9.000 -9.000 -999.  381.     94.4  0.13   4.07   1.00    3.32
 328.   10.1  286.4    2.0
 12 01 01   1 02   -5.5  0.102 -9.000 -9.000 -999.  122.     17.6  0.13   4.07   1.00    1.23
 320.   10.1  284.2    2.0
 12 01 01   1 03  -19.4  0.196 -9.000 -9.000 -999.  209.     42.5  0.13   4.07   1.00    2.27
 306.   10.1  283.1    2.0
 12 01 01   1 04  -16.5  0.181 -9.000 -9.000 -999.  184.     35.9  0.13   4.07   1.00    2.10
 328.   10.1  282.5    2.0
 12 01 01   1 05  -20.0  0.202 -9.000 -9.000 -999.  218.     44.9  0.13   4.07   1.00    2.33
 328.   10.1  283.8    2.0
 12 01 01   1 06  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 325.   10.1  283.1    2.0
 12 01 01   1 07  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 327.   10.1  284.2    2.0
 12 01 01   1 08   -9.3  0.150 -9.000 -9.000 -999.  140.     32.5  0.13   4.07   0.52    1.74
 297.   10.1  284.9    2.0
 12 01 01   1 09   50.6  0.130  0.399  0.011   45.  112.     -3.9  0.13   4.07   0.32    0.92
 282.   10.1  291.4    2.0
 12 01 01   1 10  126.5  0.172  0.815  0.008  154.  171.     -3.6  0.13   4.07   0.25    1.20
 233.   10.1  294.2    2.0
 12 01 01   1 11  179.5  0.134  1.299  0.005  439.  118.     -1.2  0.13   4.07   0.23    0.75
 344.   10.1  297.5    2.0
 12 01 01   1 12  203.7  0.185  1.649  0.005  791.  192.     -2.8  0.13   4.07   0.22    1.23
 100.   10.1  298.8    2.0
 12 01 01   1 13  199.8  0.234  1.913  0.005 1259.  271.     -5.7  0.13   4.07   0.22    1.76
 110.   10.1  299.9    2.0
 12 01 01   1 14  167.6  0.236  1.916  0.005 1507.  275.     -7.0  0.13   4.07   0.24    1.84
 124.   10.1  300.4    2.0
 12 01 01   1 15  108.5  0.273  1.697  0.005 1617.  342.    -16.8  0.13   4.07   0.27    2.40
 92.   10.1  300.4    2.0
 12 01 01   1 16   27.5  0.235  1.080  0.005 1640.  275.    -42.5  0.13   4.07   0.37    2.27
 144.   10.1  299.2    2.0
 12 01 01   1 17   -5.6  0.106 -9.000 -9.000 -999.   95.     19.2  0.13   4.07   0.66    1.28
 204.   10.1  294.9    2.0
 12 01 01   1 18  -17.6  0.188 -9.000 -9.000 -999.  196.     39.0  0.13   4.07   1.00    2.18
 314.   10.1  292.0    2.0
 12 01 01   1 19  -25.3  0.260 -9.000 -9.000 -999.  318.     74.4  0.13   4.07   1.00    2.96
 322.   10.1  289.9    2.0
 12 01 01   1 20  -21.1  0.217 -9.000 -9.000 -999.  243.     51.7  0.13   4.07   1.00    2.49
 314.   10.1  289.2    2.0
 12 01 01   1 21  -26.7  0.275 -9.000 -9.000 -999.  346.     83.0  0.13   4.07   1.00    3.12
 314.   10.1  290.4    2.0
 12 01 01   1 22  -22.1  0.226 -9.000 -9.000 -999.  259.     56.2  0.13   4.07   1.00    2.59
 317.   10.1  288.8    2.0
 12 01 01   1 23  -28.1  0.285 -9.000 -9.000 -999.  365.     89.2  0.13   4.07   1.00    3.23
 328.   10.1  285.4    2.0
 12 01 01   1 24  -33.3  0.338 -9.000 -9.000 -999.  472.    125.8  0.13   4.07   1.00    3.81
 331.   10.1  286.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1  328.    3.32   286.5   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	7.48320	(15012916)	556267.14	3743577.37	6.45998	(15012916)
556211.51	3743511.11	7.30092	(15012916)	556212.12	3743491.64	7.09837	(15012916)
556212.20	3743468.61	6.94050	(14120916)	556212.20	3743447.63	6.76884	(14120916)
556212.88	3743426.98	6.54443	(14120916)	556212.88	3743403.28	6.23872	(14120916)
556212.88	3743380.94	6.05263	(14120215)	556214.23	3743358.94	5.97234	(14120215)
556213.56	3743337.62	5.86067	(14120215)	556213.22	3743315.61	5.71905	(12120716)
556213.22	3743271.61	5.30889	(12120716)	556214.91	3743248.59	5.04345	(12120716)
556215.25	3743227.27	4.78534	(12120716)	556172.26	3743162.95	6.17746	(16010616)
556113.36	3743164.31	7.39988	(16010616)	555825.30	3743159.90	9.45800	(14120216)
555869.64	3743163.97	9.23216	(16010616)	555911.62	3743161.26	9.20955	(16010616)
555593.79	3743143.18	8.96073	(14120216)	555332.94	3743363.00	13.25671	(12121316)
555382.32	3743364.99	13.59763	(14120216)	554993.81	3743124.40	5.33916	(12121316)
555073.22	3743246.43	7.67709	(12121316)	555239.74	3743255.78	8.98118	(12121316)
555433.36	3742022.73	1.53629	(16122116)	555348.71	3742090.44	1.38339	(12121316)
555540.35	3741977.02	1.76671	(16122116)	555632.11	3741980.40	1.98398	(16122116)
555682.56	3741980.40	2.07146	(16122116)	555853.20	3741996.66	2.20046	(16122116)
555931.42	3741996.32	2.13813	(16122116)	555981.19	3741993.27	2.14942	(14120216)
555836.95	3742073.18	2.33087	(16122116)	555467.56	3742088.75	1.75945	(16122116)
555569.47	3742015.62	1.90988	(16122116)	555322.64	3742026.11	1.30373	(15123116)
555170.62	3742238.40	1.61687	(16122209)	552518.62	3742635.91	1.11502	(15120910)
552151.07	3742961.57	0.84887	(13020109)	552104.59	3743002.77	0.81893	(13020109)
552147.90	3743107.35	0.79362	(12121011)	552511.02	3742385.96	0.92174	(15120910)
552396.18	3742346.58	0.91175	(15120910)	554748.71	3741897.68	1.24312	(16122209)
554624.49	3741840.49	1.29163	(14120409)	555067.24	3742375.24	1.80289	(12121316)
554920.60	3742586.43	2.19823	(12121316)	554947.30	3742550.17	2.12692	(12121316)

```
      554864.41   3742535.03       2.01868  (12121316)                554941.32
      3742393.57        1.77790  (12121316)
      555036.96   3742730.68       2.79644  (12121316)                555018.23
      3742600.78        2.32488  (12121316)
      555688.41   3742524.26       3.47145  (16122116)                555640.59
      3742489.10        3.30827  (16122116)
      555702.48   3742734.30       4.57808  (14120216)                555658.92
      3742351.21        2.89274  (16122116)
      555468.83   3742309.41       2.26024  (16122116)                555024.76
      3744296.72       17.25874  (14120116)
      556539.92   3743618.77       3.47017  (16092109)                556518.18
      3743768.24        6.47828  (16010516)
      556624.24   3743711.65       3.22917  (16010516)                556613.05
      3743868.53        8.45423  (16010516)
      556893.94   3743855.99       4.92906  (16010516)                556507.22
      3744010.11       11.04667  (16010516)
      557195.85   3744195.39       4.62100  (16010516)                557240.64
      3744050.63        4.96011  (16010516)
      551720.23   3743871.95       0.85571  (15120411)                551713.09
      3743823.26        0.85515  (15120411)
      551720.88   3743686.93       0.86757  (15112712)                551723.47
      3743526.58        0.81198  (15112712)
      553601.74   3741280.79       0.97550  (13012409)                554152.43
      3741075.58        1.10433  (14120409)
      554291.40   3741227.54       1.14761  (14120409)                554094.63
      3741115.84        1.09393  (14120409)
      554501.84   3741076.63       1.00328  (16122209)                553871.76
      3741110.78        0.95070  (14120409)
      554124.33   3741453.24       1.09869  (14120409)                555828.45
      3742342.52        2.85425  (16122116)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***       10:54:26

                        PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

    X-COORD (M)  Y-COORD (M)        CONC     (YYYYMMDDHH)              X-COORD (M)  Y-COORD
    (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -
      555821.54   3742752.86       5.33866  (14120216)                555474.96
      3742811.58        4.39193  (16122116)
      555504.84   3742897.96       5.10676  (16122116)                557195.16
      3744349.69        2.44454  (16010516)
      557198.52   3744248.16       3.95184  (16010516)                557193.27
      3744425.80        1.66721  (14120213)
      555470.59   3745232.95       5.91860  (13112216)                550726.90
      3743617.42        0.73804  (15112712)
      550066.60   3744391.95       0.61949  (15111810)                557807.51
      3744815.58        1.21899  (14120309)
      555574.11   3741789.80       1.55451  (16122116)                555481.59
      3741918.55        1.51425  (16122116)
      555144.29   3742414.37       1.91611  (12121316)                555129.31
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       3742292.02        1.66970  (16122209)
       556633.34   3741897.60        2.36758  (14120216)                556634.03
       3741731.26        2.28002  (14120216)
       556637.78   3741538.02        2.10977
       (14120216)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***       10:54:26

                        PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
       556210.54   3743579.94        2.50517  (15012916)                556267.14
       3743577.37        2.07971  (15012916)
       556211.51   3743511.11        2.54034  (15012916)                556212.12
       3743491.64        2.52527  (15012916)
       556212.20   3743468.61        2.49620  (15012916)                556212.20
       3743447.63        2.45423  (15012916)
       556212.88   3743426.98        2.39800  (15012916)                556212.88
       3743403.28        2.32250  (15012916)
       556212.88   3743380.94        2.23828  (15012916)                556214.23
       3743358.94        2.14239  (15012916)
       556213.56   3743337.62        2.04783  (15012916)                556213.22
       3743315.61        1.94374  (15012916)
       556213.22   3743271.61        1.80270  (15111016)                556214.91
       3743248.59        1.78192  (15111016)
       556215.25   3743227.27        1.76147  (15111016)                556172.26
       3743162.95        1.90146  (15121416)
       556113.36   3743164.31        2.10666  (15121416)                555825.30
       3743159.90        2.83246b (16121216)
       555869.64   3743163.97        2.79960b (16121216)                555911.62
       3743161.26        2.68605b (16121216)
       555593.79   3743143.18        2.73622  (12012716)                555332.94
       3743363.00        5.05675  (13112216)
       555382.32   3743364.99        5.04749  (13122516)                554993.81
       3743124.40        2.25521  (13112216)
       555073.22   3743246.43        3.26793  (13112216)                555239.74
       3743255.78        3.65838  (13112216)
       555433.36   3742022.73        0.58919  (16120216)                555348.71
       3742090.44        0.60670  (16120216)
       555540.35   3741977.02        0.55187  (16120216)                555632.11
       3741980.40        0.51041  (16120216)
       555682.56   3741980.40        0.49108  (16122116)                555853.20
       3741996.66        0.54661  (16122116)
       555931.42   3741996.32        0.54307  (16122116)                555981.19
       3741993.27        0.53193  (16122116)
       555836.95   3742073.18        0.57252  (16122116)                555467.56
       3742088.75        0.62259  (16120216)
       555569.47   3742015.62        0.55801  (16120216)                555322.64
       3742026.11        0.56352  (16120216)
```

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      555170.62   3742238.40        0.61977  (13100416)                    552518.62
      3742635.91        0.16248  (12121316)
      552151.07   3742961.57        0.19397  (15020516)                    552104.59
      3743002.77        0.19669  (15020516)
      552147.90   3743107.35        0.20671  (15020516)                    552511.02
      3742385.96        0.18160  (12121316)
      552396.18   3742346.58        0.17299  (12121316)                    554748.71
      3741897.68        0.40465  (13112216)
      554624.49   3741840.49        0.36524  (13112216)                    555067.24
      3742375.24        0.73777  (13100416)
      554920.60   3742586.43        0.94907  (13112216)                    554947.30
      3742550.17        0.92131  (13112216)
      554864.41   3742535.03        0.85026  (13112216)                    554941.32
      3742393.57        0.74998  (13112216)
      555036.96   3742730.68        1.23496  (13112216)                    555018.23
      3742600.78        1.01117  (13112216)
      555688.41   3742524.26        0.94908  (12012716)                    555640.59
      3742489.10        0.92691  (12012716)
      555702.48   3742734.30        1.24729  (12012716)                    555658.92
      3742351.21        0.76882  (12012716)
      555468.83   3742309.41        0.76077  (16120216)                    555024.76
      3744296.72        3.95176  (14120116)
      556539.92   3743618.77        1.43420  (16010516)                    556518.18
      3743768.24        2.04837  (16010516)
      556624.24   3743711.65        1.51168  (16010516)                    556613.05
      3743868.53        1.95236  (16010516)
      556893.94   3743855.99        1.27389  (16010516)                    556507.22
      3744010.11        2.05892  (16010516)
      557195.85   3744195.39        0.82207  (16010516)                    557240.64
      3744050.63        0.96391  (16010516)
      551720.23   3743871.95        0.27603  (15120416)                    551713.09
      3743823.26        0.27111  (15120416)
      551720.88   3743686.93        0.25361  (15120416)                    551723.47
      3743526.58        0.22298  (15120416)
      553601.74   3741280.79        0.14555  (13112116)                    554152.43
      3741075.58        0.18239  (13112216)
      554291.40   3741227.54        0.20673  (13112216)                    554094.63
      3741115.84        0.18406  (13112216)
      554501.84   3741076.63        0.18948  (13112216)                    553871.76
      3741110.78        0.16009  (13112216)
      554124.33   3741453.24        0.22107  (13112216)                    555828.45
      3742342.52        0.68317  (16122116)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        10:54:26

                        PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                   VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)               X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -
      555821.54   3742752.86        1.17083  (15021116)                    555474.96
```

```
       3742811.58        1.48372  (12012716)
       555504.84   3742897.96       1.74517  (12012716)                557195.16
       3744349.69        0.63653  (13012516)
       557198.52   3744248.16       0.70468  (16010516)                557193.27
       3744425.80        0.57393  (13012516)
       555470.59   3745232.95       0.74691  (13112216)                550726.90
       3743617.42        0.20250  (15120416)
       550066.60   3744391.95       0.22169  (14121116)                557807.51
       3744815.58        0.36095  (16121916)
       555574.11   3741789.80       0.46734  (16120216)                555481.59
       3741918.55        0.53871  (16120216)
       555144.29   3742414.37       0.77924  (13100416)                555129.31
       3742292.02        0.67059  (13100416)
       556633.34   3741897.60       0.41558  (13030716)                556634.03
       3741731.26        0.35014b (16121216)
       556637.78   3741538.02       0.29889b
       (16121216)
```



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

                                                   *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


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


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

ALL      HIGH   1ST HIGH VALUE IS      17.25874  ON 14120116: AT (  555024.76,  3744296.72,
114.38,   434.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



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

                                                   *** THE SUMMARY OF HIGHEST  8-HR RESULTS ***


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


                                                        DATE
                                                                                     NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR, YR,
ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
```

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       5.05675  ON 13112216: AT (  555332.94,  3743363.00,
88.81,    88.81,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



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

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons NOX\14174 Cons
NOX.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2189641 Riverside_County
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons NOX.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL2         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL3         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL4         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL5         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL6         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL7         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL8         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL9         0.1614347845     5.000    45.398     1.400
   SRCPARAM VOL10        0.1614347845     5.000    45.398     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

```
   EMISFACT VOL1          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL5        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons NOX.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "14174 CONS NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "14174 Cons NOX.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***
```

```
   ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       10:57:02

                     PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: NOX

 **Model Calculates  1 Short Term Average(s) of:   1-HR

 **This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)
```

```
 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing
                                                                 Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
 0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate
                  Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:
 aermod.inp
 **Output Print File:
 aermod.out

 **Detailed Error/Message File:   14174 Cons
 NOX.err
 **File for Summary of Results:   14174 Cons
 NOX.sum
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        10:57:02

                      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      ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - -

 VOL1             0   0.16143E+00  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL2             0   0.16143E+00  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL3             0   0.16143E+00  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL4             0   0.16143E+00  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL5             0   0.16143E+00  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL6             0   0.16143E+00  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL7             0   0.16143E+00  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL8             0   0.16143E+00  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL9             0   0.16143E+00  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL10            0   0.16143E+00  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
```

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 ***                                                                            ***       10:57:02

                      PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                              *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                 SOURCE IDs
 -----------                                                 ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                            ***       10:57:02

                      PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                       SOURCE IDs
  --------   ---------                                       ----------


              2189641.   VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
              VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                            ***       10:57:02

                      PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                      (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        10:57:02

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        10:57:02

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
```

```
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        10:57:02

                        PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        10:57:02

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
```

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```

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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        10:57:02

                        PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        10:57:02

                        PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        10:57:02

                        PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
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   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```

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FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        10:57:02

                        PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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                                               *** DISCRETE CARTESIAN RECEPTORS ***
                                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                              (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,       96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,       94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,       94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,       93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,       92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,       91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,       90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,       89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,       88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,       88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,       88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,       80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,       85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,       69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,       68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,       68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,       68.6,      68.6,       2.0);
     ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);         ( 555467.6,
     3742088.8,       69.0,      69.0,       2.0);
     ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);         ( 555322.6,
     3742026.1,       69.9,      69.9,       2.0);
     ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);         ( 552518.6,
     3742635.9,       96.0,      96.0,       2.0);
     ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);         ( 552104.6,
     3743002.8,       97.0,      97.0,       2.0);
     ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);         ( 552511.0,
     3742386.0,       98.0,      98.0,       2.0);
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    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);         ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);         ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);         ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);         ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);         ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);         ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);         ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);         ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);         ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);         ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);         ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);         ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);         ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);         ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);         ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);         ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);         ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);         ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);         ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);         ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);         ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);         ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);         ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        10:57:02

                      PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

    ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
    3741918.5,      68.3,      68.3,       2.0);
    ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
    3742292.0,      71.0,      71.0,       2.0);
    ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
    3741731.3,      66.0,      66.0,       2.0);
    ( 556637.8, 3741538.0,      65.0,      65.0,
    2.0);
```

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

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

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

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file:
KPSP_V9_ADJU\KPSP_v9.SFC Met
Version: 16216
Profile file:
KPSP_V9_ADJU\KPSP_v9.PFL
Surface format:
FREE

Profile format:
FREE

Surface station no.: 93138 Upper air station no.: 3190
Name: UNKNOWN Name:
UNKNOWN
Year: 2012 Year: 2012

First 24 hours of scalar data
YR MO DY JDY HR H0 U* W* DT/DZ ZICNV ZIMCH M-O LEN Z0 BOWEN ALBEDO REF WS
WD HT REF TA HT

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - -
 12 01 01   1 01  -28.7  0.293 -9.000 -9.000 -999.  381.     94.4  0.13   4.07   1.00    3.32
 328.   10.1  286.4    2.0
 12 01 01   1 02   -5.5  0.102 -9.000 -9.000 -999.  122.     17.6  0.13   4.07   1.00    1.23
 320.   10.1  284.2    2.0
 12 01 01   1 03  -19.4  0.196 -9.000 -9.000 -999.  209.     42.5  0.13   4.07   1.00    2.27
 306.   10.1  283.1    2.0
 12 01 01   1 04  -16.5  0.181 -9.000 -9.000 -999.  184.     35.9  0.13   4.07   1.00    2.10
 328.   10.1  282.5    2.0
 12 01 01   1 05  -20.0  0.202 -9.000 -9.000 -999.  218.     44.9  0.13   4.07   1.00    2.33
 328.   10.1  283.8    2.0
 12 01 01   1 06  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 325.   10.1  283.1    2.0
 12 01 01   1 07  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 327.   10.1  284.2    2.0
 12 01 01   1 08   -9.3  0.150 -9.000 -9.000 -999.  140.     32.5  0.13   4.07   0.52    1.74
 297.   10.1  284.9    2.0
 12 01 01   1 09   50.6  0.130  0.399  0.011   45.  112.     -3.9  0.13   4.07   0.32    0.92
 282.   10.1  291.4    2.0
 12 01 01   1 10  126.5  0.172  0.815  0.008  154.  171.     -3.6  0.13   4.07   0.25    1.20
 233.   10.1  294.2    2.0
 12 01 01   1 11  179.5  0.134  1.299  0.005  439.  118.     -1.2  0.13   4.07   0.23    0.75
 344.   10.1  297.5    2.0
 12 01 01   1 12  203.7  0.185  1.649  0.005  791.  192.     -2.8  0.13   4.07   0.22    1.23
 100.   10.1  298.8    2.0
 12 01 01   1 13  199.8  0.234  1.913  0.005 1259.  271.     -5.7  0.13   4.07   0.22    1.76
 110.   10.1  299.9    2.0
 12 01 01   1 14  167.6  0.236  1.916  0.005 1507.  275.     -7.0  0.13   4.07   0.24    1.84
 124.   10.1  300.4    2.0
 12 01 01   1 15  108.5  0.273  1.697  0.005 1617.  342.    -16.8  0.13   4.07   0.27    2.40
 92.   10.1  300.4    2.0
 12 01 01   1 16   27.5  0.235  1.080  0.005 1640.  275.    -42.5  0.13   4.07   0.37    2.27
 144.   10.1  299.2    2.0
 12 01 01   1 17   -5.6  0.106 -9.000 -9.000 -999.   95.     19.2  0.13   4.07   0.66    1.28
 204.   10.1  294.9    2.0
 12 01 01   1 18  -17.6  0.188 -9.000 -9.000 -999.  196.     39.0  0.13   4.07   1.00    2.18
 314.   10.1  292.0    2.0
 12 01 01   1 19  -25.3  0.260 -9.000 -9.000 -999.  318.     74.4  0.13   4.07   1.00    2.96
 322.   10.1  289.9    2.0
 12 01 01   1 20  -21.1  0.217 -9.000 -9.000 -999.  243.     51.7  0.13   4.07   1.00    2.49
 314.   10.1  289.2    2.0
 12 01 01   1 21  -26.7  0.275 -9.000 -9.000 -999.  346.     83.0  0.13   4.07   1.00    3.12
 314.   10.1  290.4    2.0
 12 01 01   1 22  -22.1  0.226 -9.000 -9.000 -999.  259.     56.2  0.13   4.07   1.00    2.59
 317.   10.1  288.8    2.0
 12 01 01   1 23  -28.1  0.285 -9.000 -9.000 -999.  365.     89.2  0.13   4.07   1.00    3.23
 328.   10.1  285.4    2.0
 12 01 01   1 24  -33.3  0.338 -9.000 -9.000 -999.  472.    125.8  0.13   4.07   1.00    3.81
 331.   10.1  286.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1  328.    3.32   286.5   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***        10:57:02

                     PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR
```

SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 ,
VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	8.51307	(15012916)	556267.14	3743577.37	7.34903	(15012916)
556211.51	3743511.11	8.30571	(15012916)	556212.12	3743491.64	8.07528	(15012916)
556212.20	3743468.61	7.89569	(14120916)	556212.20	3743447.63	7.70040	(14120916)
556212.88	3743426.98	7.44511	(14120916)	556212.88	3743403.28	7.09733	(14120916)
556212.88	3743380.94	6.88563	(14120215)	556214.23	3743358.94	6.79428	(14120215)
556213.56	3743337.62	6.66725	(14120215)	556213.22	3743315.61	6.50613	(12120716)
556213.22	3743271.61	6.03953	(12120716)	556214.91	3743248.59	5.73755	(12120716)
556215.25	3743227.27	5.44392	(12120716)	556172.26	3743162.95	7.02764	(16010616)
556113.36	3743164.31	8.41829	(16010616)	555825.30	3743159.90	10.75966	(14120216)
555869.64	3743163.97	10.50274	(16010616)	555911.62	3743161.26	10.47701	(16010616)
555593.79	3743143.18	10.19394	(14120216)	555332.94	3743363.00	15.08116	(12121316)
555382.32	3743364.99	15.46900	(14120216)	554993.81	3743124.40	6.07396	(12121316)
555073.22	3743246.43	8.73365	(12121316)	555239.74	3743255.78	10.21722	(12121316)
555433.36	3742022.73	1.74772	(16122116)	555348.71	3742090.44	1.57378	(12121316)
555540.35	3741977.02	2.00985	(16122116)	555632.11	3741980.40	2.25703	(16122116)
555682.56	3741980.40	2.35654	(16122116)	555853.20	3741996.66	2.50330	(16122116)
555931.42	3741996.32	2.43240	(16122116)	555981.19	3741993.27	2.44523	(14120216)
555836.95	3742073.18	2.65166	(16122116)	555467.56	3742088.75	2.00160	(16122116)
555569.47	3742015.62	2.17273	(16122116)	555322.64	3742026.11	1.48316	(15123116)
555170.62	3742238.40	1.83939	(16122209)	552518.62	3742635.91	1.26848	(15120910)
552151.07	3742961.57	0.96570	(13020109)	552104.59	3743002.77	0.93164	(13020109)
552147.90	3743107.35	0.90284	(12121011)	552511.02	3742385.96	1.04860	(15120910)
552396.18	3742346.58	1.03723	(15120910)	554748.71	3741897.68	1.41421	(16122209)
554624.49	3741840.49	1.46939	(14120409)	555067.24	3742375.24	2.05101	(12121316)
554920.60	3742586.43	2.50077	(12121316)	554947.30	3742550.17	2.41963	(12121316)
554864.41	3742535.03	2.29650	(12121316)	554941.32	3742393.57	2.02258	(12121316)

```
       555036.96   3742730.68        3.18129  (12121316)                555018.23
       3742600.78        2.64485  (12121316)
       555688.41   3742524.26        3.94921  (16122116)                555640.59
       3742489.10        3.76357  (16122116)
       555702.48   3742734.30        5.20814  (14120216)                555658.92
       3742351.21        3.29085  (16122116)
       555468.83   3742309.41        2.57131  (16122116)                555024.76
       3744296.72       19.63398  (14120116)
       556539.92   3743618.77        3.94775  (16092109)                556518.18
       3743768.24        7.36985  (16010516)
       556624.24   3743711.65        3.67358  (16010516)                556613.05
       3743868.53        9.61775  (16010516)
       556893.94   3743855.99        5.60742  (16010516)                556507.22
       3744010.11       12.56697  (16010516)
       557195.85   3744195.39        5.25697  (16010516)                557240.64
       3744050.63        5.64274  (16010516)
       551720.23   3743871.95        0.97348  (15120411)                551713.09
       3743823.26        0.97284  (15120411)
       551720.88   3743686.93        0.98697  (15112712)                551723.47
       3743526.58        0.92373  (15112712)
       553601.74   3741280.79        1.10975  (13012409)                554152.43
       3741075.58        1.25632  (14120409)
       554291.40   3741227.54        1.30555  (14120409)                554094.63
       3741115.84        1.24448  (14120409)
       554501.84   3741076.63        1.14136  (16122209)                553871.76
       3741110.78        1.08154  (14120409)
       554124.33   3741453.24        1.24990  (14120409)                555828.45
       3742342.52        3.24707  (16122116)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        10:57:02

                        PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)               X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
       555821.54   3742752.86        6.07339  (14120216)                555474.96
       3742811.58        4.99637  (16122116)
       555504.84   3742897.96        5.80957  (16122116)                557195.16
       3744349.69        2.78096  (16010516)
       557198.52   3744248.16        4.49571  (16010516)                557193.27
       3744425.80        1.89666  (14120213)
       555470.59   3745232.95        6.73315  (13112216)                550726.90
       3743617.42        0.83961  (15112712)
       550066.60   3744391.95        0.70475  (15111810)                557807.51
       3744815.58        1.38676  (14120309)
       555574.11   3741789.80        1.76845  (16122116)                555481.59
       3741918.55        1.72265  (16122116)
       555144.29   3742414.37        2.17981  (12121316)                555129.31
       3742292.02        1.89949  (16122209)
       556633.34   3741897.60        2.69341  (14120216)                556634.03
```

```
        3741731.26        2.59380  (14120216)
        556637.78   3741538.02        2.40013
        (14120216)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        10:57:02

                      PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                   *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


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


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

ALL      HIGH   1ST HIGH VALUE IS      19.63398  ON 14120116: AT (  555024.76,  3744296.72,
114.38,   434.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        10:57:02

                      PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ************************************
    *** AERMOD Finishes Successfully ***
```

****

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons PM10\14174 Cons
PM10.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2189641 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons PM10.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
   LOCATION AREA1        AREA       554980.210  3743586.700       93.000
** Source Parameters **
   SRCPARAM VOL1         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL2         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL3         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL4         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL5         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL6         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL7         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL8         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL9         0.0077803691     5.000    45.398     1.400
   SRCPARAM VOL10        0.0077803691     5.000    45.398     1.400
   SRCPARAM AREA1        4.1342E-07     0.000   823.410   386.320     0.000     1.000
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
```

```
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT AREA1        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons PM10.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
```

```
   PLOTFILE 24 ALL 1ST "14174 CONS PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "14174 Cons PM10.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***       11:02:28

                     PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    11 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:  24-HR

 **This Run Includes:     11 Source(s);       1 Source Group(s); and      97 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
```

```
                 and:     10 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing
                                                                 Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
 0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate
                  Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:
 aermod.inp
 **Output Print File:
 aermod.out

 **Detailed Error/Message File:   14174 Cons
 PM10.err
 **File for Summary of Results:   14174 Cons
 PM10.sum
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        11:02:28

                        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       ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID          CATS.                (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1              0   0.77804E-02  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES   HRDOW            NO
 VOL2              0   0.77804E-02  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES   HRDOW            NO
 VOL3              0   0.77804E-02  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES   HRDOW            NO
```

```
 VOL4             0   0.77804E-02  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL5             0   0.77804E-02  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL6             0   0.77804E-02  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL7             0   0.77804E-02  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL8             0   0.77804E-02  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL9             0   0.77804E-02  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL10            0   0.77804E-02  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:02:28

                     PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** AREA SOURCE DATA ***

              NUMBER EMISSION RATE  COORD (SW CORNER)  BASE     RELEASE  X-DIM     Y-DIM
              ORIENT.    INIT.   URBAN  EMISSION RATE  AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X         Y      ELEV.    HEIGHT  OF AREA   OF AREA   OF
   AREA     SZ      SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS) (METERS)  (METERS)
     (DEG.)  (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -

 AREA1            0   0.41342E-06  554980.2 3743586.7    93.0     0.00    823.41    386.32
 0.00     1.00     YES   HRDOW            NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:02:28

                     PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                 SOURCE IDs
 -----------                                                 ----------



  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

           VOL9        , VOL10       , AREA1       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:02:28

                     PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***
```

```
  URBAN ID   URBAN POP                                              SOURCE IDs
  --------   ---------                                              ----------


             2189641.   VOL1         , VOL2         , VOL3         , VOL4         , VOL5         ,
             VOL6         , VOL7         ,
 VOL8         ,

            VOL9         , VOL10        , AREA1        ,
```


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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```


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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
```

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:02:28

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

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:02:28
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                     PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***        11:02:28

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

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
```

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    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:02:28

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

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:02:28

                     PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = AREA1        ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
```

```
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .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
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                           DAY OF WEEK = SATURDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                           DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                       (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,      96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,      94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,      94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,      93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,      92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,      91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,      90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,      89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,      88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,      88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,      88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,      80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,      85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,      69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,      68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,      68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,      68.6,      68.6,       2.0);
```

```
    ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);        ( 555467.6,
    3742088.8,      69.0,      69.0,       2.0);
    ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);        ( 555322.6,
    3742026.1,      69.9,      69.9,       2.0);
    ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);        ( 552518.6,
    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);        ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);        ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);        ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);        ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);        ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);        ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);        ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);        ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);        ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);        ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);        ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);        ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);        ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);        ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);        ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);        ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);        ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);        ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);        ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);        ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);        ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);        ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);        ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);        ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);        ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
```

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

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

```
( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
3741918.5,      68.3,      68.3,       2.0);
( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
3742292.0,      71.0,      71.0,       2.0);
( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
3741731.3,      66.0,      66.0,       2.0);
( 556637.8, 3741538.0,      65.0,      65.0,
2.0);
```


*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file:
KPSP_V9_ADJU\KPSP_v9.SFC Met
Version: 16216
Profile file:
KPSP_V9_ADJU\KPSP_v9.PFL
Surface format:
FREE

Profile format:

FREE

Surface station no.: 93138
Name: UNKNOWN
UNKNOWN
Year: 2012

Upper air station no.: 3190
Name:
Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-28.7	0.293	-9.000	-9.000	-999.	381.	94.4	0.13	4.07	1.00	3.32	328.	10.1	286.4	2.0
12	01	01	1	02	-5.5	0.102	-9.000	-9.000	-999.	122.	17.6	0.13	4.07	1.00	1.23	320.	10.1	284.2	2.0
12	01	01	1	03	-19.4	0.196	-9.000	-9.000	-999.	209.	42.5	0.13	4.07	1.00	2.27	306.	10.1	283.1	2.0
12	01	01	1	04	-16.5	0.181	-9.000	-9.000	-999.	184.	35.9	0.13	4.07	1.00	2.10	328.	10.1	282.5	2.0
12	01	01	1	05	-20.0	0.202	-9.000	-9.000	-999.	218.	44.9	0.13	4.07	1.00	2.33	328.	10.1	283.8	2.0
12	01	01	1	06	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	325.	10.1	283.1	2.0
12	01	01	1	07	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	327.	10.1	284.2	2.0
12	01	01	1	08	-9.3	0.150	-9.000	-9.000	-999.	140.	32.5	0.13	4.07	0.52	1.74	297.	10.1	284.9	2.0
12	01	01	1	09	50.6	0.130	0.399	0.011	45.	112.	-3.9	0.13	4.07	0.32	0.92	282.	10.1	291.4	2.0
12	01	01	1	10	126.5	0.172	0.815	0.008	154.	171.	-3.6	0.13	4.07	0.25	1.20	233.	10.1	294.2	2.0
12	01	01	1	11	179.5	0.134	1.299	0.005	439.	118.	-1.2	0.13	4.07	0.23	0.75	344.	10.1	297.5	2.0
12	01	01	1	12	203.7	0.185	1.649	0.005	791.	192.	-2.8	0.13	4.07	0.22	1.23	100.	10.1	298.8	2.0
12	01	01	1	13	199.8	0.234	1.913	0.005	1259.	271.	-5.7	0.13	4.07	0.22	1.76	110.	10.1	299.9	2.0
12	01	01	1	14	167.6	0.236	1.916	0.005	1507.	275.	-7.0	0.13	4.07	0.24	1.84	124.	10.1	300.4	2.0
12	01	01	1	15	108.5	0.273	1.697	0.005	1617.	342.	-16.8	0.13	4.07	0.27	2.40	92.	10.1	300.4	2.0
12	01	01	1	16	27.5	0.235	1.080	0.005	1640.	275.	-42.5	0.13	4.07	0.37	2.27	144.	10.1	299.2	2.0
12	01	01	1	17	-5.6	0.106	-9.000	-9.000	-999.	95.	19.2	0.13	4.07	0.66	1.28	204.	10.1	294.9	2.0
12	01	01	1	18	-17.6	0.188	-9.000	-9.000	-999.	196.	39.0	0.13	4.07	1.00	2.18	314.	10.1	292.0	2.0
12	01	01	1	19	-25.3	0.260	-9.000	-9.000	-999.	318.	74.4	0.13	4.07	1.00	2.96	322.	10.1	289.9	2.0
12	01	01	1	20	-21.1	0.217	-9.000	-9.000	-999.	243.	51.7	0.13	4.07	1.00	2.49	314.	10.1	289.2	2.0
12	01	01	1	21	-26.7	0.275	-9.000	-9.000	-999.	346.	83.0	0.13	4.07	1.00	3.12	314.	10.1	290.4	2.0
12	01	01	1	22	-22.1	0.226	-9.000	-9.000	-999.	259.	56.2	0.13	4.07	1.00	2.59	317.	10.1	288.8	2.0
12	01	01	1	23	-28.1	0.285	-9.000	-9.000	-999.	365.	89.2	0.13	4.07	1.00	3.23	328.	10.1	285.4	2.0
12	01	01	1	24	-33.3	0.338	-9.000	-9.000	-999.	472.	125.8	0.13	4.07	1.00	3.81	331.	10.1	286.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.1	1	328.	3.32	286.5	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 11:02:28

PAGE 21
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , AREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	0.26518	(12121324)	556267.14	3743577.37	0.24744	(12121324)
556211.51	3743511.11	0.19438	(12121324)	556212.12	3743491.64	0.17163	(12121324)
556212.20	3743468.61	0.14594	(12121324)	556212.20	3743447.63	0.14319	(15012924)
556212.88	3743426.98	0.14015	(15012924)	556212.88	3743403.28	0.13529	(15012924)
556212.88	3743380.94	0.12950	(15012924)	556214.23	3743358.94	0.12312	(15012924)
556213.56	3743337.62	0.11649	(15012924)	556213.22	3743315.61	0.11395	(14120924)
556213.22	3743271.61	0.10724	(14120924)	556214.91	3743248.59	0.10294	(14120924)
556215.25	3743227.27	0.09920	(13112924)	556172.26	3743162.95	0.10934	(13112924)
556113.36	3743164.31	0.11998	(13112924)	555825.30	3743159.90	0.15867b	(16121224)
555869.64	3743163.97	0.15912b	(16121224)	555911.62	3743161.26	0.15519b	(16121224)
555593.79	3743143.18	0.16686m	(15123124)	555332.94	3743363.00	0.33927m	(15123124)
555382.32	3743364.99	0.34552m	(15123124)	554993.81	3743124.40	0.11597	(13112224)
555073.22	3743246.43	0.16373	(13112224)	555239.74	3743255.78	0.21611m	(15123124)
555433.36	3742022.73	0.03230	(16120224)	555348.71	3742090.44	0.03328	(16120224)
555540.35	3741977.02	0.03031	(16120224)	555632.11	3741980.40	0.03112	(16122124)
555682.56	3741980.40	0.03349	(16122124)	555853.20	3741996.66	0.03828	(16122124)
555931.42	3741996.32	0.03845	(16122124)	555981.19	3741993.27	0.03790	(16122124)
555836.95	3742073.18	0.03973	(16122124)	555467.56	3742088.75	0.03391	(16120224)
555569.47	3742015.62	0.03060	(16120224)	555322.64	3742026.11	0.03107	(16120224)
555170.62	3742238.40	0.03436	(13100424)	552518.62	3742635.91	0.01929	(12121024)
552151.07	3742961.57	0.02025	(13020124)	552104.59			

```
     3743002.77        0.01931  (13020124)
     552147.90   3743107.35       0.01775  (13020124)                   552511.02
     3742385.96        0.01673  (12121024)
     552396.18   3742346.58       0.01648  (12121024)                   554748.71
     3741897.68        0.02088  (13112224)
     554624.49   3741840.49       0.02051  (13120624)                   555067.24
     3742375.24        0.04082  (13100424)
     554920.60   3742586.43       0.05031  (13112224)                   554947.30
     3742550.17        0.04908  (13112224)
     554864.41   3742535.03       0.04442  (13112224)                   554941.32
     3742393.57        0.04025  (13112224)
     555036.96   3742730.68       0.06380  (13112224)                   555018.23
     3742600.78        0.05299  (13112224)
     555688.41   3742524.26       0.05307  (12012724)                   555640.59
     3742489.10        0.05215  (12012724)
     555702.48   3742734.30       0.06875  (12012724)                   555658.92
     3742351.21        0.04434  (16122124)
     555468.83   3742309.41       0.04070  (16120224)                   555024.76
     3744296.72        0.20658  (14120124)
     556539.92   3743618.77       0.20148  (12121324)                   556518.18
     3743768.24        0.16719  (12121324)
     556624.24   3743711.65       0.17084  (12121324)                   556613.05
     3743868.53        0.11225  (16010524)
     556893.94   3743855.99       0.07131  (16010524)                   556507.22
     3744010.11        0.11332  (16010524)
     557195.85   3744195.39       0.05275  (13012524)                   557240.64
     3744050.63        0.05693  (16010524)
     551720.23   3743871.95       0.02543  (15120424)                   551713.09
     3743823.26        0.02485  (15120424)
     551720.88   3743686.93       0.02135  (15120424)                   551723.47
     3743526.58        0.01503  (13123024)
     553601.74   3741280.79       0.01509c (15010124)                   554152.43
     3741075.58        0.01615  (13120624)
     554291.40   3741227.54       0.01741  (13120624)                   554094.63
     3741115.84        0.01536  (13120624)
     554501.84   3741076.63       0.01682  (13120624)                   553871.76
     3741110.78        0.01436c (15010124)
     554124.33   3741453.24       0.01566c (15010124)                   555828.45
     3742342.52        0.04596  (16122124)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                   ***       11:02:28

                        PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                  AREA1       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10    IN
                                          MICROGRAMS/M**3                          **

       X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
       (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
     555821.54   3742752.86       0.08016  (14121624)                   555474.96
     3742811.58        0.08275m (15123124)
     555504.84   3742897.96       0.09940m (15123124)                   557195.16
```

```
        3744349.69        0.04328  (13012524)
        557198.52   3744248.16        0.05023  (13012524)                 557193.27
        3744425.80        0.04219  (12020724)
        555470.59   3745232.95        0.03931  (13112224)                 550726.90
        3743617.42        0.01625  (15120424)
        550066.60   3744391.95        0.01657  (14121124)                 557807.51
        3744815.58        0.03113  (12020724)
        555574.11   3741789.80        0.02593  (16120224)                 555481.59
        3741918.55        0.02971  (16120224)
        555144.29   3742414.37        0.04297  (13100424)                 555129.31
        3742292.02        0.03721  (13100424)
        556633.34   3741897.60        0.05185  (14121624)                 556634.03
        3741731.26        0.04760  (14121624)
        556637.78   3741538.02        0.04043
        (14121624)
```



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

                                                  *** THE SUMMARY OF HIGHEST 24-HR RESULTS ***


                                    ** CONC OF PM_10    IN
                                    MICROGRAMS/M**3                          **


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

ALL      HIGH   1ST HIGH VALUE IS       0.34552m ON 15123124: AT (  555382.32,  3743364.99,
89.00,    89.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



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

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

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of         709 Informational Message(s)

 A Total of       43848 Hours Were Processed

 A Total of         289 Calm Hours Identified

 A Total of         420 Missing Hours Identified (  0.96 Percent)
```

```
   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons PM25\14174 Cons
PM25.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2189641 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons PM25.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
   LOCATION AREA1        AREA       554980.210  3743586.700       93.000
** Source Parameters **
   SRCPARAM VOL1         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL2         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL3         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL4         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL5         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL6         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL7         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL8         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL9         0.0071661295     5.000    45.398     1.400
   SRCPARAM VOL10        0.0071661295     5.000    45.398     1.400
   SRCPARAM AREA1        1.8171E-07     0.000   823.410   386.320     0.000     1.000
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
```

```
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT AREA1        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons PM25.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
```

```
   PLOTFILE 24 ALL 1ST "14174 CONS PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "14174 Cons PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:04:42

                     PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    11 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_2.5

 **Model Calculates  1 Short Term Average(s) of:  24-HR

 **This Run Includes:     11 Source(s);       1 Source Group(s); and      97 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
```

```
                and:     10 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing
                                                                 Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
 0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate
                  Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:
 aermod.inp
 **Output Print File:
 aermod.out

 **Detailed Error/Message File:   14174 Cons
 PM25.err
 **File for Summary of Results:   14174 Cons
 PM25.sum
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***       11:04:42

                         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       ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - -

 VOL1             0   0.71661E-02  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES   HRDOW            NO
 VOL2             0   0.71661E-02  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES   HRDOW            NO
 VOL3             0   0.71661E-02  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES   HRDOW            NO
```

```
 VOL4              0   0.71661E-02  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES   HRDOW          NO
 VOL5              0   0.71661E-02  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES   HRDOW          NO
 VOL6              0   0.71661E-02  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES   HRDOW          NO
 VOL7              0   0.71661E-02  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES   HRDOW          NO
 VOL8              0   0.71661E-02  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES   HRDOW          NO
 VOL9              0   0.71661E-02  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES   HRDOW          NO
 VOL10             0   0.71661E-02  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES   HRDOW          NO
```

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


                                                    *** AREA SOURCE DATA ***

                NUMBER EMISSION RATE  COORD (SW CORNER)  BASE     RELEASE  X-DIM     Y-DIM
                ORIENT.    INIT.   URBAN  EMISSION RATE  AIRCRAFT
   SOURCE        PART.  (GRAMS/SEC       X         Y      ELEV.    HEIGHT  OF AREA   OF AREA   OF
   AREA      SZ      SOURCE  SCALAR VARY
     ID          CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS) (METERS)  (METERS)
     (DEG.)  (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

 AREA1             0   0.18171E-06  554980.2 3743586.7    93.0     0.00    823.41    386.32
 0.00     1.00     YES   HRDOW            NO
```

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


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                SOURCE IDs
 -----------                                                ----------



  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       , AREA1       ,
```

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


                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***
```

```
  URBAN ID   URBAN POP                                             SOURCE IDs
  --------   ---------                                             ----------


             2189641.   VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
             VOL6        , VOL7        ,
 VOL8        ,

            VOL9        , VOL10       , AREA1       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:04:42

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:04:42

                        PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:04:42

                        PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        11:04:42

                        PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
```

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```



```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL6 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- -

DAY OF WEEK = WEEKDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .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
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL7 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- -

DAY OF WEEK = WEEKDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .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
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

```
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        11:04:42

                        PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME    :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        11:04:42

                        PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = AREA1        ; SOURCE TYPE = AREA      :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
```

```
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .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
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
```



```
                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                            (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);          ( 556267.1,
     3743577.4,      96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);          ( 556212.1,
     3743491.6,      94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);          ( 556212.2,
     3743447.6,      94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);          ( 556212.9,
     3743403.3,      93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);          ( 556214.2,
     3743358.9,      92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);          ( 556213.2,
     3743315.6,      91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);          ( 556214.9,
     3743248.6,      90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);          ( 556172.3,
     3743162.9,      89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);          ( 555825.3,
     3743159.9,      88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);          ( 555911.6,
     3743161.3,      88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);          ( 555332.9,
     3743363.0,      88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);          ( 554993.8,
     3743124.4,      80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);          ( 555239.7,
     3743255.8,      85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);          ( 555348.7,
     3742090.4,      69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);          ( 555632.1,
     3741980.4,      68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);          ( 555853.2,
     3741996.7,      68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);          ( 555981.2,
     3741993.3,      68.6,      68.6,       2.0);
```

```
    ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);        ( 555467.6,
    3742088.8,      69.0,      69.0,       2.0);
    ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);        ( 555322.6,
    3742026.1,      69.9,      69.9,       2.0);
    ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);        ( 552518.6,
    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);        ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);        ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);        ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);        ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);        ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);        ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);        ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);        ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);        ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);        ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);        ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);        ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);        ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);        ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);        ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);        ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);        ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);        ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);        ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);        ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);        ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);        ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);        ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);        ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);        ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
```

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

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

```
                                                             (METERS)

     ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
     3741918.5,      68.3,      68.3,       2.0);
     ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
     3742292.0,      71.0,      71.0,       2.0);
     ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
     3741731.3,      66.0,      66.0,       2.0);
     ( 556637.8, 3741538.0,      65.0,      65.0,
     2.0);
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       11:04:42

                        PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                (1=YES; 0=NO)

              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1

                  NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
                  INCLUDED IN THE DATA FILE.



                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES
                                    ***
                                                              (METERS/SEC)

                                                   1.54,   3.09,   5.14,   8.23,  10.80,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       11:04:42

                        PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:
   KPSP_V9_ADJU\KPSP_v9.SFC                                                         Met
   Version:  16216
   Profile file:
   KPSP_V9_ADJU\KPSP_v9.PFL
   Surface format:
   FREE

   Profile format:
```

FREE

Surface station no.: 93138
Name: UNKNOWN
UNKNOWN
Year: 2012

Upper air station no.: 3190
Name:
Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-28.7	0.293	-9.000	-9.000	-999.	381.	94.4	0.13	4.07	1.00	3.32	328.	10.1	286.4	2.0
12	01	01	1	02	-5.5	0.102	-9.000	-9.000	-999.	122.	17.6	0.13	4.07	1.00	1.23	320.	10.1	284.2	2.0
12	01	01	1	03	-19.4	0.196	-9.000	-9.000	-999.	209.	42.5	0.13	4.07	1.00	2.27	306.	10.1	283.1	2.0
12	01	01	1	04	-16.5	0.181	-9.000	-9.000	-999.	184.	35.9	0.13	4.07	1.00	2.10	328.	10.1	282.5	2.0
12	01	01	1	05	-20.0	0.202	-9.000	-9.000	-999.	218.	44.9	0.13	4.07	1.00	2.33	328.	10.1	283.8	2.0
12	01	01	1	06	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	325.	10.1	283.1	2.0
12	01	01	1	07	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	327.	10.1	284.2	2.0
12	01	01	1	08	-9.3	0.150	-9.000	-9.000	-999.	140.	32.5	0.13	4.07	0.52	1.74	297.	10.1	284.9	2.0
12	01	01	1	09	50.6	0.130	0.399	0.011	45.	112.	-3.9	0.13	4.07	0.32	0.92	282.	10.1	291.4	2.0
12	01	01	1	10	126.5	0.172	0.815	0.008	154.	171.	-3.6	0.13	4.07	0.25	1.20	233.	10.1	294.2	2.0
12	01	01	1	11	179.5	0.134	1.299	0.005	439.	118.	-1.2	0.13	4.07	0.23	0.75	344.	10.1	297.5	2.0
12	01	01	1	12	203.7	0.185	1.649	0.005	791.	192.	-2.8	0.13	4.07	0.22	1.23	100.	10.1	298.8	2.0
12	01	01	1	13	199.8	0.234	1.913	0.005	1259.	271.	-5.7	0.13	4.07	0.22	1.76	110.	10.1	299.9	2.0
12	01	01	1	14	167.6	0.236	1.916	0.005	1507.	275.	-7.0	0.13	4.07	0.24	1.84	124.	10.1	300.4	2.0
12	01	01	1	15	108.5	0.273	1.697	0.005	1617.	342.	-16.8	0.13	4.07	0.27	2.40	92.	10.1	300.4	2.0
12	01	01	1	16	27.5	0.235	1.080	0.005	1640.	275.	-42.5	0.13	4.07	0.37	2.27	144.	10.1	299.2	2.0
12	01	01	1	17	-5.6	0.106	-9.000	-9.000	-999.	95.	19.2	0.13	4.07	0.66	1.28	204.	10.1	294.9	2.0
12	01	01	1	18	-17.6	0.188	-9.000	-9.000	-999.	196.	39.0	0.13	4.07	1.00	2.18	314.	10.1	292.0	2.0
12	01	01	1	19	-25.3	0.260	-9.000	-9.000	-999.	318.	74.4	0.13	4.07	1.00	2.96	322.	10.1	289.9	2.0
12	01	01	1	20	-21.1	0.217	-9.000	-9.000	-999.	243.	51.7	0.13	4.07	1.00	2.49	314.	10.1	289.2	2.0
12	01	01	1	21	-26.7	0.275	-9.000	-9.000	-999.	346.	83.0	0.13	4.07	1.00	3.12	314.	10.1	290.4	2.0
12	01	01	1	22	-22.1	0.226	-9.000	-9.000	-999.	259.	56.2	0.13	4.07	1.00	2.59	317.	10.1	288.8	2.0
12	01	01	1	23	-28.1	0.285	-9.000	-9.000	-999.	365.	89.2	0.13	4.07	1.00	3.23	328.	10.1	285.4	2.0
12	01	01	1	24	-33.3	0.338	-9.000	-9.000	-999.	472.	125.8	0.13	4.07	1.00	3.81	331.	10.1	286.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.1	1	328.	3.32	286.5	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 11:04:42

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

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , AREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	0.12710	(12121324)	556267.14	3743577.37	0.11799	(12121324)
556211.51	3743511.11	0.09570	(12121324)	556212.12	3743491.64	0.08601	(15012924)
556212.20	3743468.61	0.08573	(15012924)	556212.20	3743447.63	0.08454	(15012924)
556212.88	3743426.98	0.08270	(15012924)	556212.88	3743403.28	0.07990	(15012924)
556212.88	3743380.94	0.07661	(15012924)	556214.23	3743358.94	0.07297	(15012924)
556213.56	3743337.62	0.06922	(15012924)	556213.22	3743315.61	0.06686	(14120924)
556213.22	3743271.61	0.06295	(14120924)	556214.91	3743248.59	0.06047	(14120924)
556215.25	3743227.27	0.05818	(15111024)	556172.26	3743162.95	0.06358	(15121424)
556113.36	3743164.31	0.06975	(16100324)	555825.30	3743159.90	0.09467b	(16121224)
555869.64	3743163.97	0.09458b	(16121224)	555911.62	3743161.26	0.09185b	(16121224)
555593.79	3743143.18	0.09776m	(15123124)	555332.94	3743363.00	0.19864m	(15123124)
555382.32	3743364.99	0.20278m	(15123124)	554993.81	3743124.40	0.07082	(13112224)
555073.22	3743246.43	0.10072	(13112224)	555239.74	3743255.78	0.12603m	(15123124)
555433.36	3742022.73	0.01938	(16120224)	555348.71	3742090.44	0.01997	(16120224)
555540.35	3741977.02	0.01818	(16120224)	555632.11	3741980.40	0.01776	(16122124)
555682.56	3741980.40	0.01904	(16122124)	555853.20	3741996.66	0.02164	(16122124)
555931.42	3741996.32	0.02168	(16122124)	555981.19	3741993.27	0.02134	(16122124)
555836.95	3742073.18	0.02250	(16122124)	555467.56	3742088.75	0.02039	(16120224)
555569.47	3742015.62	0.01836	(16120224)	555322.64	3742026.11	0.01862	(16120224)
555170.62	3742238.40	0.02056	(13100424)	552518.62	3742635.91	0.00953	(12121024)
552151.07	3742961.57	0.01039	(13020124)	552104.59			

3743002.77   0.00995 (13020124)
552147.90   3743107.35   0.00925 (13020124)   552511.02
3742385.96   0.00809 (12121024)
552396.18   3742346.58   0.00796 (12121024)   554748.71
3741897.68   0.01274 (13112224)
554624.49   3741840.49   0.01107 (13112224)   555067.24
3742375.24   0.02444 (13100424)
554920.60   3742586.43   0.03046 (13112224)   554947.30
3742550.17   0.02968 (13112224)
554864.41   3742535.03   0.02700 (13112224)   554941.32
3742393.57   0.02429 (13112224)
555036.96   3742730.68   0.03891 (13112224)   555018.23
3742600.78   0.03219 (13112224)
555688.41   3742524.26   0.03168 (12012724)   555640.59
3742489.10   0.03108 (12012724)
555702.48   3742734.30   0.04119 (12012724)   555658.92
3742351.21   0.02580 (12012724)
555468.83   3742309.41   0.02458 (16120224)   555024.76
3744296.72   0.12557 (14120124)
556539.92   3743618.77   0.09404 (12121324)   556518.18
3743768.24   0.07871 (12121324)
556624.24   3743711.65   0.07957 (12121324)   556613.05
3743868.53   0.06652 (16010524)
556893.94   3743855.99   0.04255 (16010524)   556507.22
3744010.11   0.06793 (16010524)
557195.85   3744195.39   0.02957 (13012524)   557240.64
3744050.63   0.03350 (16010524)
551720.23   3743871.95   0.01361 (15120424)   551713.09
3743823.26   0.01331 (15120424)
551720.88   3743686.93   0.01162 (15120424)   551723.47
3743526.58   0.00852 (15120424)
553601.74   3741280.79   0.00712c (15010124)   554152.43
3741075.58   0.00752 (13120624)
554291.40   3741227.54   0.00811 (13120624)   554094.63
3741115.84   0.00718 (13120624)
554501.84   3741076.63   0.00784 (13120624)   553871.76
3741110.78   0.00684c (15010124)
554124.33   3741453.24   0.00750c (15010124)   555828.45
3742342.52   0.02621 (16122124)

FF *** AERMOD - VERSION 23132 ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ ***   01/23/24
*** AERMET - VERSION 16216 ***
***   ***   11:04:42

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

*** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   VOL1   , VOL2   ,
VOL3   , VOL4   , VOL5   ,
VOL6   , VOL7   , VOL8   , VOL9   , VOL10   ,
AREA1   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5   IN MICROGRAMS/M**3   **

X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
- -
555821.54   3742752.86   0.04135 (14121624)   555474.96
3742811.58   0.04855m (15123124)
555504.84   3742897.96   0.05817m (15123124)   557195.16

```
       3744349.69       0.02463  (13012524)
       557198.52   3744248.16       0.02826  (13012524)                557193.27
       3744425.80       0.02121  (13012524)
       555470.59   3745232.95       0.02385  (13112224)                550726.90
       3743617.42       0.00893  (15120424)
       550066.60   3744391.95       0.00923  (14121124)                557807.51
       3744815.58       0.01556  (16121924)
       555574.11   3741789.80       0.01551  (16120224)                555481.59
       3741918.55       0.01780  (16120224)
       555144.29   3742414.37       0.02574  (13100424)                555129.31
       3742292.02       0.02226  (13100424)
       556633.34   3741897.60       0.02578  (14121624)                556634.03
       3741731.26       0.02356  (14121624)
       556637.78   3741538.02       0.01999
       (14121624)
```



```
                                                  *** THE SUMMARY OF HIGHEST 24-HR RESULTS ***


                                      ** CONC OF PM_2.5   IN
                                      MICROGRAMS/M**3                          **


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

ALL      HIGH   1ST HIGH VALUE IS       0.20278m ON 15123124: AT (  555382.32,  3743364.99,
89.00,    89.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



```
 *** Message Summary : AERMOD Model Execution ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)
```

```
   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons CO Mit\14174 Cons
CO Mit.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2189641 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons CO Mit.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL2         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL3         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL4         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL5         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL6         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL7         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL8         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL9         0.1573398533     5.000    45.398     1.400
   SRCPARAM VOL10        0.1573398533     5.000    45.398     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

```
   EMISFACT VOL1          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons CO Mit.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "14174 CONS CO MIT.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "14174 CONS CO MIT.AD\08H1GALL.PLT" 32
   SUMMFILE "14174 Cons CO Mit.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of             0 Fatal Error Message(s)
 A Total of             2 Warning Message(s)
 A Total of             0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
```

```
               ***  NONE  ***


   ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:05:58

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

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: CO

 **Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR

 **This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
```

Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 125.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Input Runstream File: aermod.inp
**Output Print File: aermod.out

**Detailed Error/Message File: 14174 Cons CO Mit.err
**File for Summary of Results: 14174 Cons CO Mit.sum

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

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT SOURCE
VOL1	0	0.15734E+00	555077.2	3743877.5	101.4	5.00	45.40	1.40	YES	HRDOW	NO
VOL2	0	0.15734E+00	555076.8	3743681.2	95.9	5.00	45.40	1.40	YES	HRDOW	NO
VOL3	0	0.15734E+00	555235.6	3743876.4	101.7	5.00	45.40	1.40	YES	HRDOW	NO
VOL4	0	0.15734E+00	555236.3	3743681.9	96.9	5.00	45.40	1.40	YES	HRDOW	NO
VOL5	0	0.15734E+00	555393.7	3743877.8	102.4	5.00	45.40	1.40	YES	HRDOW	NO
VOL6	0	0.15734E+00	555546.3	3743684.0	97.0	5.00	45.40	1.40	YES	HRDOW	NO
VOL7	0	0.15734E+00	555705.1	3743881.2	101.5	5.00	45.40	1.40	YES	HRDOW	NO
VOL8	0	0.15734E+00	555705.8	3743685.3	98.0	5.00	45.40	1.40	YES	HRDOW	NO
VOL9	0	0.15734E+00	555546.3	3743878.5	102.1	5.00	45.40	1.40	YES	HRDOW	NO
VOL10	0	0.15734E+00	555393.0	3743681.2	96.9	5.00	45.40	1.40	YES	HRDOW	NO

```
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        12:05:58

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

                                            *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                 SOURCE IDs
 -----------                                                 ----------

  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        12:05:58

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

                                           *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                       SOURCE IDs
  --------   ---------                                       ----------

              2189641.   VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
              VOL6        , VOL7        ,
 VOL8        ,

             VOL9        , VOL10       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        12:05:58

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:05:58

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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:05:58

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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```


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

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```


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

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
```

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```


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

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
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                    PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:05:58

                    PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
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   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:05:58

                     PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:05:58

                     PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
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  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:05:58

                        PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                               *** DISCRETE CARTESIAN RECEPTORS ***
                                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                             (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,       96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,       94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,       94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,       93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,       92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,       91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,       90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,       89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,       88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,       88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,       88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,       80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,       85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,       69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,       68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,       68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,       68.6,      68.6,       2.0);
     ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);         ( 555467.6,
     3742088.8,       69.0,      69.0,       2.0);
     ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);         ( 555322.6,
     3742026.1,       69.9,      69.9,       2.0);
     ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);         ( 552518.6,
     3742635.9,       96.0,      96.0,       2.0);
     ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);         ( 552104.6,
     3743002.8,       97.0,      97.0,       2.0);
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( 552147.9, 3743107.3,      96.4,      96.4,       2.0);         ( 552511.0,
3742386.0,      98.0,      98.0,       2.0);
( 552396.2, 3742346.6,      99.0,      99.0,       2.0);         ( 554748.7,
3741897.7,      73.0,      73.0,       2.0);
( 554624.5, 3741840.5,      75.0,      75.0,       2.0);         ( 555067.2,
3742375.2,      71.0,      71.0,       2.0);
( 554920.6, 3742586.4,      72.4,      72.4,       2.0);         ( 554947.3,
3742550.2,      72.0,      72.0,       2.0);
( 554864.4, 3742535.0,      72.0,      72.0,       2.0);         ( 554941.3,
3742393.6,      72.0,      72.0,       2.0);
( 555037.0, 3742730.7,      73.9,      73.9,       2.0);         ( 555018.2,
3742600.8,      72.0,      72.0,       2.0);
( 555688.4, 3742524.3,      77.2,      77.2,       2.0);         ( 555640.6,
3742489.1,      76.0,      76.0,       2.0);
( 555702.5, 3742734.3,      80.3,      80.3,       2.0);         ( 555658.9,
3742351.2,      73.5,      73.5,       2.0);
( 555468.8, 3742309.4,      72.0,      72.0,       2.0);         ( 555024.8, 3744296.7,
114.4,     434.0,       2.0);
( 556539.9, 3743618.8,      97.0,      97.0,       2.0);         ( 556518.2,
3743768.2,      99.0,      99.0,       2.0);
( 556624.2, 3743711.6,      98.0,      98.0,       2.0);         ( 556613.1, 3743868.5,
101.1,     101.1,       2.0);
( 556893.9, 3743856.0,     100.7,     100.7,       2.0);         ( 556507.2, 3744010.1,
103.8,     103.8,       2.0);
( 557195.9, 3744195.4,     107.0,     107.0,       2.0);         ( 557240.6, 3744050.6,
103.0,     103.0,       2.0);
( 551720.2, 3743871.9,     100.0,     478.0,       2.0);         ( 551713.1, 3743823.3,
100.0,     478.0,       2.0);
( 551720.9, 3743686.9,     100.0,     100.0,       2.0);         ( 551723.5, 3743526.6,
100.0,     100.0,       2.0);
( 553601.7, 3741280.8,     104.0,     104.0,       2.0);         ( 554152.4, 3741075.6,
106.0,     106.0,       2.0);
( 554291.4, 3741227.5,     104.0,     104.0,       2.0);         ( 554094.6, 3741115.8,
106.0,     106.0,       2.0);
( 554501.8, 3741076.6,     102.9,     102.9,       2.0);         ( 553871.8, 3741110.8,
105.0,     105.0,       2.0);
( 554124.3, 3741453.2,      97.4,      97.4,       2.0);         ( 555828.5,
3742342.5,      73.2,      73.2,       2.0);
( 555821.5, 3742752.9,      81.9,      81.9,       2.0);         ( 555475.0,
3742811.6,      79.9,      79.9,       2.0);
( 555504.8, 3742898.0,      81.4,      81.4,       2.0);         ( 557195.2, 3744349.7,
111.1,     111.1,       2.0);
( 557198.5, 3744248.2,     108.8,     108.8,       2.0);         ( 557193.3, 3744425.8,
112.7,     112.7,       2.0);
( 555470.6, 3745232.9,     144.6,     434.0,       2.0);         ( 550726.9, 3743617.4,
110.0,     110.0,       2.0);
( 550066.6, 3744391.9,     113.9,     113.9,       2.0);         ( 557807.5, 3744815.6,
130.0,     422.0,       2.0);
```



```
                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
3741918.5,      68.3,      68.3,       2.0);
( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
3742292.0,      71.0,      71.0,       2.0);
( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
3741731.3,      66.0,      66.0,       2.0);
```

```
    ( 556637.8, 3741538.0,      65.0,      65.0,
    2.0);
```


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

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54,   3.09,   5.14,   8.23, 10.80,

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

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file:
KPSP_V9_ADJU\KPSP_v9.SFC   Met
Version: 16216
Profile file:
KPSP_V9_ADJU\KPSP_v9.PFL
Surface format:
FREE

Profile format:
FREE

Surface station no.:   93138   Upper air station no.:   3190
Name: UNKNOWN   Name:
UNKNOWN
Year: 2012   Year: 2012

First 24 hours of scalar data

```
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - -
 12 01 01   1 01  -28.7  0.293 -9.000 -9.000 -999.  381.     94.4  0.13   4.07   1.00    3.32
 328.   10.1  286.4    2.0
 12 01 01   1 02   -5.5  0.102 -9.000 -9.000 -999.  122.     17.6  0.13   4.07   1.00    1.23
 320.   10.1  284.2    2.0
 12 01 01   1 03  -19.4  0.196 -9.000 -9.000 -999.  209.     42.5  0.13   4.07   1.00    2.27
 306.   10.1  283.1    2.0
 12 01 01   1 04  -16.5  0.181 -9.000 -9.000 -999.  184.     35.9  0.13   4.07   1.00    2.10
 328.   10.1  282.5    2.0
 12 01 01   1 05  -20.0  0.202 -9.000 -9.000 -999.  218.     44.9  0.13   4.07   1.00    2.33
 328.   10.1  283.8    2.0
 12 01 01   1 06  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 325.   10.1  283.1    2.0
 12 01 01   1 07  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 327.   10.1  284.2    2.0
 12 01 01   1 08   -9.3  0.150 -9.000 -9.000 -999.  140.     32.5  0.13   4.07   0.52    1.74
 297.   10.1  284.9    2.0
 12 01 01   1 09   50.6  0.130  0.399  0.011   45.  112.     -3.9  0.13   4.07   0.32    0.92
 282.   10.1  291.4    2.0
 12 01 01   1 10  126.5  0.172  0.815  0.008  154.  171.     -3.6  0.13   4.07   0.25    1.20
 233.   10.1  294.2    2.0
 12 01 01   1 11  179.5  0.134  1.299  0.005  439.  118.     -1.2  0.13   4.07   0.23    0.75
 344.   10.1  297.5    2.0
 12 01 01   1 12  203.7  0.185  1.649  0.005  791.  192.     -2.8  0.13   4.07   0.22    1.23
 100.   10.1  298.8    2.0
 12 01 01   1 13  199.8  0.234  1.913  0.005 1259.  271.     -5.7  0.13   4.07   0.22    1.76
 110.   10.1  299.9    2.0
 12 01 01   1 14  167.6  0.236  1.916  0.005 1507.  275.     -7.0  0.13   4.07   0.24    1.84
 124.   10.1  300.4    2.0
 12 01 01   1 15  108.5  0.273  1.697  0.005 1617.  342.    -16.8  0.13   4.07   0.27    2.40
 92.   10.1  300.4    2.0
 12 01 01   1 16   27.5  0.235  1.080  0.005 1640.  275.    -42.5  0.13   4.07   0.37    2.27
 144.   10.1  299.2    2.0
 12 01 01   1 17   -5.6  0.106 -9.000 -9.000 -999.   95.     19.2  0.13   4.07   0.66    1.28
 204.   10.1  294.9    2.0
 12 01 01   1 18  -17.6  0.188 -9.000 -9.000 -999.  196.     39.0  0.13   4.07   1.00    2.18
 314.   10.1  292.0    2.0
 12 01 01   1 19  -25.3  0.260 -9.000 -9.000 -999.  318.     74.4  0.13   4.07   1.00    2.96
 322.   10.1  289.9    2.0
 12 01 01   1 20  -21.1  0.217 -9.000 -9.000 -999.  243.     51.7  0.13   4.07   1.00    2.49
 314.   10.1  289.2    2.0
 12 01 01   1 21  -26.7  0.275 -9.000 -9.000 -999.  346.     83.0  0.13   4.07   1.00    3.12
 314.   10.1  290.4    2.0
 12 01 01   1 22  -22.1  0.226 -9.000 -9.000 -999.  259.     56.2  0.13   4.07   1.00    2.59
 317.   10.1  288.8    2.0
 12 01 01   1 23  -28.1  0.285 -9.000 -9.000 -999.  365.     89.2  0.13   4.07   1.00    3.23
 328.   10.1  285.4    2.0
 12 01 01   1 24  -33.3  0.338 -9.000 -9.000 -999.  472.    125.8  0.13   4.07   1.00    3.81
 331.   10.1  286.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1  328.    3.32   286.5   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	8.29713	(15012916)	556267.14	3743577.37	7.16262	(15012916)
556211.51	3743511.11	8.09503	(15012916)	556212.12	3743491.64	7.87044	(15012916)
556212.20	3743468.61	7.69541	(14120916)	556212.20	3743447.63	7.50508	(14120916)
556212.88	3743426.98	7.25626	(14120916)	556212.88	3743403.28	6.91730	(14120916)
556212.88	3743380.94	6.71097	(14120215)	556214.23	3743358.94	6.62194	(14120215)
556213.56	3743337.62	6.49813	(14120215)	556213.22	3743315.61	6.34110	(12120716)
556213.22	3743271.61	5.88633	(12120716)	556214.91	3743248.59	5.59201	(12120716)
556215.25	3743227.27	5.30583	(12120716)	556172.26	3743162.95	6.84938	(16010616)
556113.36	3743164.31	8.20475	(16010616)	555825.30	3743159.90	10.48673	(14120216)
555869.64	3743163.97	10.23633	(16010616)	555911.62	3743161.26	10.21125	(16010616)
555593.79	3743143.18	9.93537	(14120216)	555332.94	3743363.00	14.69862	(12121316)
555382.32	3743364.99	15.07662	(14120216)	554993.81	3743124.40	5.91989	(12121316)
555073.22	3743246.43	8.51212	(12121316)	555239.74	3743255.78	9.95805	(12121316)
555433.36	3742022.73	1.70339	(16122116)	555348.71	3742090.44	1.53386	(12121316)
555540.35	3741977.02	1.95887	(16122116)	555632.11	3741980.40	2.19978	(16122116)
555682.56	3741980.40	2.29677	(16122116)	555853.20	3741996.66	2.43980	(16122116)
555931.42	3741996.32	2.37070	(16122116)	555981.19	3741993.27	2.38321	(14120216)
555836.95	3742073.18	2.58440	(16122116)	555467.56	3742088.75	1.95083	(16122116)
555569.47	3742015.62	2.11761	(16122116)	555322.64	3742026.11	1.44554	(15123116)
555170.62	3742238.40	1.79274	(16122209)	552518.62	3742635.91	1.23630	(15120910)
552151.07	3742961.57	0.94120	(13020109)	552104.59	3743002.77	0.90800	(13020109)
552147.90	3743107.35	0.87994	(12121011)	552511.02	3742385.96	1.02200	(15120910)
552396.18	3742346.58	1.01092	(15120910)	554748.71	3741897.68	1.37833	(16122209)
554624.49	3741840.49	1.43212	(14120409)	555067.24	3742375.24	1.99899	(12121316)
554920.60	3742586.43	2.43733	(12121316)	554947.30	3742550.17	2.35826	(12121316)

554864.41   3742535.03   2.23824 (12121316)   554941.32
3742393.57   1.97127 (12121316)
555036.96   3742730.68   3.10060 (12121316)   555018.23
3742600.78   2.57776 (12121316)
555688.41   3742524.26   3.84904 (16122116)   555640.59
3742489.10   3.66810 (16122116)
555702.48   3742734.30   5.07603 (14120216)   555658.92
3742351.21   3.20738 (16122116)
555468.83   3742309.41   2.50608 (16122116)   555024.76
3744296.72   19.13594 (14120116)
556539.92   3743618.77   3.84761 (16092109)   556518.18
3743768.24   7.18291 (16010516)
556624.24   3743711.65   3.58040 (16010516)   556613.05
3743868.53   9.37378 (16010516)
556893.94   3743855.99   5.46519 (16010516)   556507.22
3744010.11   12.24820 (16010516)
557195.85   3744195.39   5.12362 (16010516)   557240.64
3744050.63   5.49961 (16010516)
551720.23   3743871.95   0.94879 (15120411)   551713.09
3743823.26   0.94816 (15120411)
551720.88   3743686.93   0.96194 (15112712)   551723.47
3743526.58   0.90030 (15112712)
553601.74   3741280.79   1.08160 (13012409)   554152.43
3741075.58   1.22445 (14120409)
554291.40   3741227.54   1.27244 (14120409)   554094.63
3741115.84   1.21291 (14120409)
554501.84   3741076.63   1.11241 (16122209)   553871.76
3741110.78   1.05411 (14120409)
554124.33   3741453.24   1.21819 (14120409)   555828.45
3742342.52   3.16470 (16122116)

FF *** AERMOD - VERSION 23132 ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ ***   01/23/24
*** AERMET - VERSION 16216 ***
***   ***   12:05:58

PAGE 20
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   VOL1   , VOL2   ,
VOL3   , VOL4   , VOL5   ,
VOL6   , VOL7   , VOL8   , VOL9   , VOL10   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
- -
555821.54   3742752.86   5.91934 (14120216)   555474.96
3742811.58   4.86963 (16122116)
555504.84   3742897.96   5.66221 (16122116)   557195.16
3744349.69   2.71042 (16010516)
557198.52   3744248.16   4.38167 (16010516)   557193.27
3744425.80   1.84855 (14120213)
555470.59   3745232.95   6.56235 (13112216)   550726.90
3743617.42   0.81831 (15112712)
550066.60   3744391.95   0.68687 (15111810)   557807.51
3744815.58   1.35158 (14120309)
555574.11   3741789.80   1.72359 (16122116)   555481.59
3741918.55   1.67895 (16122116)
555144.29   3742414.37   2.12452 (12121316)   555129.31

3742292.02 1.85131 (16122209)
556633.34 3741897.60 2.62509 (14120216) 556634.03
3741731.26 2.52801 (14120216)
556637.78 3741538.02 2.33925
(14120216)

FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 12:05:58

PAGE 21
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 ,
VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD
(M) CONC (YYMMDDHH)
- -
- - - - - - - - - - - - - - - - - -
556210.54 3743579.94 2.77765 (15012916) 556267.14
3743577.37 2.30591 (15012916)
556211.51 3743511.11 2.81665 (15012916) 556212.12
3743491.64 2.79994 (15012916)
556212.20 3743468.61 2.76771 (15012916) 556212.20
3743447.63 2.72117 (15012916)
556212.88 3743426.98 2.65883 (15012916) 556212.88
3743403.28 2.57511 (15012916)
556212.88 3743380.94 2.48173 (15012916) 556214.23
3743358.94 2.37541 (15012916)
556213.56 3743337.62 2.27057 (15012916) 556213.22
3743315.61 2.15516 (15012916)
556213.22 3743271.61 1.99877 (15111016) 556214.91
3743248.59 1.97574 (15111016)
556215.25 3743227.27 1.95306 (15111016) 556172.26
3743162.95 2.10828 (15121416)
556113.36 3743164.31 2.33580 (15121416) 555825.30
3743159.90 3.14054b (16121216)
555869.64 3743163.97 3.10410b (16121216) 555911.62
3743161.26 2.97821b (16121216)
555593.79 3743143.18 3.03383 (12012716) 555332.94
3743363.00 5.60677 (13112216)
555382.32 3743364.99 5.59649 (13122516) 554993.81
3743124.40 2.50050 (13112216)
555073.22 3743246.43 3.62338 (13112216) 555239.74
3743255.78 4.05629 (13112216)
555433.36 3742022.73 0.65328 (16120216) 555348.71
3742090.44 0.67269 (16120216)
555540.35 3741977.02 0.61189 (16120216) 555632.11
3741980.40 0.56593 (16120216)
555682.56 3741980.40 0.54450 (16122116) 555853.20
3741996.66 0.60607 (16122116)
555931.42 3741996.32 0.60214 (16122116) 555981.19
3741993.27 0.58978 (16122116)
555836.95 3742073.18 0.63479 (16122116) 555467.56
3742088.75 0.69031 (16120216)
555569.47 3742015.62 0.61870 (16120216) 555322.64
3742026.11 0.62481 (16120216)

555170.62 3742238.40 0.68718 (13100416) 552518.62
3742635.91 0.18015 (12121316)
552151.07 3742961.57 0.21507 (15020516) 552104.59
3743002.77 0.21809 (15020516)
552147.90 3743107.35 0.22919 (15020516) 552511.02
3742385.96 0.20135 (12121316)
552396.18 3742346.58 0.19181 (12121316) 554748.71
3741897.68 0.44866 (13112216)
554624.49 3741840.49 0.40497 (13112216) 555067.24
3742375.24 0.81801 (13100416)
554920.60 3742586.43 1.05230 (13112216) 554947.30
3742550.17 1.02152 (13112216)
554864.41 3742535.03 0.94275 (13112216) 554941.32
3742393.57 0.83156 (13112216)
555036.96 3742730.68 1.36928 (13112216) 555018.23
3742600.78 1.12115 (13112216)
555688.41 3742524.26 1.05231 (12012716) 555640.59
3742489.10 1.02773 (12012716)
555702.48 3742734.30 1.38296 (12012716) 555658.92
3742351.21 0.85245 (12012716)
555468.83 3742309.41 0.84351 (16120216) 555024.76
3744296.72 4.38158 (14120116)
556539.92 3743618.77 1.59020 (16010516) 556518.18
3743768.24 2.27117 (16010516)
556624.24 3743711.65 1.67610 (16010516) 556613.05
3743868.53 2.16471 (16010516)
556893.94 3743855.99 1.41244 (16010516) 556507.22
3744010.11 2.28286 (16010516)
557195.85 3744195.39 0.91148 (16010516) 557240.64
3744050.63 1.06875 (16010516)
551720.23 3743871.95 0.30605 (15120416) 551713.09
3743823.26 0.30060 (15120416)
551720.88 3743686.93 0.28119 (15120416) 551723.47
3743526.58 0.24723 (15120416)
553601.74 3741280.79 0.16138 (13112116) 554152.43
3741075.58 0.20222 (13112216)
554291.40 3741227.54 0.22921 (13112216) 554094.63
3741115.84 0.20407 (13112216)
554501.84 3741076.63 0.21009 (13112216) 553871.76
3741110.78 0.17750 (13112216)
554124.33 3741453.24 0.24511 (13112216) 555828.45
3742342.52 0.75748 (16122116)
FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 12:05:58

PAGE 22
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 ,
VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)
- -
555821.54 3742752.86 1.29818 (15021116) 555474.96

```
        3742811.58        1.64510  (12012716)
        555504.84   3742897.96       1.93499  (12012716)                557195.16
        3744349.69        0.70577  (13012516)
        557198.52   3744248.16       0.78133  (16010516)                557193.27
        3744425.80        0.63635  (13012516)
        555470.59   3745232.95       0.82815  (13112216)                550726.90
        3743617.42        0.22452  (15120416)
        550066.60   3744391.95       0.24580  (14121116)                557807.51
        3744815.58        0.40021  (16121916)
        555574.11   3741789.80       0.51817  (16120216)                555481.59
        3741918.55        0.59731  (16120216)
        555144.29   3742414.37       0.86400  (13100416)                555129.31
        3742292.02        0.74353  (13100416)
        556633.34   3741897.60       0.46078  (13030716)                556634.03
        3741731.26        0.38822b (16121216)
        556637.78   3741538.02       0.33140b
        (16121216)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       12:05:58

                      PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                   *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


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


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

ALL      HIGH   1ST HIGH VALUE IS      19.13594  ON 14120116: AT (  555024.76,  3744296.72,
114.38,   434.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       12:05:58

                      PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                   *** THE SUMMARY OF HIGHEST  8-HR RESULTS ***


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


                                                         DATE
                                                                                     NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR, YR,
ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
```

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       5.60677  ON 13112216: AT (  555332.94,  3743363.00,
88.81,    88.81,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:05:58

                      PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons NOX Mit\14174 Cons
NOX Mit.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2189641 Riverside_County
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons NOX Mit.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL2         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL3         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL4         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL5         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL6         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL7         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL8         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL9         0.0850485694     5.000    45.398     1.400
   SRCPARAM VOL10        0.0850485694     5.000    45.398     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
```

```
   EMISFACT VOL1          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5          HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons NOX Mit.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "14174 CONS NOX MIT.AD\01H1GALL.PLT" 31
   SUMMFILE "14174 Cons NOX Mit.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***
```

```
   ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:09:40

                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: NOX

 **Model Calculates  1 Short Term Average(s) of:   1-HR

 **This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)
```

```
**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing
                                                                 Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                               ;  Emission Rate
                 Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
**Output Print File:
aermod.out

**Detailed Error/Message File:   14174 Cons NOX
Mit.err
**File for Summary of Results:   14174 Cons NOX
Mit.sum
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                  ***        12:09:40

                     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      ELEV.   HEIGHT      SY       SZ
  SOURCE  SCALAR VARY
    ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
    (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1             0   0.85049E-01  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL2             0   0.85049E-01  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL3             0   0.85049E-01  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL4             0   0.85049E-01  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL5             0   0.85049E-01  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL6             0   0.85049E-01  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL7             0   0.85049E-01  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL8             0   0.85049E-01  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL9             0   0.85049E-01  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL10            0   0.85049E-01  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
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*** *** 12:09:40

PAGE 3
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE IDs
----------- ----------

ALL VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 ,
VOL7 , VOL8 ,

VOL9 , VOL10 ,
FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 12:09:40

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

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID URBAN POP SOURCE IDs
-------- --------- ----------

2189641. VOL1 , VOL2 , VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 ,
VOL8 ,

VOL9 , VOL10 ,
FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 12:09:40

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

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL1 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- -

DAY OF WEEK = WEEKDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .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
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

```
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:09:40

                        PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:09:40

                        PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
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   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
```

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:09:40

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:09:40

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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```


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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
```

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  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       12:09:40

                    PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       12:09:40

                    PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
```

```
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
```


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

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
( 556210.5, 3743579.9,      96.5,      96.5,       2.0);        ( 556267.1,
3743577.4,       96.4,      96.4,       2.0);
( 556211.5, 3743511.1,      95.2,      95.2,       2.0);        ( 556212.1,
3743491.6,       94.5,      94.5,       2.0);
( 556212.2, 3743468.6,      94.0,      94.0,       2.0);        ( 556212.2,
3743447.6,       94.0,      94.0,       2.0);
( 556212.9, 3743427.0,      93.4,      93.4,       2.0);        ( 556212.9,
3743403.3,       93.0,      93.0,       2.0);
( 556212.9, 3743380.9,      92.8,      92.8,       2.0);        ( 556214.2,
3743358.9,       92.1,      92.1,       2.0);
( 556213.6, 3743337.6,      92.0,      92.0,       2.0);        ( 556213.2,
3743315.6,       91.7,      91.7,       2.0);
( 556213.2, 3743271.6,      91.0,      91.0,       2.0);        ( 556214.9,
3743248.6,       90.4,      90.4,       2.0);
( 556215.2, 3743227.3,      90.0,      90.0,       2.0);        ( 556172.3,
3743162.9,       89.0,      89.0,       2.0);
( 556113.4, 3743164.3,      89.0,      89.0,       2.0);        ( 555825.3,
3743159.9,       88.0,      88.0,       2.0);
( 555869.6, 3743164.0,      88.0,      88.0,       2.0);        ( 555911.6,
3743161.3,       88.5,      88.5,       2.0);
( 555593.8, 3743143.2,      86.4,      86.4,       2.0);        ( 555332.9,
3743363.0,       88.8,      88.8,       2.0);
( 555382.3, 3743365.0,      89.0,      89.0,       2.0);        ( 554993.8,
3743124.4,       80.6,      80.6,       2.0);
( 555073.2, 3743246.4,      84.0,      84.0,       2.0);        ( 555239.7,
3743255.8,       85.7,      85.7,       2.0);
( 555433.4, 3742022.7,      69.0,      69.0,       2.0);        ( 555348.7,
3742090.4,       69.0,      69.0,       2.0);
( 555540.4, 3741977.0,      68.0,      68.0,       2.0);        ( 555632.1,
3741980.4,       68.0,      68.0,       2.0);
( 555682.6, 3741980.4,      68.0,      68.0,       2.0);        ( 555853.2,
3741996.7,       68.1,      68.1,       2.0);
( 555931.4, 3741996.3,      68.0,      68.0,       2.0);        ( 555981.2,
3741993.3,       68.6,      68.6,       2.0);
( 555837.0, 3742073.2,      69.3,      69.3,       2.0);        ( 555467.6,
3742088.8,       69.0,      69.0,       2.0);
( 555569.5, 3742015.6,      68.0,      68.0,       2.0);        ( 555322.6,
3742026.1,       69.9,      69.9,       2.0);
( 555170.6, 3742238.4,      70.0,      70.0,       2.0);        ( 552518.6,
3742635.9,       96.0,      96.0,       2.0);
( 552151.1, 3742961.6,      97.0,      97.0,       2.0);        ( 552104.6,
3743002.8,       97.0,      97.0,       2.0);
( 552147.9, 3743107.3,      96.4,      96.4,       2.0);        ( 552511.0,
3742386.0,       98.0,      98.0,       2.0);
```

```
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);          ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);          ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);          ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);          ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);          ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);          ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);          ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);          ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);          ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);          ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);          ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);          ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);          ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);          ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);          ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);          ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);          ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);          ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);          ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);          ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);          ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);          ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);          ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:09:40

                        PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                               *** DISCRETE CARTESIAN RECEPTORS ***
                                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                            (METERS)

    ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);          ( 555481.6,
    3741918.5,      68.3,      68.3,       2.0);
    ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);          ( 555129.3,
    3742292.0,      71.0,      71.0,       2.0);
    ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);          ( 556634.0,
    3741731.3,      66.0,      66.0,       2.0);
    ( 556637.8, 3741538.0,      65.0,      65.0,
    2.0);
```

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FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:09:40

                     PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                (1=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
                INCLUDED IN THE DATA FILE.


                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES
                                    ***
                                                              (METERS/SEC)

                                                   1.54,   3.09,   5.14,   8.23,  10.80,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:09:40

                     PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:
   KPSP_V9_ADJU\KPSP_v9.SFC                                                          Met
   Version:  16216
   Profile file:
   KPSP_V9_ADJU\KPSP_v9.PFL
   Surface format:
   FREE

   Profile format:
   FREE

   Surface station no.:    93138                  Upper air station no.:     3190
                  Name: UNKNOWN                                     Name:
                  UNKNOWN
                  Year:   2012                                      Year:   2012

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 WD     HT  REF TA     HT
```

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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - -
 12 01 01   1 01  -28.7  0.293 -9.000 -9.000 -999.  381.     94.4  0.13   4.07   1.00    3.32
 328.   10.1  286.4    2.0
 12 01 01   1 02   -5.5  0.102 -9.000 -9.000 -999.  122.     17.6  0.13   4.07   1.00    1.23
 320.   10.1  284.2    2.0
 12 01 01   1 03  -19.4  0.196 -9.000 -9.000 -999.  209.     42.5  0.13   4.07   1.00    2.27
 306.   10.1  283.1    2.0
 12 01 01   1 04  -16.5  0.181 -9.000 -9.000 -999.  184.     35.9  0.13   4.07   1.00    2.10
 328.   10.1  282.5    2.0
 12 01 01   1 05  -20.0  0.202 -9.000 -9.000 -999.  218.     44.9  0.13   4.07   1.00    2.33
 328.   10.1  283.8    2.0
 12 01 01   1 06  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 325.   10.1  283.1    2.0
 12 01 01   1 07  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 327.   10.1  284.2    2.0
 12 01 01   1 08   -9.3  0.150 -9.000 -9.000 -999.  140.     32.5  0.13   4.07   0.52    1.74
 297.   10.1  284.9    2.0
 12 01 01   1 09   50.6  0.130  0.399  0.011   45.  112.     -3.9  0.13   4.07   0.32    0.92
 282.   10.1  291.4    2.0
 12 01 01   1 10  126.5  0.172  0.815  0.008  154.  171.     -3.6  0.13   4.07   0.25    1.20
 233.   10.1  294.2    2.0
 12 01 01   1 11  179.5  0.134  1.299  0.005  439.  118.     -1.2  0.13   4.07   0.23    0.75
 344.   10.1  297.5    2.0
 12 01 01   1 12  203.7  0.185  1.649  0.005  791.  192.     -2.8  0.13   4.07   0.22    1.23
 100.   10.1  298.8    2.0
 12 01 01   1 13  199.8  0.234  1.913  0.005 1259.  271.     -5.7  0.13   4.07   0.22    1.76
 110.   10.1  299.9    2.0
 12 01 01   1 14  167.6  0.236  1.916  0.005 1507.  275.     -7.0  0.13   4.07   0.24    1.84
 124.   10.1  300.4    2.0
 12 01 01   1 15  108.5  0.273  1.697  0.005 1617.  342.    -16.8  0.13   4.07   0.27    2.40
 92.   10.1  300.4    2.0
 12 01 01   1 16   27.5  0.235  1.080  0.005 1640.  275.    -42.5  0.13   4.07   0.37    2.27
 144.   10.1  299.2    2.0
 12 01 01   1 17   -5.6  0.106 -9.000 -9.000 -999.   95.     19.2  0.13   4.07   0.66    1.28
 204.   10.1  294.9    2.0
 12 01 01   1 18  -17.6  0.188 -9.000 -9.000 -999.  196.     39.0  0.13   4.07   1.00    2.18
 314.   10.1  292.0    2.0
 12 01 01   1 19  -25.3  0.260 -9.000 -9.000 -999.  318.     74.4  0.13   4.07   1.00    2.96
 322.   10.1  289.9    2.0
 12 01 01   1 20  -21.1  0.217 -9.000 -9.000 -999.  243.     51.7  0.13   4.07   1.00    2.49
 314.   10.1  289.2    2.0
 12 01 01   1 21  -26.7  0.275 -9.000 -9.000 -999.  346.     83.0  0.13   4.07   1.00    3.12
 314.   10.1  290.4    2.0
 12 01 01   1 22  -22.1  0.226 -9.000 -9.000 -999.  259.     56.2  0.13   4.07   1.00    2.59
 317.   10.1  288.8    2.0
 12 01 01   1 23  -28.1  0.285 -9.000 -9.000 -999.  365.     89.2  0.13   4.07   1.00    3.23
 328.   10.1  285.4    2.0
 12 01 01   1 24  -33.3  0.338 -9.000 -9.000 -999.  472.    125.8  0.13   4.07   1.00    3.81
 331.   10.1  286.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1  328.    3.32   286.5   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:09:40

                     PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR
```

SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 ,
VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	4.48494	(15012916)	556267.14	3743577.37	3.87168	(15012916)
556211.51	3743511.11	4.37569	(15012916)	556212.12	3743491.64	4.25429	(15012916)
556212.20	3743468.61	4.15968	(14120916)	556212.20	3743447.63	4.05680	(14120916)
556212.88	3743426.98	3.92230	(14120916)	556212.88	3743403.28	3.73908	(14120916)
556212.88	3743380.94	3.62755	(14120215)	556214.23	3743358.94	3.57943	(14120215)
556213.56	3743337.62	3.51250	(14120215)	556213.22	3743315.61	3.42762	(12120716)
556213.22	3743271.61	3.18180	(12120716)	556214.91	3743248.59	3.02271	(12120716)
556215.25	3743227.27	2.86802	(12120716)	556172.26	3743162.95	3.70237	(16010616)
556113.36	3743164.31	4.43500	(16010616)	555825.30	3743159.90	5.66850	(14120216)
555869.64	3743163.97	5.53315	(16010616)	555911.62	3743161.26	5.51959	(16010616)
555593.79	3743143.18	5.37047	(14120216)	555332.94	3743363.00	7.94520	(12121316)
555382.32	3743364.99	8.14952	(14120216)	554993.81	3743124.40	3.19994	(12121316)
555073.22	3743246.43	4.60114	(12121316)	555239.74	3743255.78	5.38273	(12121316)
555433.36	3742022.73	0.92075	(16122116)	555348.71	3742090.44	0.82912	(12121316)
555540.35	3741977.02	1.05885	(16122116)	555632.11	3741980.40	1.18907	(16122116)
555682.56	3741980.40	1.24150	(16122116)	555853.20	3741996.66	1.31881	(16122116)
555931.42	3741996.32	1.28146	(16122116)	555981.19	3741993.27	1.28822	(14120216)
555836.95	3742073.18	1.39697	(16122116)	555467.56	3742088.75	1.05450	(16122116)
555569.47	3742015.62	1.14466	(16122116)	555322.64	3742026.11	0.78137	(15123116)
555170.62	3742238.40	0.96905	(16122209)	552518.62	3742635.91	0.66827	(15120910)
552151.07	3742961.57	0.50876	(13020109)	552104.59	3743002.77	0.49081	(13020109)
552147.90	3743107.35	0.47564	(12121011)	552511.02	3742385.96	0.55243	(15120910)
552396.18	3742346.58	0.54644	(15120910)	554748.71	3741897.68	0.74505	(16122209)
554624.49	3741840.49	0.77412	(14120409)	555067.24	3742375.24	1.08053	(12121316)
554920.60	3742586.43	1.31748	(12121316)	554947.30	3742550.17	1.27473	(12121316)
554864.41	3742535.03	1.20986	(12121316)	554941.32	3742393.57	1.06555	(12121316)

```
       555036.96   3742730.68        1.67600  (12121316)                555018.23
       3742600.78        1.39338  (12121316)
       555688.41   3742524.26        2.08056  (16122116)                555640.59
       3742489.10        1.98276  (16122116)
       555702.48   3742734.30        2.74380  (14120216)                555658.92
       3742351.21        1.73372  (16122116)
       555468.83   3742309.41        1.35464  (16122116)                555024.76
       3744296.72       10.34375  (14120116)
       556539.92   3743618.77        2.07979  (16092109)                556518.18
       3743768.24        3.88266  (16010516)
       556624.24   3743711.65        1.93535  (16010516)                556613.05
       3743868.53        5.06691  (16010516)
       556893.94   3743855.99        2.95415  (16010516)                556507.22
       3744010.11        6.62065  (16010516)
       557195.85   3744195.39        2.76952  (16010516)                557240.64
       3744050.63        2.97276  (16010516)
       551720.23   3743871.95        0.51286  (15120411)                551713.09
       3743823.26        0.51252  (15120411)
       551720.88   3743686.93        0.51997  (15112712)                551723.47
       3743526.58        0.48665  (15112712)
       553601.74   3741280.79        0.58465  (13012409)                554152.43
       3741075.58        0.66187  (14120409)
       554291.40   3741227.54        0.68780  (14120409)                554094.63
       3741115.84        0.65563  (14120409)
       554501.84   3741076.63        0.60130  (16122209)                553871.76
       3741110.78        0.56979  (14120409)
       554124.33   3741453.24        0.65848  (14120409)                555828.45
       3742342.52        1.71065  (16122116)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       12:09:40

                        PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                   VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
       555821.54   3742752.86        3.19964  (14120216)                555474.96
       3742811.58        2.63223  (16122116)
       555504.84   3742897.96        3.06065  (16122116)                557195.16
       3744349.69        1.46509  (16010516)
       557198.52   3744248.16        2.36847  (16010516)                557193.27
       3744425.80        0.99921  (14120213)
       555470.59   3745232.95        3.54722  (13112216)                550726.90
       3743617.42        0.44233  (15112712)
       550066.60   3744391.95        0.37128  (15111810)                557807.51
       3744815.58        0.73058  (14120309)
       555574.11   3741789.80        0.93167  (16122116)                555481.59
       3741918.55        0.90754  (16122116)
       555144.29   3742414.37        1.14839  (12121316)                555129.31
       3742292.02        1.00071  (16122209)
       556633.34   3741897.60        1.41897  (14120216)                556634.03
```

```
        3741731.26        1.36649  (14120216)
        556637.78   3741538.02       1.26446
        (14120216)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:09:40

                      PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                   *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


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


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

ALL      HIGH   1ST HIGH VALUE IS      10.34375  ON 14120116: AT (  555024.76,  3744296.72,
114.38,   434.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



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

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     235       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     235       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ***********************************
    *** AERMOD Finishes Successfully ***
```

****

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons PM10 Mit\14174
Cons PM10 Mit.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2189641 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons PM10 Mit.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
   LOCATION AREA1        AREA       554980.210  3743586.700       93.000
** Source Parameters **
   SRCPARAM VOL1         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL2         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL3         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL4         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL5         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL6         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL7         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL8         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL9         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL10        0.0006929883     5.000    45.398     1.400
   SRCPARAM AREA1        4.1342E-07     0.000   823.410   386.320     0.000     1.000
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
```

```
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT AREA1        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons PM10 Mit.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
```

```
   PLOTFILE 24 ALL 1ST "14174 CONS PM10 MIT.AD\24H1GALL.PLT" 31
   SUMMFILE "14174 Cons PM10 Mit.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:12:32

                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                             ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    11 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:  24-HR

 **This Run Includes:     11 Source(s);       1 Source Group(s); and      97 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
```

```
                and:     10 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                  m for Missing Hours
                                                                  b for Both Calm and Missing
                                                                  Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
 0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate
                  Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:
 aermod.inp
 **Output Print File:
 aermod.out

 **Detailed Error/Message File:   14174 Cons PM10
 Mit.err
 **File for Summary of Results:   14174 Cons PM10
 Mit.sum
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:12:32

                      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        ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.                (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - -


 VOL1             0   0.69299E-03  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL2             0   0.69299E-03  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL3             0   0.69299E-03  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES   HRDOW           NO
```

```
 VOL4             0   0.69299E-03  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL5             0   0.69299E-03  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL6             0   0.69299E-03  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL7             0   0.69299E-03  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL8             0   0.69299E-03  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL9             0   0.69299E-03  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL10            0   0.69299E-03  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:12:32

                      PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** AREA SOURCE DATA ***

               NUMBER EMISSION RATE  COORD (SW CORNER)  BASE     RELEASE  X-DIM     Y-DIM
               ORIENT.    INIT.   URBAN  EMISSION RATE  AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X         Y      ELEV.    HEIGHT  OF AREA   OF AREA   OF
   AREA     SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS) (METERS)  (METERS)
     (DEG.)  (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -

 AREA1            0   0.41342E-06  554980.2 3743586.7    93.0     0.00    823.41    386.32
 0.00     1.00     YES   HRDOW           NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:12:32

                      PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                SOURCE IDs
 -----------                                                ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       , AREA1       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:12:32

                      PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***
```

```
  URBAN ID   URBAN POP                                              SOURCE IDs
  --------   ---------                                              ----------


             2189641.   VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
             VOL6        , VOL7        ,
 VOL8        ,

            VOL9        , VOL10       , AREA1       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:12:32

                        PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:12:32

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                         DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
```

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- -

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .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
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

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

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL5 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- -

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .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
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

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

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL6 ; SOURCE TYPE = VOLUME :

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```


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

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL7 ; SOURCE TYPE = VOLUME :

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
```

```
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```



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

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***        12:12:32

                      PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .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
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
  1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
  9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
 17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
 .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***        12:12:32

                      PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                   (HRDOW) *

 SOURCE ID = AREA1        ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                           DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                           DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:12:32

                     PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                            (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,      96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,      94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,      94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,      93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,      92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,      91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,      90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,      89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,      88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,      88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,      88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,      80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,      85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,      69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,      68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,      68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,      68.6,      68.6,       2.0);
```

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    ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);          ( 555467.6,
    3742088.8,      69.0,      69.0,       2.0);
    ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);          ( 555322.6,
    3742026.1,      69.9,      69.9,       2.0);
    ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);          ( 552518.6,
    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);          ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);          ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);          ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);          ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);          ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);          ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);          ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);          ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);          ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);          ( 555024.8, 3744296.7,
    114.4,     434.0,      2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);          ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);          ( 556613.1, 3743868.5,
    101.1,     101.1,      2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);          ( 556507.2, 3744010.1,
    103.8,     103.8,      2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);          ( 557240.6, 3744050.6,
    103.0,     103.0,      2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);          ( 551713.1, 3743823.3,
    100.0,     478.0,      2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);          ( 551723.5, 3743526.6,
    100.0,     100.0,      2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);          ( 554152.4, 3741075.6,
    106.0,     106.0,      2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);          ( 554094.6, 3741115.8,
    106.0,     106.0,      2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);          ( 553871.8, 3741110.8,
    105.0,     105.0,      2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);          ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);          ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);          ( 557195.2, 3744349.7,
    111.1,     111.1,      2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);          ( 557193.3, 3744425.8,
    112.7,     112.7,      2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);          ( 550726.9, 3743617.4,
    110.0,     110.0,      2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);          ( 557807.5, 3744815.6,
    130.0,     422.0,      2.0);
```

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

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

```
                                                              (METERS)

     ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
     3741918.5,      68.3,      68.3,       2.0);
     ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
     3742292.0,      71.0,      71.0,       2.0);
     ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
     3741731.3,      66.0,      66.0,       2.0);
     ( 556637.8, 3741538.0,      65.0,      65.0,
     2.0);
```

```
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***       12:12:32

                      PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                                              *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                  (1=YES; 0=NO)

              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1

                  NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
                  INCLUDED IN THE DATA FILE.



                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES
                                    ***
                                                               (METERS/SEC)

                                                   1.54,   3.09,   5.14,   8.23,  10.80,
```

```
 *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***       12:12:32

                      PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:
   KPSP_V9_ADJU\KPSP_v9.SFC                                                        Met
   Version:  16216
   Profile file:
   KPSP_V9_ADJU\KPSP_v9.PFL
   Surface format:
   FREE

   Profile format:
```

FREE

Surface station no.: 93138 Upper air station no.: 3190
Name: UNKNOWN Name:
UNKNOWN
Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-28.7	0.293	-9.000	-9.000	-999.	381.	94.4	0.13	4.07	1.00	3.32	328.	10.1	286.4	2.0
12	01	01	1	02	-5.5	0.102	-9.000	-9.000	-999.	122.	17.6	0.13	4.07	1.00	1.23	320.	10.1	284.2	2.0
12	01	01	1	03	-19.4	0.196	-9.000	-9.000	-999.	209.	42.5	0.13	4.07	1.00	2.27	306.	10.1	283.1	2.0
12	01	01	1	04	-16.5	0.181	-9.000	-9.000	-999.	184.	35.9	0.13	4.07	1.00	2.10	328.	10.1	282.5	2.0
12	01	01	1	05	-20.0	0.202	-9.000	-9.000	-999.	218.	44.9	0.13	4.07	1.00	2.33	328.	10.1	283.8	2.0
12	01	01	1	06	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	325.	10.1	283.1	2.0
12	01	01	1	07	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	327.	10.1	284.2	2.0
12	01	01	1	08	-9.3	0.150	-9.000	-9.000	-999.	140.	32.5	0.13	4.07	0.52	1.74	297.	10.1	284.9	2.0
12	01	01	1	09	50.6	0.130	0.399	0.011	45.	112.	-3.9	0.13	4.07	0.32	0.92	282.	10.1	291.4	2.0
12	01	01	1	10	126.5	0.172	0.815	0.008	154.	171.	-3.6	0.13	4.07	0.25	1.20	233.	10.1	294.2	2.0
12	01	01	1	11	179.5	0.134	1.299	0.005	439.	118.	-1.2	0.13	4.07	0.23	0.75	344.	10.1	297.5	2.0
12	01	01	1	12	203.7	0.185	1.649	0.005	791.	192.	-2.8	0.13	4.07	0.22	1.23	100.	10.1	298.8	2.0
12	01	01	1	13	199.8	0.234	1.913	0.005	1259.	271.	-5.7	0.13	4.07	0.22	1.76	110.	10.1	299.9	2.0
12	01	01	1	14	167.6	0.236	1.916	0.005	1507.	275.	-7.0	0.13	4.07	0.24	1.84	124.	10.1	300.4	2.0
12	01	01	1	15	108.5	0.273	1.697	0.005	1617.	342.	-16.8	0.13	4.07	0.27	2.40	92.	10.1	300.4	2.0
12	01	01	1	16	27.5	0.235	1.080	0.005	1640.	275.	-42.5	0.13	4.07	0.37	2.27	144.	10.1	299.2	2.0
12	01	01	1	17	-5.6	0.106	-9.000	-9.000	-999.	95.	19.2	0.13	4.07	0.66	1.28	204.	10.1	294.9	2.0
12	01	01	1	18	-17.6	0.188	-9.000	-9.000	-999.	196.	39.0	0.13	4.07	1.00	2.18	314.	10.1	292.0	2.0
12	01	01	1	19	-25.3	0.260	-9.000	-9.000	-999.	318.	74.4	0.13	4.07	1.00	2.96	322.	10.1	289.9	2.0
12	01	01	1	20	-21.1	0.217	-9.000	-9.000	-999.	243.	51.7	0.13	4.07	1.00	2.49	314.	10.1	289.2	2.0
12	01	01	1	21	-26.7	0.275	-9.000	-9.000	-999.	346.	83.0	0.13	4.07	1.00	3.12	314.	10.1	290.4	2.0
12	01	01	1	22	-22.1	0.226	-9.000	-9.000	-999.	259.	56.2	0.13	4.07	1.00	2.59	317.	10.1	288.8	2.0
12	01	01	1	23	-28.1	0.285	-9.000	-9.000	-999.	365.	89.2	0.13	4.07	1.00	3.23	328.	10.1	285.4	2.0
12	01	01	1	24	-33.3	0.338	-9.000	-9.000	-999.	472.	125.8	0.13	4.07	1.00	3.81	331.	10.1	286.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.1	1	328.	3.32	286.5	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 12:12:32

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

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , AREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	0.24524	(12121324)	556267.14	3743577.37	0.22997	(12121324)
556211.51	3743511.11	0.17497	(12121324)	556212.12	3743491.64	0.15247	(12121324)
556212.20	3743468.61	0.12708	(12121324)	556212.20	3743447.63	0.10615	(12121324)
556212.88	3743426.98	0.10022	(15012924)	556212.88	3743403.28	0.09662	(15012924)
556212.88	3743380.94	0.09223	(15012924)	556214.23	3743358.94	0.08746	(15012924)
556213.56	3743337.62	0.08389	(14120924)	556213.22	3743315.61	0.08222	(14120924)
556213.22	3743271.61	0.07732	(14120924)	556214.91	3743248.59	0.07415	(14120924)
556215.25	3743227.27	0.07344	(13112924)	556172.26	3743162.95	0.08144	(13112924)
556113.36	3743164.31	0.09887	(14121624)	555825.30	3743159.90	0.12602	(14121624)
555869.64	3743163.97	0.12775	(14121624)	555911.62	3743161.26	0.12796	(14121624)
555593.79	3743143.18	0.12237	(14121624)	555332.94	3743363.00	0.24559m	(15123124)
555382.32	3743364.99	0.24920m	(15123124)	554993.81	3743124.40	0.07843	(13112224)
555073.22	3743246.43	0.10932	(13112224)	555239.74	3743255.78	0.15739m	(15123124)
555433.36	3742022.73	0.02249	(16120224)	555348.71	3742090.44	0.02318	(16120224)
555540.35	3741977.02	0.02380	(12112724)	555632.11	3741980.40	0.02560	(12112724)
555682.56	3741980.40	0.02616	(12112724)	555853.20	3741996.66	0.02918	(16122124)
555931.42	3741996.32	0.02941	(16122124)	555981.19	3741993.27	0.02904	(16122124)
555836.95	3742073.18	0.03020	(16122124)	555467.56	3742088.75	0.02355	(16120224)
555569.47	3742015.62	0.02483	(12112724)	555322.64	3742026.11	0.02232	(15020524)
555170.62	3742238.40	0.02404	(13100424)	552518.62	3742635.91	0.01730	(12121024)
552151.07	3742961.57	0.01744	(13020124)	552104.59			

```
      3743002.77        0.01654  (13020124)
      552147.90   3743107.35        0.01502  (13020124)                552511.02
      3742385.96        0.01534  (12121024)
      552396.18   3742346.58        0.01512  (12121024)                554748.71
      3741897.68        0.01929  (13120624)
      554624.49   3741840.49        0.01933  (13120624)                555067.24
      3742375.24        0.02854  (13100424)
      554920.60   3742586.43        0.03451  (13112224)                554947.30
      3742550.17        0.03374  (13112224)
      554864.41   3742535.03        0.03026  (13112224)                554941.32
      3742393.57        0.02776  (13112224)
      555036.96   3742730.68        0.04324  (13112224)                555018.23
      3742600.78        0.03616  (13112224)
      555688.41   3742524.26        0.03815  (16122124)                555640.59
      3742489.10        0.03671  (12012724)
      555702.48   3742734.30        0.05118  (14121624)                555658.92
      3742351.21        0.03326  (16122124)
      555468.83   3742309.41        0.02846  (15031324)                555024.76
      3744296.72        0.14079  (14120124)
      556539.92   3743618.77        0.19110  (12121324)                556518.18
      3743768.24        0.15730  (12121324)
      556624.24   3743711.65        0.16237  (12121324)                556613.05
      3743868.53        0.07975  (16010524)
      556893.94   3743855.99        0.05023  (12121324)                556507.22
      3744010.11        0.07905  (16010524)
      557195.85   3744195.39        0.04066  (13012524)                557240.64
      3744050.63        0.04088  (16010524)
      551720.23   3743871.95        0.02084  (15120424)                551713.09
      3743823.26        0.02034  (15120424)
      551720.88   3743686.93        0.01713  (15120424)                551723.47
      3743526.58        0.01362  (13123024)
      553601.74   3741280.79        0.01416c (15010124)                554152.43
      3741075.58        0.01535  (13120624)
      554291.40   3741227.54        0.01655  (13120624)                554094.63
      3741115.84        0.01456  (13120624)
      554501.84   3741076.63        0.01598  (13120624)                553871.76
      3741110.78        0.01337c (15010124)
      554124.33   3741453.24        0.01450c (15010124)                555828.45
      3742342.52        0.03459  (16122124)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       12:12:32

                        PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                   VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                   AREA1       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10    IN
                                          MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - -
      555821.54   3742752.86        0.06859  (14121624)                555474.96
      3742811.58        0.05972m (15123124)
      555504.84   3742897.96        0.07201m (15123124)                557195.16
```

```
       3744349.69        0.03732  (12020724)
       557198.52   3744248.16       0.03854  (13012524)                557193.27
       3744425.80        0.03762  (12020724)
       555470.59   3745232.95       0.02688  (13112224)                550726.90
       3743617.42        0.01288  (15120424)
       550066.60   3744391.95       0.01288  (14121124)                557807.51
       3744815.58        0.02763  (12020724)
       555574.11   3741789.80       0.02283  (12112724)                555481.59
       3741918.55        0.02164  (12112724)
       555144.29   3742414.37       0.03000  (13100424)                555129.31
       3742292.02        0.02604  (13100424)
       556633.34   3741897.60       0.04618  (14121624)                556634.03
       3741731.26        0.04261  (14121624)
       556637.78   3741538.02       0.03623
       (14121624)
```



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

                                             *** THE SUMMARY OF HIGHEST 24-HR RESULTS ***


                                  ** CONC OF PM_10    IN
                                  MICROGRAMS/M**3                         **


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

ALL      HIGH   1ST HIGH VALUE IS       0.24920m ON 15123124: AT (  555382.32,  3743364.99,
89.00,    89.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



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

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

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of         709 Informational Message(s)

 A Total of       43848 Hours Were Processed

 A Total of         289 Calm Hours Identified

 A Total of         420 Missing Hours Identified (  0.96 Percent)
```

```
   ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 1/23/2024
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Cons PM25 Mit\14174
Cons PM25 Mit.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2189641 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Cons PM25 Mit.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
   LOCATION AREA1        AREA       554980.210  3743586.700       93.000
** Source Parameters **
   SRCPARAM VOL1         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL2         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL3         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL4         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL5         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL6         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL7         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL8         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL9         0.0006929883     5.000    45.398     1.400
   SRCPARAM VOL10        0.0006929883     5.000    45.398     1.400
   SRCPARAM AREA1        1.8171E-07     0.000   823.410   386.320     0.000     1.000
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
```

```
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL2         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL2         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL7         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL8         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL9         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL9          HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL10         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT AREA1         HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT AREA1         HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "14174 Cons PM25 Mit.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
```

```
   PLOTFILE 24 ALL 1ST "14174 CONS PM25 MIT.AD\24H1GALL.PLT" 31
   SUMMFILE "14174 Cons PM25 Mit.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***       12:14:52

                     PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                               ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    11 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_2.5

 **Model Calculates  1 Short Term Average(s) of:  24-HR

 **This Run Includes:     11 Source(s);       1 Source Group(s); and      97 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
```

```
                and:     10 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing
                                                                 Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
 0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate
                  Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:
 aermod.inp
 **Output Print File:
 aermod.out

 **Detailed Error/Message File:   14174 Cons PM25
 Mit.err
 **File for Summary of Results:   14174 Cons PM25
 Mit.sum
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:14:52

                        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      ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1             0   0.69299E-03  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES   HRDOW            NO
 VOL2             0   0.69299E-03  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES   HRDOW            NO
 VOL3             0   0.69299E-03  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES   HRDOW            NO
```

```
 VOL4              0   0.69299E-03  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL5              0   0.69299E-03  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL6              0   0.69299E-03  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL7              0   0.69299E-03  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL8              0   0.69299E-03  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL9              0   0.69299E-03  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES   HRDOW           NO
 VOL10             0   0.69299E-03  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES   HRDOW           NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:14:52

                      PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** AREA SOURCE DATA ***

               NUMBER EMISSION RATE  COORD (SW CORNER)  BASE     RELEASE  X-DIM     Y-DIM
               ORIENT.    INIT.   URBAN  EMISSION RATE  AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X         Y      ELEV.    HEIGHT  OF AREA   OF AREA   OF
   AREA     SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS) (METERS)  (METERS)
     (DEG.)  (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -

 AREA1             0   0.18171E-06  554980.2 3743586.7    93.0     0.00    823.41    386.32
 0.00     1.00     YES   HRDOW            NO
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:14:52

                      PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                 SOURCE IDs
 -----------                                                 ----------



  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       , AREA1       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:14:52

                      PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***
```

```
  URBAN ID   URBAN POP                                              SOURCE IDs
  --------   ---------                                              ----------


             2189641.   VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
             VOL6        , VOL7        ,
 VOL8        ,

            VOL9        , VOL10       , AREA1       ,
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        12:14:52

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        12:14:52

                        PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:14:52

                        PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL3         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
                                               DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                               DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:14:52

                        PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL4         ; SOURCE TYPE = VOLUME   :
```

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                    (HRDOW) *

 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```

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

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL6 ; SOURCE TYPE = VOLUME :

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
```


* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL7 ; SOURCE TYPE = VOLUME :

```
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
```

```
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:14:52

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

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:14:52

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

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                  (HRDOW) *

 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:14:52

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

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = VOL10        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .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
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:14:52

                        PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK
                     (HRDOW) *

 SOURCE ID = AREA1        ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .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
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        12:14:52

                       PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                               *** DISCRETE CARTESIAN RECEPTORS ***
                                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                              (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,      96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,      94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,      94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,      93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,      92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,      91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,      90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,      89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,      88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,      88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,      88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,      80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,      85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,      69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,      68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,      68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,      68.6,      68.6,       2.0);
```

```
    ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);          ( 555467.6,
    3742088.8,      69.0,      69.0,       2.0);
    ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);          ( 555322.6,
    3742026.1,      69.9,      69.9,       2.0);
    ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);          ( 552518.6,
    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);          ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);          ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);          ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);          ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);          ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);          ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);          ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);          ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);          ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);          ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);          ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);          ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);          ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);          ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);          ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);          ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);          ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);          ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);          ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);          ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);          ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);          ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);          ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);          ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);          ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        12:14:52

                        PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
```

```
                                                              (METERS)

      ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
      3741918.5,      68.3,      68.3,       2.0);
      ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
      3742292.0,      71.0,      71.0,       2.0);
      ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
      3741731.3,      66.0,      66.0,       2.0);
      ( 556637.8, 3741538.0,      65.0,      65.0,
      2.0);
```



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

                                               *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                  (1=YES; 0=NO)

              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1

                  NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
                  INCLUDED IN THE DATA FILE.



                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES
                                    ***
                                                               (METERS/SEC)

                                                   1.54,   3.09,   5.14,   8.23,  10.80,
```



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

                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:
   KPSP_V9_ADJU\KPSP_v9.SFC                                                          Met
   Version:  16216
   Profile file:
   KPSP_V9_ADJU\KPSP_v9.PFL
   Surface format:
   FREE

   Profile format:
```

FREE

Surface station no.: 93138
Name: UNKNOWN
UNKNOWN
Year: 2012

Upper air station no.: 3190
Name:
Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-28.7	0.293	-9.000	-9.000	-999.	381.	94.4	0.13	4.07	1.00	3.32	328.	10.1	286.4	2.0
12	01	01	1	02	-5.5	0.102	-9.000	-9.000	-999.	122.	17.6	0.13	4.07	1.00	1.23	320.	10.1	284.2	2.0
12	01	01	1	03	-19.4	0.196	-9.000	-9.000	-999.	209.	42.5	0.13	4.07	1.00	2.27	306.	10.1	283.1	2.0
12	01	01	1	04	-16.5	0.181	-9.000	-9.000	-999.	184.	35.9	0.13	4.07	1.00	2.10	328.	10.1	282.5	2.0
12	01	01	1	05	-20.0	0.202	-9.000	-9.000	-999.	218.	44.9	0.13	4.07	1.00	2.33	328.	10.1	283.8	2.0
12	01	01	1	06	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	325.	10.1	283.1	2.0
12	01	01	1	07	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	327.	10.1	284.2	2.0
12	01	01	1	08	-9.3	0.150	-9.000	-9.000	-999.	140.	32.5	0.13	4.07	0.52	1.74	297.	10.1	284.9	2.0
12	01	01	1	09	50.6	0.130	0.399	0.011	45.	112.	-3.9	0.13	4.07	0.32	0.92	282.	10.1	291.4	2.0
12	01	01	1	10	126.5	0.172	0.815	0.008	154.	171.	-3.6	0.13	4.07	0.25	1.20	233.	10.1	294.2	2.0
12	01	01	1	11	179.5	0.134	1.299	0.005	439.	118.	-1.2	0.13	4.07	0.23	0.75	344.	10.1	297.5	2.0
12	01	01	1	12	203.7	0.185	1.649	0.005	791.	192.	-2.8	0.13	4.07	0.22	1.23	100.	10.1	298.8	2.0
12	01	01	1	13	199.8	0.234	1.913	0.005	1259.	271.	-5.7	0.13	4.07	0.22	1.76	110.	10.1	299.9	2.0
12	01	01	1	14	167.6	0.236	1.916	0.005	1507.	275.	-7.0	0.13	4.07	0.24	1.84	124.	10.1	300.4	2.0
12	01	01	1	15	108.5	0.273	1.697	0.005	1617.	342.	-16.8	0.13	4.07	0.27	2.40	92.	10.1	300.4	2.0
12	01	01	1	16	27.5	0.235	1.080	0.005	1640.	275.	-42.5	0.13	4.07	0.37	2.27	144.	10.1	299.2	2.0
12	01	01	1	17	-5.6	0.106	-9.000	-9.000	-999.	95.	19.2	0.13	4.07	0.66	1.28	204.	10.1	294.9	2.0
12	01	01	1	18	-17.6	0.188	-9.000	-9.000	-999.	196.	39.0	0.13	4.07	1.00	2.18	314.	10.1	292.0	2.0
12	01	01	1	19	-25.3	0.260	-9.000	-9.000	-999.	318.	74.4	0.13	4.07	1.00	2.96	322.	10.1	289.9	2.0
12	01	01	1	20	-21.1	0.217	-9.000	-9.000	-999.	243.	51.7	0.13	4.07	1.00	2.49	314.	10.1	289.2	2.0
12	01	01	1	21	-26.7	0.275	-9.000	-9.000	-999.	346.	83.0	0.13	4.07	1.00	3.12	314.	10.1	290.4	2.0
12	01	01	1	22	-22.1	0.226	-9.000	-9.000	-999.	259.	56.2	0.13	4.07	1.00	2.59	317.	10.1	288.8	2.0
12	01	01	1	23	-28.1	0.285	-9.000	-9.000	-999.	365.	89.2	0.13	4.07	1.00	3.23	328.	10.1	285.4	2.0
12	01	01	1	24	-33.3	0.338	-9.000	-9.000	-999.	472.	125.8	0.13	4.07	1.00	3.81	331.	10.1	286.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.1	1	328.	3.32	286.5	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 23132 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ *** 01/23/24
*** AERMET - VERSION 16216 ***
*** *** 12:14:52

PAGE 21
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , AREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	0.10888	(12121324)	556267.14	3743577.37	0.10204	(12121324)
556211.51	3743511.11	0.07797	(12121324)	556212.12	3743491.64	0.06807	(12121324)
556212.20	3743468.61	0.05689	(12121324)	556212.20	3743447.63	0.04767	(12121324)
556212.88	3743426.98	0.04624	(15012924)	556212.88	3743403.28	0.04459	(15012924)
556212.88	3743380.94	0.04258	(15012924)	556214.23	3743358.94	0.04039	(15012924)
556213.56	3743337.62	0.03865	(14120924)	556213.22	3743315.61	0.03788	(14120924)
556213.22	3743271.61	0.03563	(14120924)	556214.91	3743248.59	0.03417	(14120924)
556215.25	3743227.27	0.03369	(13112924)	556172.26	3743162.95	0.03732	(13112924)
556113.36	3743164.31	0.04447	(14121624)	555825.30	3743159.90	0.05684	(14121624)
555869.64	3743163.97	0.05758	(14121624)	555911.62	3743161.26	0.05762	(14121624)
555593.79	3743143.18	0.05557m	(15123124)	555332.94	3743363.00	0.11308m	(15123124)
555382.32	3743364.99	0.11481m	(15123124)	554993.81	3743124.40	0.03653	(13112224)
555073.22	3743246.43	0.05103	(13112224)	555239.74	3743255.78	0.07239m	(15123124)
555433.36	3742022.73	0.01042	(16120224)	555348.71	3742090.44	0.01074	(16120224)
555540.35	3741977.02	0.01057	(12112724)	555632.11	3741980.40	0.01137	(12112724)
555682.56	3741980.40	0.01162	(12112724)	555853.20	3741996.66	0.01332	(16122124)
555931.42	3741996.32	0.01342	(16122124)	555981.19	3741993.27	0.01325	(16122124)
555836.95	3742073.18	0.01380	(16122124)	555467.56	3742088.75	0.01092	(16120224)
555569.47	3742015.62	0.01103	(12112724)	555322.64	3742026.11	0.01005	(16120224)
555170.62	3742238.40	0.01113	(13100424)	552518.62	3742635.91	0.00771	(12121024)
552151.07	3742961.57	0.00782	(13020124)	552104.59			

```
       3743002.77        0.00742  (13020124)
       552147.90   3743107.35       0.00675  (13020124)                555511.02
       3742385.96        0.00682  (12121024)
       552396.18   3742346.58       0.00672  (12121024)                554748.71
       3741897.68        0.00855  (13120624)
       554624.49   3741840.49       0.00856  (13120624)                555067.24
       3742375.24        0.01322  (13100424)
       554920.60   3742586.43       0.01603  (13112224)                554947.30
       3742550.17        0.01567  (13112224)
       554864.41   3742535.03       0.01408  (13112224)                554941.32
       3742393.57        0.01289  (13112224)
       555036.96   3742730.68       0.02013  (13112224)                555018.23
       3742600.78        0.01682  (13112224)
       555688.41   3742524.26       0.01749  (16122124)                555640.59
       3742489.10        0.01698  (12012724)
       555702.48   3742734.30       0.02319m (15123124)                555658.92
       3742351.21        0.01523  (16122124)
       555468.83   3742309.41       0.01310  (15031324)                555024.76
       3744296.72        0.06548  (14120124)
       556539.92   3743618.77       0.08456  (12121324)                556518.18
       3743768.24        0.06968  (12121324)
       556624.24   3743711.65       0.07183  (12121324)                556613.05
       3743868.53        0.03683  (16010524)
       556893.94   3743855.99       0.02318  (16010524)                556507.22
       3744010.11        0.03662  (16010524)
       557195.85   3744195.39       0.01854  (13012524)                557240.64
       3744050.63        0.01885  (16010524)
       551720.23   3743871.95       0.00941  (15120424)                551713.09
       3743823.26        0.00919  (15120424)
       551720.88   3743686.93       0.00776  (15120424)                551723.47
       3743526.58        0.00606  (13123024)
       553601.74   3741280.79       0.00628c (15010124)                554152.43
       3741075.58        0.00679  (13120624)
       554291.40   3741227.54       0.00732  (13120624)                554094.63
       3741115.84        0.00644  (13120624)
       554501.84   3741076.63       0.00707  (13120624)                553871.76
       3741110.78        0.00593c (15010124)
       554124.33   3741453.24       0.00644c (15010124)                555828.45
       3742342.52        0.01582  (16122124)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        12:14:52

                        PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,
                  AREA1       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_2.5   IN
                                          MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
       555821.54   3742752.86       0.03078  (14121624)                555474.96
       3742811.58        0.02751m (15123124)
       555504.84   3742897.96       0.03315m (15123124)                557195.16
```

```
       3744349.69        0.01665  (12020724)
       557198.52   3744248.16        0.01758  (13012524)                557193.27
       3744425.80        0.01679  (12020724)
       555470.59   3745232.95        0.01249  (13112224)                550726.90
       3743617.42        0.00585  (15120424)
       550066.60   3744391.95        0.00586  (14121124)                557807.51
       3744815.58        0.01234  (12020724)
       555574.11   3741789.80        0.01014  (12112724)                555481.59
       3741918.55        0.00962  (12112724)
       555144.29   3742414.37        0.01390  (13100424)                555129.31
       3742292.02        0.01206  (13100424)
       556633.34   3741897.60        0.02061  (14121624)                556634.03
       3741731.26        0.01900  (14121624)
       556637.78   3741538.02        0.01616
       (14121624)
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:14:52

                      PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                  *** THE SUMMARY OF HIGHEST 24-HR RESULTS ***


                                      ** CONC OF PM_2.5   IN
                                      MICROGRAMS/M**3                          **


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

ALL      HIGH   1ST HIGH VALUE IS       0.11481m ON 15123124: AT (  555382.32,  3743364.99,
89.00,    89.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 23132  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        01/23/24
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        12:14:52

                      PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)
```

```
   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186     252       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187     252       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 8/29/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops CO\14174 Ops CO.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2189641 Riverside_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Ops CO.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL2         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL3         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL4         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL5         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL6         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL7         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL8         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL9         0.0873581105     5.000    45.398     1.400
   SRCPARAM VOL10        0.0873581105     5.000    45.398     1.400
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
```

```
**
RE STARTING
   INCLUDED "14174 Ops CO.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "14174 OPS CO.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "14174 OPS CO.AD\08H1GALL.PLT" 32
   SUMMFILE "14174 Ops CO.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of           0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ************************************
 *** SETUP Finishes Successfully ***
 ************************************

FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       17:48:25

                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - -
```

```
** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: CO

**Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR

**This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  16216

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing
                                                                Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                               ;  Emission Rate
                 Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
**Output Print File:
aermod.out

**Detailed Error/Message File:   14174 Ops
```

```
 CO.err
 **File for Summary of Results:   14174 Ops
 CO.sum
 *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        17:48:25

                     PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                    BASE    RELEASE    INIT.    INIT.
              URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1             0   0.87358E-01  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES
 VOL2             0   0.87358E-01  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES
 VOL3             0   0.87358E-01  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES
 VOL4             0   0.87358E-01  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES
 VOL5             0   0.87358E-01  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES
 VOL6             0   0.87358E-01  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES
 VOL7             0   0.87358E-01  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES
 VOL8             0   0.87358E-01  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES
 VOL9             0   0.87358E-01  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES
 VOL10            0   0.87358E-01  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES
 *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        17:48:25

                     PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                SOURCE IDs
 -----------                                                ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       ,
 *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        17:48:25
```

```
                        PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                          SOURCE IDs
  --------   ---------                                          ----------



               2189641.   VOL1       , VOL2       , VOL3       , VOL4       , VOL5       ,
               VOL6       , VOL7       ,
 VOL8       ,

              VOL9       , VOL10      ,
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       17:48:25

                        PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                               *** DISCRETE CARTESIAN RECEPTORS ***
                                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                              (METERS)

    ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
    3743577.4,      96.4,      96.4,       2.0);
    ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
    3743491.6,      94.5,      94.5,       2.0);
    ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
    3743447.6,      94.0,      94.0,       2.0);
    ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
    3743403.3,      93.0,      93.0,       2.0);
    ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
    3743358.9,      92.1,      92.1,       2.0);
    ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
    3743315.6,      91.7,      91.7,       2.0);
    ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
    3743248.6,      90.4,      90.4,       2.0);
    ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
    3743162.9,      89.0,      89.0,       2.0);
    ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
    3743159.9,      88.0,      88.0,       2.0);
    ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
    3743161.3,      88.5,      88.5,       2.0);
    ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
    3743363.0,      88.8,      88.8,       2.0);
    ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
    3743124.4,      80.6,      80.6,       2.0);
    ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
    3743255.8,      85.7,      85.7,       2.0);
    ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
    3742090.4,      69.0,      69.0,       2.0);
    ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
    3741980.4,      68.0,      68.0,       2.0);
    ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
    3741996.7,      68.1,      68.1,       2.0);
    ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
    3741993.3,      68.6,      68.6,       2.0);
    ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);         ( 555467.6,
    3742088.8,      69.0,      69.0,       2.0);
    ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);         ( 555322.6,
    3742026.1,      69.9,      69.9,       2.0);
```

```
    ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);         ( 552518.6,
    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);         ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);         ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);         ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);         ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);         ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);         ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);         ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);         ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);         ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);         ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);         ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);         ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);         ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);         ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);         ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);         ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);         ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);         ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);         ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);         ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);         ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);         ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);         ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);         ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);         ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
```

```
                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                              (METERS)

    ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
    3741918.5,      68.3,      68.3,       2.0);
```

```
    ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
    3742292.0,      71.0,      71.0,       2.0);
    ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
    3741731.3,      66.0,      66.0,       2.0);
    ( 556637.8, 3741538.0,      65.0,      65.0,
    2.0);
```


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

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54,   3.09,   5.14,   8.23, 10.80,

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

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file:
KPSP_V9_ADJU\KPSP_v9.SFC   Met
Version: 16216
Profile file:
KPSP_V9_ADJU\KPSP_v9.PFL
Surface format:
FREE

Profile format:
FREE

Surface station no.:   93138   Upper air station no.:   3190
Name: UNKNOWN   Name:

```
                  UNKNOWN
                  Year:   2012                                    Year:   2012

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - -
 12 01 01   1 01  -28.7  0.293 -9.000 -9.000 -999.  381.     94.4  0.13   4.07   1.00    3.32
 328.   10.1  286.4    2.0
 12 01 01   1 02   -5.5  0.102 -9.000 -9.000 -999.  122.     17.6  0.13   4.07   1.00    1.23
 320.   10.1  284.2    2.0
 12 01 01   1 03  -19.4  0.196 -9.000 -9.000 -999.  209.     42.5  0.13   4.07   1.00    2.27
 306.   10.1  283.1    2.0
 12 01 01   1 04  -16.5  0.181 -9.000 -9.000 -999.  184.     35.9  0.13   4.07   1.00    2.10
 328.   10.1  282.5    2.0
 12 01 01   1 05  -20.0  0.202 -9.000 -9.000 -999.  218.     44.9  0.13   4.07   1.00    2.33
 328.   10.1  283.8    2.0
 12 01 01   1 06  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 325.   10.1  283.1    2.0
 12 01 01   1 07  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 327.   10.1  284.2    2.0
 12 01 01   1 08   -9.3  0.150 -9.000 -9.000 -999.  140.     32.5  0.13   4.07   0.52    1.74
 297.   10.1  284.9    2.0
 12 01 01   1 09   50.6  0.130  0.399  0.011   45.  112.     -3.9  0.13   4.07   0.32    0.92
 282.   10.1  291.4    2.0
 12 01 01   1 10  126.5  0.172  0.815  0.008  154.  171.     -3.6  0.13   4.07   0.25    1.20
 233.   10.1  294.2    2.0
 12 01 01   1 11  179.5  0.134  1.299  0.005  439.  118.     -1.2  0.13   4.07   0.23    0.75
 344.   10.1  297.5    2.0
 12 01 01   1 12  203.7  0.185  1.649  0.005  791.  192.     -2.8  0.13   4.07   0.22    1.23
 100.   10.1  298.8    2.0
 12 01 01   1 13  199.8  0.234  1.913  0.005 1259.  271.     -5.7  0.13   4.07   0.22    1.76
 110.   10.1  299.9    2.0
 12 01 01   1 14  167.6  0.236  1.916  0.005 1507.  275.     -7.0  0.13   4.07   0.24    1.84
 124.   10.1  300.4    2.0
 12 01 01   1 15  108.5  0.273  1.697  0.005 1617.  342.    -16.8  0.13   4.07   0.27    2.40
 92.   10.1  300.4    2.0
 12 01 01   1 16   27.5  0.235  1.080  0.005 1640.  275.    -42.5  0.13   4.07   0.37    2.27
 144.   10.1  299.2    2.0
 12 01 01   1 17   -5.6  0.106 -9.000 -9.000 -999.   95.     19.2  0.13   4.07   0.66    1.28
 204.   10.1  294.9    2.0
 12 01 01   1 18  -17.6  0.188 -9.000 -9.000 -999.  196.     39.0  0.13   4.07   1.00    2.18
 314.   10.1  292.0    2.0
 12 01 01   1 19  -25.3  0.260 -9.000 -9.000 -999.  318.     74.4  0.13   4.07   1.00    2.96
 322.   10.1  289.9    2.0
 12 01 01   1 20  -21.1  0.217 -9.000 -9.000 -999.  243.     51.7  0.13   4.07   1.00    2.49
 314.   10.1  289.2    2.0
 12 01 01   1 21  -26.7  0.275 -9.000 -9.000 -999.  346.     83.0  0.13   4.07   1.00    3.12
 314.   10.1  290.4    2.0
 12 01 01   1 22  -22.1  0.226 -9.000 -9.000 -999.  259.     56.2  0.13   4.07   1.00    2.59
 317.   10.1  288.8    2.0
 12 01 01   1 23  -28.1  0.285 -9.000 -9.000 -999.  365.     89.2  0.13   4.07   1.00    3.23
 328.   10.1  285.4    2.0
 12 01 01   1 24  -33.3  0.338 -9.000 -9.000 -999.  472.    125.8  0.13   4.07   1.00    3.81
 331.   10.1  286.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1  328.    3.32   286.5   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
```

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

*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   VOL1   , VOL2   , VOL3   , VOL4   , VOL5   , VOL6   , VOL7   , VOL8   , VOL9   , VOL10   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	10.01583	(13082821)	556267.14	3743577.37	9.13060	(14073103)
556211.51	3743511.11	9.56879	(15082820)	556212.12	3743491.64	9.39941	(16072522)
556212.20	3743468.61	9.24529	(16072522)	556212.20	3743447.63	9.05372	(16072522)
556212.88	3743426.98	8.79372	(16072522)	556212.88	3743403.28	8.60351	(16072321)
556212.88	3743380.94	8.50303	(16072321)	556214.23	3743358.94	8.32783	(16072321)
556213.56	3743337.62	8.15144	(16072321)	556213.22	3743315.61	7.92351	(16072321)
556213.22	3743271.61	7.51192	(15090801)	556214.91	3743248.59	7.32348	(13051321)
556215.25	3743227.27	7.15688	(13051321)	556172.26	3743162.95	6.95013	(14080122)
556113.36	3743164.31	7.29839	(14080122)	555825.30	3743159.90	8.26598	(15082322)
555869.64	3743163.97	8.17976	(14090623)	555911.62	3743161.26	8.00721	(14090623)
555593.79	3743143.18	8.28865	(13063002)	555332.94	3743363.00	12.38778	(13062923)
555382.32	3743364.99	12.47705	(14080202)	554993.81	3743124.40	7.67114	(15082420)
555073.22	3743246.43	9.45072	(15082420)	555239.74	3743255.78	9.77028	(16062924)
555433.36	3742022.73	2.91736	(12072220)	555348.71	3742090.44	3.00631	(12081421)
555540.35	3741977.02	2.78434	(13081423)	555632.11	3741980.40	2.77685	(13081421)
555682.56	3741980.40	2.76259	(13081421)	555853.20	3741996.66	2.74189	(15091024)
555931.42	3741996.32	2.71799	(12091821)	555981.19	3741993.27	2.70056	(13063002)
555836.95	3742073.18	2.88982	(15091024)	555467.56	3742088.75	3.02395	(12072220)
555569.47	3742015.62	2.83111	(13081423)	555322.64	3742026.11	2.87449	(12081421)
555170.62	3742238.40	3.29708	(15101320)	552518.62	3742635.91	1.63877	(12090319)
552151.07	3742961.57	1.49317	(13062720)	552104.59	3743002.77	1.46953	(13062720)
552147.90	3743107.35	1.49463	(14080121)	552511.02	3742385.96	1.54693	(14092219)
552396.18	3742346.58	1.59308	(14092219)	554748.71	3741897.68	2.56855	(16062924)

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       554624.49   3741840.49       2.46816  (13091419)                 555067.24
       3742375.24        3.59151  (16100819)
       554920.60   3742586.43       4.20657  (16062924)                 554947.30
       3742550.17        4.09700  (16062924)
       554864.41   3742535.03       4.02368  (13091419)                 554941.32
       3742393.57        3.59584  (12081624)
       555036.96   3742730.68       4.84107  (16062924)                 555018.23
       3742600.78        4.26545  (12081624)
       555688.41   3742524.26       4.18804  (13051120)                 555640.59
       3742489.10        4.06083  (13051120)
       555702.48   3742734.30       5.03403  (14072723)                 555658.92
       3742351.21        3.61259  (13051120)
       555468.83   3742309.41       3.54244  (12072220)                 555024.76
       3744296.72       21.16271  (13082101)
       556539.92   3743618.77       6.43629  (14072522)                 556518.18
       3743768.24        6.99029  (15101501)
       556624.24   3743711.65       5.94166  (14073101)                 556613.05
       3743868.53        8.38228  (14083002)
       556893.94   3743855.99       5.78949  (13090920)                 556507.22
       3744010.11        9.84074  (14073024)
       557195.85   3744195.39       8.12100  (13070804)                 557240.64
       3744050.63        5.02061  (15080303)
       551720.23   3743871.95       1.66087  (16022618)                 551713.09
       3743823.26        1.69014  (16072921)
       551720.88   3743686.93       1.71857  (16072921)                 551723.47
       3743526.58        1.71360  (13072521)
       553601.74   3741280.79       2.44989  (12090320)                 554152.43
       3741075.58        3.67858  (14100318)
       554291.40   3741227.54       2.67715  (16063003)                 554094.63
       3741115.84        3.69688  (14100318)
       554501.84   3741076.63       2.54139  (14090701)                 553871.76
       3741110.78        2.94296  (15092320)
       554124.33   3741453.24       1.90362  (15082420)                 555828.45
       3742342.52        3.51346  (12091821)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                             ***        17:48:25

                        PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -
       555821.54   3742752.86       5.04085  (14090702)                 555474.96
       3742811.58        5.52481  (15082601)
       555504.84   3742897.96       6.03383  (15082601)                 557195.16
       3744349.69        9.43894  (15062703)
       557198.52   3744248.16       8.81218  (13090621)                 557193.27
       3744425.80        9.74361  (16081101)
       555470.59   3745232.95       9.81352  (14081702)                 550726.90
       3743617.42        2.77489  (16101601)
       550066.60   3744391.95       2.73041  (15060903)                 557807.51
```

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        3744815.58        9.13653  (13073002)
        555574.11   3741789.80        2.48441  (13081423)                  555481.59
        3741918.55        2.70803  (12072220)
        555144.29   3742414.37        3.73057  (16100819)                  555129.31
        3742292.02        3.40769  (16100819)
        556633.34   3741897.60        2.25108  (15082322)                  556634.03
        3741731.26        2.07042  (15082322)
        556637.78   3741538.02        1.88217
        (16072303)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***       17:48:25

                    PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES FOR
                              SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1         , VOL2         ,
                                  VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
        556210.54   3743579.94        8.35499  (12020408)                  556267.14
        3743577.37        7.55639  (12020408)
        556211.51   3743511.11        7.85559  (12020408)                  556212.12
        3743491.64        7.61601  (12020408)
        556212.20   3743468.61        7.30292  (12020408)                  556212.20
        3743447.63        6.99625  (12020408)
        556212.88   3743426.98        6.66134  (12020408)                  556212.88
        3743403.28        6.27088  (12020408)
        556212.88   3743380.94        6.11241  (12093024)                  556214.23
        3743358.94        6.05814  (13011808)
        556213.56   3743337.62        6.03446  (13011808)                  556213.22
        3743315.61        5.97923  (13011808)
        556213.22   3743271.61        5.80179  (13011808)                  556214.91
        3743248.59        5.66733  (13011808)
        556215.25   3743227.27        5.54055  (13011808)                  556172.26
        3743162.95        5.38798  (13122408)
        556113.36   3743164.31        5.86624  (13122408)                  555825.30
        3743159.90        7.16818  (14010208)
        555869.64   3743163.97        7.22846  (12122908)                  555911.62
        3743161.26        7.15639  (12122908)
        555593.79   3743143.18        6.27033  (14122808)                  555332.94
        3743363.00        9.48677  (12121808)
        555382.32   3743364.99        9.78629  (13012424)                  554993.81
        3743124.40        4.06136  (12121408)
        555073.22   3743246.43        5.67877  (12121408)                  555239.74
        3743255.78        6.44066  (12121808)
        555433.36   3742022.73        1.20641  (13081424)                  555348.71
        3742090.44        1.18502  (13081424)
        555540.35   3741977.02        1.22065  (13081424)                  555632.11
        3741980.40        1.22916  (13081424)
        555682.56   3741980.40        1.26255c (14010908)                  555853.20
        3741996.66        1.45426  (16111408)
        555931.42   3741996.32        1.61363  (16111408)                  555981.19
        3741993.27        1.69859  (16111408)
```

```
        555836.95   3742073.18        1.56532  (16111408)                555467.56
        3742088.75        1.29382  (13081424)
        555569.47   3742015.62        1.26046  (13081424)                555322.64
        3742026.11        1.12465  (16122408)
        555170.62   3742238.40        1.29474  (14121208)                552518.62
        3742635.91        0.51337  (14013108)
        552151.07   3742961.57        0.64670  (12110924)                552104.59
        3743002.77        0.64931  (12110924)
        552147.90   3743107.35        0.68352  (12110924)                552511.02
        3742385.96        0.47217  (14013108)
        552396.18   3742346.58        0.45516  (14013108)                554748.71
        3741897.68        0.93540  (15071808)
        554624.49   3741840.49        0.90030  (15071808)                555067.24
        3742375.24        1.39226  (15071808)
        554920.60   3742586.43        1.79245  (15071808)                554947.30
        3742550.17        1.72563  (15071808)
        554864.41   3742535.03        1.67318  (15071808)                554941.32
        3742393.57        1.45309  (15071808)
        555036.96   3742730.68        2.19306  (15071808)                555018.23
        3742600.78        1.83978  (15071808)
        555688.41   3742524.26        2.36658  (16111408)                555640.59
        3742489.10        2.10350c (14010908)
        555702.48   3742734.30        3.33626  (16111408)                555658.92
        3742351.21        1.81752c (14010908)
        555468.83   3742309.41        1.56221  (13081424)                555024.76
        3744296.72       14.08993  (13072808)
        556539.92   3743618.77        4.99287  (15030508)                556518.18
        3743768.24        5.31204  (16111808)
        556624.24   3743711.65        4.43897  (14120824)                556613.05
        3743868.53        6.26750  (14012408)
        556893.94   3743855.99        4.29281  (16111808)                556507.22
        3744010.11        7.54729  (14111208)
        557195.85   3744195.39        4.95324  (14111208)                557240.64
        3744050.63        3.52277  (14012408)
        551720.23   3743871.95        0.85780  (13083008)                551713.09
        3743823.26        0.86967  (13083008)
        551720.88   3743686.93        0.88015  (13083008)                551723.47
        3743526.58        0.83237  (13083008)
        553601.74   3741280.79        0.74843  (13020824)                554152.43
        3741075.58        1.34078  (14090724)
        554291.40   3741227.54        1.03750  (14090724)                554094.63
        3741115.84        1.38052  (14090724)
        554501.84   3741076.63        0.81532  (13062924)                553871.76
        3741110.78        1.08322  (14090724)
        554124.33   3741453.24        0.63759  (14090724)                555828.45
        3742342.52        2.19591  (16111408)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***        17:48:25

                        PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES FOR
                                SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                    VOL3        , VOL4        , VOL5        ,
                  VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)             X-COORD (M)  Y-COORD
```

```
      (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -
       555821.54   3742752.86       3.79967  (14122808)              555474.96
       3742811.58        2.83847  (16100824)
       555504.84   3742897.96       3.37935  (16120924)              557195.16
       3744349.69        5.71478  (14111208)
       557198.52   3744248.16       5.39784  (14111208)              557193.27
       3744425.80        5.51209m (14111508)
       555470.59   3745232.95       4.76399  (12100808)              550726.90
       3743617.42        0.87033  (13083008)
       550066.60   3744391.95       0.63807  (12081724)              557807.51
       3744815.58        3.46487m (14111508)
       555574.11   3741789.80       1.08374  (13081424)              555481.59
       3741918.55        1.14718  (13081424)
       555144.29   3742414.37       1.49816  (14121208)              555129.31
       3742292.02        1.34117  (14121208)
       556633.34   3741897.60       1.83415  (16012208)              556634.03
       3741731.26        1.63606  (16012208)
       556637.78   3741538.02       1.44524
       (14122808)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       17:48:25

                     PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                  *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


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


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

ALL      HIGH   1ST HIGH VALUE IS      21.16271  ON 13082101: AT (  555024.76,  3744296.72,
114.38,   434.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       17:48:25

                     PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                  *** THE SUMMARY OF HIGHEST  8-HR RESULTS ***


                                      ** CONC OF CO       IN
                                      MICROGRAMS/M**3                          **
```

```
                                                        DATE
                                                                                     NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)           RECEPTOR  (XR, YR,
ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      14.08993  ON 13072808: AT (  555024.76,  3744296.72,
114.38,   434.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/29/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       17:48:25

                      PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
** Lakes Environmental AERMOD MPI
**
***************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 8/30/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops NOX\14174 Ops
NOX.ADI
**
***************************************
**
**
***************************************
** AERMOD Control Pathway
***************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2189641 Riverside_County
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Ops NOX.err"
CO FINISHED
**
***************************************
** AERMOD Source Pathway
***************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL2         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL3         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL4         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL5         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL6         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL7         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL8         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL9         0.0125468689     5.000    45.398     1.400
   SRCPARAM VOL10        0.0125468689     5.000    45.398     1.400
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
***************************************
** AERMOD Receptor Pathway
***************************************
```

```
**
**
RE STARTING
   INCLUDED "14174 Ops NOX.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "14174 OPS NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "14174 Ops NOX.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of           0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        08:35:36

                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - -
```

```
** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: NOX

**Model Calculates  1 Short Term Average(s) of:   1-HR

**This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  16216

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing
                                                                Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate
                 Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
**Output Print File:
aermod.out

**Detailed Error/Message File:   14174 Ops
NOX.err
```

```
**File for Summary of Results:   14174 Ops
 NOX.sum
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        08:35:36

                     PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                   *** VOLUME SOURCE DATA ***

                NUMBER EMISSION RATE                      BASE    RELEASE    INIT.    INIT.
                URBAN  EMISSION RATE
   SOURCE        PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1             0   0.12547E-01  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES
 VOL2             0   0.12547E-01  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES
 VOL3             0   0.12547E-01  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES
 VOL4             0   0.12547E-01  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES
 VOL5             0   0.12547E-01  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES
 VOL6             0   0.12547E-01  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES
 VOL7             0   0.12547E-01  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES
 VOL8             0   0.12547E-01  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES
 VOL9             0   0.12547E-01  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES
 VOL10            0   0.12547E-01  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        08:35:36

                     PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                SOURCE IDs
 -----------                                                ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       ,
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        08:35:36
```

```
                        PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                          SOURCE IDs
  --------   ---------                                          ----------



                2189641.   VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
                VOL6        , VOL7        ,
 VOL8        ,

               VOL9        , VOL10       ,
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        08:35:36

                        PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                               *** DISCRETE CARTESIAN RECEPTORS ***
                                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                              (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,      96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,      94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,      94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,      93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,      92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,      91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,      90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,      89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,      88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,      88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,      88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,      80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,      85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,      69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,      68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,      68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,      68.6,      68.6,       2.0);
     ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);         ( 555467.6,
     3742088.8,      69.0,      69.0,       2.0);
     ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);         ( 555322.6,
     3742026.1,      69.9,      69.9,       2.0);
     ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);         ( 552518.6,
```

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    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);        ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);        ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);        ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);        ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);        ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);        ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);        ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);        ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);        ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);        ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);        ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);        ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);        ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);        ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);        ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);        ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);        ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);        ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);        ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);        ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);        ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);        ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);        ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);        ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);        ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                           ***        08:35:36

                        PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                            (METERS)

    ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);        ( 555481.6,
    3741918.5,      68.3,      68.3,       2.0);
    ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);        ( 555129.3,
```

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    3742291.0,      71.0,      71.0,       2.0);
    ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
    3741731.3,      66.0,      66.0,       2.0);
    ( 556637.8, 3741538.0,      65.0,      65.0,
    2.0);
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        08:35:36

                      PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                  (1=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1
            1  1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
                INCLUDED IN THE DATA FILE.



                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES
                                    ***
                                                              (METERS/SEC)

                                                   1.54,   3.09,   5.14,   8.23,  10.80,
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        08:35:36

                      PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:
   KPSP_V9_ADJU\KPSP_v9.SFC                                                        Met
   Version:  16216
   Profile file:
   KPSP_V9_ADJU\KPSP_v9.PFL
   Surface format:
   FREE

   Profile format:
   FREE

   Surface station no.:    93138                   Upper air station no.:     3190
                  Name: UNKNOWN                                     Name:
                  UNKNOWN
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                 Year:   2012                                         Year:   2012

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - -
 12 01 01   1 01  -28.7  0.293 -9.000 -9.000 -999.  381.     94.4  0.13   4.07   1.00    3.32
 328.   10.1  286.4    2.0
 12 01 01   1 02   -5.5  0.102 -9.000 -9.000 -999.  122.     17.6  0.13   4.07   1.00    1.23
 320.   10.1  284.2    2.0
 12 01 01   1 03  -19.4  0.196 -9.000 -9.000 -999.  209.     42.5  0.13   4.07   1.00    2.27
 306.   10.1  283.1    2.0
 12 01 01   1 04  -16.5  0.181 -9.000 -9.000 -999.  184.     35.9  0.13   4.07   1.00    2.10
 328.   10.1  282.5    2.0
 12 01 01   1 05  -20.0  0.202 -9.000 -9.000 -999.  218.     44.9  0.13   4.07   1.00    2.33
 328.   10.1  283.8    2.0
 12 01 01   1 06  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 325.   10.1  283.1    2.0
 12 01 01   1 07  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 327.   10.1  284.2    2.0
 12 01 01   1 08   -9.3  0.150 -9.000 -9.000 -999.  140.     32.5  0.13   4.07   0.52    1.74
 297.   10.1  284.9    2.0
 12 01 01   1 09   50.6  0.130  0.399  0.011   45.  112.     -3.9  0.13   4.07   0.32    0.92
 282.   10.1  291.4    2.0
 12 01 01   1 10  126.5  0.172  0.815  0.008  154.  171.     -3.6  0.13   4.07   0.25    1.20
 233.   10.1  294.2    2.0
 12 01 01   1 11  179.5  0.134  1.299  0.005  439.  118.     -1.2  0.13   4.07   0.23    0.75
 344.   10.1  297.5    2.0
 12 01 01   1 12  203.7  0.185  1.649  0.005  791.  192.     -2.8  0.13   4.07   0.22    1.23
 100.   10.1  298.8    2.0
 12 01 01   1 13  199.8  0.234  1.913  0.005 1259.  271.     -5.7  0.13   4.07   0.22    1.76
 110.   10.1  299.9    2.0
 12 01 01   1 14  167.6  0.236  1.916  0.005 1507.  275.     -7.0  0.13   4.07   0.24    1.84
 124.   10.1  300.4    2.0
 12 01 01   1 15  108.5  0.273  1.697  0.005 1617.  342.    -16.8  0.13   4.07   0.27    2.40
 92.   10.1  300.4    2.0
 12 01 01   1 16   27.5  0.235  1.080  0.005 1640.  275.    -42.5  0.13   4.07   0.37    2.27
 144.   10.1  299.2    2.0
 12 01 01   1 17   -5.6  0.106 -9.000 -9.000 -999.   95.     19.2  0.13   4.07   0.66    1.28
 204.   10.1  294.9    2.0
 12 01 01   1 18  -17.6  0.188 -9.000 -9.000 -999.  196.     39.0  0.13   4.07   1.00    2.18
 314.   10.1  292.0    2.0
 12 01 01   1 19  -25.3  0.260 -9.000 -9.000 -999.  318.     74.4  0.13   4.07   1.00    2.96
 322.   10.1  289.9    2.0
 12 01 01   1 20  -21.1  0.217 -9.000 -9.000 -999.  243.     51.7  0.13   4.07   1.00    2.49
 314.   10.1  289.2    2.0
 12 01 01   1 21  -26.7  0.275 -9.000 -9.000 -999.  346.     83.0  0.13   4.07   1.00    3.12
 314.   10.1  290.4    2.0
 12 01 01   1 22  -22.1  0.226 -9.000 -9.000 -999.  259.     56.2  0.13   4.07   1.00    2.59
 317.   10.1  288.8    2.0
 12 01 01   1 23  -28.1  0.285 -9.000 -9.000 -999.  365.     89.2  0.13   4.07   1.00    3.23
 328.   10.1  285.4    2.0
 12 01 01   1 24  -33.3  0.338 -9.000 -9.000 -999.  472.    125.8  0.13   4.07   1.00    3.81
 331.   10.1  286.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1  328.    3.32   286.5   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        08:35:36
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	1.43853	(13082821)	556267.14	3743577.37	1.31139	(14073103)
556211.51	3743511.11	1.37432	(15082820)	556212.12	3743491.64	1.35000	(16072522)
556212.20	3743468.61	1.32786	(16072522)	556212.20	3743447.63	1.30035	(16072522)
556212.88	3743426.98	1.26300	(16072522)	556212.88	3743403.28	1.23569	(16072321)
556212.88	3743380.94	1.22125	(16072321)	556214.23	3743358.94	1.19609	(16072321)
556213.56	3743337.62	1.17076	(16072321)	556213.22	3743315.61	1.13802	(16072321)
556213.22	3743271.61	1.07891	(15090801)	556214.91	3743248.59	1.05184	(13051321)
556215.25	3743227.27	1.02791	(13051321)	556172.26	3743162.95	0.99822	(14080122)
556113.36	3743164.31	1.04824	(14080122)	555825.30	3743159.90	1.18721	(15082322)
555869.64	3743163.97	1.17482	(14090623)	555911.62	3743161.26	1.15004	(14090623)
555593.79	3743143.18	1.19046	(13063002)	555332.94	3743363.00	1.77920	(13062923)
555382.32	3743364.99	1.79203	(14080202)	554993.81	3743124.40	1.10177	(15082420)
555073.22	3743246.43	1.35737	(15082420)	555239.74	3743255.78	1.40326	(16062924)
555433.36	3742022.73	0.41901	(12072220)	555348.71	3742090.44	0.43178	(12081421)
555540.35	3741977.02	0.39990	(13081423)	555632.11	3741980.40	0.39883	(13081421)
555682.56	3741980.40	0.39678	(13081421)	555853.20	3741996.66	0.39381	(15091024)
555931.42	3741996.32	0.39037	(12091821)	555981.19	3741993.27	0.38787	(13063002)
555836.95	3742073.18	0.41505	(15091024)	555467.56	3742088.75	0.43432	(12072220)
555569.47	3742015.62	0.40662	(13081423)	555322.64	3742026.11	0.41285	(12081421)
555170.62	3742238.40	0.47355	(15101320)	552518.62	3742635.91	0.23537	(12090319)
552151.07	3742961.57	0.21446	(13062720)	552104.59	3743002.77	0.21106	(13062720)
552147.90	3743107.35	0.21467	(14080121)	552511.02	3742385.96	0.22218	(14092219)
552396.18	3742346.58	0.22881	(14092219)	554748.71	3741897.68	0.36891	(16062924)
554624.49	3741840.49	0.35449	(13091419)	555067.24			

3742375.24 0.51583 (16100819)
554920.60 3742586.43 0.60417 (16062924) 554947.30
3742550.17 0.58844 (16062924)
554864.41 3742535.03 0.57790 (13091419) 554941.32
3742393.57 0.51645 (12081624)
555036.96 3742730.68 0.69530 (16062924) 555018.23
3742600.78 0.61263 (12081624)
555688.41 3742524.26 0.60151 (13051120) 555640.59
3742489.10 0.58324 (13051120)
555702.48 3742734.30 0.72302 (14072723) 555658.92
3742351.21 0.51886 (13051120)
555468.83 3742309.41 0.50879 (12072220) 555024.76
3744296.72 3.03951 (13082101)
556539.92 3743618.77 0.92442 (14072522) 556518.18
3743768.24 1.00398 (15101501)
556624.24 3743711.65 0.85338 (14073101) 556613.05
3743868.53 1.20391 (14083002)
556893.94 3743855.99 0.83152 (13090920) 556507.22
3744010.11 1.41338 (14073024)
557195.85 3744195.39 1.16638 (13070804) 557240.64
3744050.63 0.72109 (15080303)
551720.23 3743871.95 0.23854 (16022618) 551713.09
3743823.26 0.24275 (16072921)
551720.88 3743686.93 0.24683 (16072921) 551723.47
3743526.58 0.24612 (13072521)
553601.74 3741280.79 0.35187 (12090320) 554152.43
3741075.58 0.52834 (14100318)
554291.40 3741227.54 0.38451 (16063003) 554094.63
3741115.84 0.53097 (14100318)
554501.84 3741076.63 0.36501 (14090701) 553871.76
3741110.78 0.42268 (15092320)
554124.33 3741453.24 0.27341 (15082420) 555828.45
3742342.52 0.50462 (12091821)

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

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M) Y-COORD (M) CONC (YYMMDDHH)
- -
555821.54 3742752.86 0.72400 (14090702) 555474.96
3742811.58 0.79350 (15082601)
555504.84 3742897.96 0.86661 (15082601) 557195.16
3744349.69 1.35567 (15062703)
557198.52 3744248.16 1.26566 (13090621) 557193.27
3744425.80 1.39943 (16081101)
555470.59 3745232.95 1.40947 (14081702) 550726.90
3743617.42 0.39855 (16101601)
550066.60 3744391.95 0.39216 (15060903) 557807.51
3744815.58 1.31224 (13073002)

```
        555574.11   3741789.80        0.35683  (13081423)                555481.59
        3741918.55        0.38894  (12072220)
        555144.29   3742414.37        0.53581  (16100819)                555129.31
        3742292.02        0.48943  (16100819)
        556633.34   3741897.60        0.32331  (15082322)                556634.03
        3741731.26        0.29737  (15082322)
        556637.78   3741538.02        0.27033
        (16072303)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        08:35:36

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

                                                  *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


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


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

ALL      HIGH   1ST HIGH VALUE IS       3.03951  ON 13082101: AT (  555024.76,  3744296.72,
114.38,   434.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                       ***        08:35:36

                      PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
```

```
ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 8/30/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops PM10\14174 Ops
PM10.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2189641 Riverside_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Ops PM10.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL2         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL3         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL4         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL5         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL6         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL7         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL8         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL9         0.001427556     5.000    45.398     1.400
   SRCPARAM VOL10        0.001427556     5.000    45.398     1.400
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
```

```
**
**
RE STARTING
   INCLUDED "14174 Ops PM10.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "14174 OPS PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "14174 Ops PM10.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***       09:01:04

                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - -
```

```
** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: PM_10

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  16216

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing
                                                                Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate
                 Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
**Output Print File:
aermod.out

**Detailed Error/Message File:   14174 Ops
PM10.err
```

```
**File for Summary of Results:   14174 Ops
PM10.sum
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       09:01:04

                     PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                        BASE    RELEASE    INIT.    INIT.
              URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1             0   0.14276E-02  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES
 VOL2             0   0.14276E-02  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES
 VOL3             0   0.14276E-02  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES
 VOL4             0   0.14276E-02  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES
 VOL5             0   0.14276E-02  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES
 VOL6             0   0.14276E-02  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES
 VOL7             0   0.14276E-02  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES
 VOL8             0   0.14276E-02  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES
 VOL9             0   0.14276E-02  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES
 VOL10            0   0.14276E-02  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       09:01:04

                     PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                              SOURCE IDs
 -----------                                              ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       ,
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       09:01:04
```

```
                     PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                             SOURCE IDs
  --------   ---------                                             ----------



             2189641.   VOL1        , VOL2        , VOL3        , VOL4        , VOL5        ,
             VOL6        , VOL7        ,
 VOL8        ,

            VOL9        , VOL10       ,
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        09:01:04

                     PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                              (METERS)

     ( 556210.5, 3743579.9,      96.5,      96.5,       2.0);         ( 556267.1,
     3743577.4,       96.4,      96.4,       2.0);
     ( 556211.5, 3743511.1,      95.2,      95.2,       2.0);         ( 556212.1,
     3743491.6,       94.5,      94.5,       2.0);
     ( 556212.2, 3743468.6,      94.0,      94.0,       2.0);         ( 556212.2,
     3743447.6,       94.0,      94.0,       2.0);
     ( 556212.9, 3743427.0,      93.4,      93.4,       2.0);         ( 556212.9,
     3743403.3,       93.0,      93.0,       2.0);
     ( 556212.9, 3743380.9,      92.8,      92.8,       2.0);         ( 556214.2,
     3743358.9,       92.1,      92.1,       2.0);
     ( 556213.6, 3743337.6,      92.0,      92.0,       2.0);         ( 556213.2,
     3743315.6,       91.7,      91.7,       2.0);
     ( 556213.2, 3743271.6,      91.0,      91.0,       2.0);         ( 556214.9,
     3743248.6,       90.4,      90.4,       2.0);
     ( 556215.2, 3743227.3,      90.0,      90.0,       2.0);         ( 556172.3,
     3743162.9,       89.0,      89.0,       2.0);
     ( 556113.4, 3743164.3,      89.0,      89.0,       2.0);         ( 555825.3,
     3743159.9,       88.0,      88.0,       2.0);
     ( 555869.6, 3743164.0,      88.0,      88.0,       2.0);         ( 555911.6,
     3743161.3,       88.5,      88.5,       2.0);
     ( 555593.8, 3743143.2,      86.4,      86.4,       2.0);         ( 555332.9,
     3743363.0,       88.8,      88.8,       2.0);
     ( 555382.3, 3743365.0,      89.0,      89.0,       2.0);         ( 554993.8,
     3743124.4,       80.6,      80.6,       2.0);
     ( 555073.2, 3743246.4,      84.0,      84.0,       2.0);         ( 555239.7,
     3743255.8,       85.7,      85.7,       2.0);
     ( 555433.4, 3742022.7,      69.0,      69.0,       2.0);         ( 555348.7,
     3742090.4,       69.0,      69.0,       2.0);
     ( 555540.4, 3741977.0,      68.0,      68.0,       2.0);         ( 555632.1,
     3741980.4,       68.0,      68.0,       2.0);
     ( 555682.6, 3741980.4,      68.0,      68.0,       2.0);         ( 555853.2,
     3741996.7,       68.1,      68.1,       2.0);
     ( 555931.4, 3741996.3,      68.0,      68.0,       2.0);         ( 555981.2,
     3741993.3,       68.6,      68.6,       2.0);
     ( 555837.0, 3742073.2,      69.3,      69.3,       2.0);         ( 555467.6,
     3742088.8,       69.0,      69.0,       2.0);
     ( 555569.5, 3742015.6,      68.0,      68.0,       2.0);         ( 555322.6,
     3742026.1,       69.9,      69.9,       2.0);
     ( 555170.6, 3742238.4,      70.0,      70.0,       2.0);         ( 552518.6,
```

```
    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);         ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);         ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);         ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);         ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);         ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);         ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);         ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);         ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);         ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);         ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);         ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);         ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);         ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);         ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);         ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);         ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);         ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);         ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);         ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);         ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);         ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);         ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);         ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);         ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);         ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        09:01:04

                        PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                            (METERS)

    ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
    3741918.5,      68.3,      68.3,       2.0);
    ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
```

```
    3742292.0,      71.0,      71.0,       2.0);
    ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
    3741731.3,      66.0,      66.0,       2.0);
    ( 556637.8, 3741538.0,      65.0,      65.0,
    2.0);
```



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

                                              *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                 (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
               INCLUDED IN THE DATA FILE.


                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                                 (METERS/SEC)

                                                   1.54,   3.09,   5.14,   8.23,  10.80,
```



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

                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:
   KPSP_V9_ADJU\KPSP_v9.SFC                                                            Met
   Version:  16216
   Profile file:
   KPSP_V9_ADJU\KPSP_v9.PFL
   Surface format:
   FREE

   Profile format:
   FREE

   Surface station no.:    93138                 Upper air station no.:     3190
                  Name: UNKNOWN                                  Name:
                  UNKNOWN
```

```
                 Year:   2012                                         Year:   2012

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - -
 12 01 01   1 01  -28.7  0.293 -9.000 -9.000 -999.  381.     94.4  0.13   4.07   1.00    3.32
 328.   10.1  286.4    2.0
 12 01 01   1 02   -5.5  0.102 -9.000 -9.000 -999.  122.     17.6  0.13   4.07   1.00    1.23
 320.   10.1  284.2    2.0
 12 01 01   1 03  -19.4  0.196 -9.000 -9.000 -999.  209.     42.5  0.13   4.07   1.00    2.27
 306.   10.1  283.1    2.0
 12 01 01   1 04  -16.5  0.181 -9.000 -9.000 -999.  184.     35.9  0.13   4.07   1.00    2.10
 328.   10.1  282.5    2.0
 12 01 01   1 05  -20.0  0.202 -9.000 -9.000 -999.  218.     44.9  0.13   4.07   1.00    2.33
 328.   10.1  283.8    2.0
 12 01 01   1 06  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 325.   10.1  283.1    2.0
 12 01 01   1 07  -18.7  0.193 -9.000 -9.000 -999.  203.     40.9  0.13   4.07   1.00    2.23
 327.   10.1  284.2    2.0
 12 01 01   1 08   -9.3  0.150 -9.000 -9.000 -999.  140.     32.5  0.13   4.07   0.52    1.74
 297.   10.1  284.9    2.0
 12 01 01   1 09   50.6  0.130  0.399  0.011   45.  112.     -3.9  0.13   4.07   0.32    0.92
 282.   10.1  291.4    2.0
 12 01 01   1 10  126.5  0.172  0.815  0.008  154.  171.     -3.6  0.13   4.07   0.25    1.20
 233.   10.1  294.2    2.0
 12 01 01   1 11  179.5  0.134  1.299  0.005  439.  118.     -1.2  0.13   4.07   0.23    0.75
 344.   10.1  297.5    2.0
 12 01 01   1 12  203.7  0.185  1.649  0.005  791.  192.     -2.8  0.13   4.07   0.22    1.23
 100.   10.1  298.8    2.0
 12 01 01   1 13  199.8  0.234  1.913  0.005 1259.  271.     -5.7  0.13   4.07   0.22    1.76
 110.   10.1  299.9    2.0
 12 01 01   1 14  167.6  0.236  1.916  0.005 1507.  275.     -7.0  0.13   4.07   0.24    1.84
 124.   10.1  300.4    2.0
 12 01 01   1 15  108.5  0.273  1.697  0.005 1617.  342.    -16.8  0.13   4.07   0.27    2.40
 92.   10.1  300.4    2.0
 12 01 01   1 16   27.5  0.235  1.080  0.005 1640.  275.    -42.5  0.13   4.07   0.37    2.27
 144.   10.1  299.2    2.0
 12 01 01   1 17   -5.6  0.106 -9.000 -9.000 -999.   95.     19.2  0.13   4.07   0.66    1.28
 204.   10.1  294.9    2.0
 12 01 01   1 18  -17.6  0.188 -9.000 -9.000 -999.  196.     39.0  0.13   4.07   1.00    2.18
 314.   10.1  292.0    2.0
 12 01 01   1 19  -25.3  0.260 -9.000 -9.000 -999.  318.     74.4  0.13   4.07   1.00    2.96
 322.   10.1  289.9    2.0
 12 01 01   1 20  -21.1  0.217 -9.000 -9.000 -999.  243.     51.7  0.13   4.07   1.00    2.49
 314.   10.1  289.2    2.0
 12 01 01   1 21  -26.7  0.275 -9.000 -9.000 -999.  346.     83.0  0.13   4.07   1.00    3.12
 314.   10.1  290.4    2.0
 12 01 01   1 22  -22.1  0.226 -9.000 -9.000 -999.  259.     56.2  0.13   4.07   1.00    2.59
 317.   10.1  288.8    2.0
 12 01 01   1 23  -28.1  0.285 -9.000 -9.000 -999.  365.     89.2  0.13   4.07   1.00    3.23
 328.   10.1  285.4    2.0
 12 01 01   1 24  -33.3  0.338 -9.000 -9.000 -999.  472.    125.8  0.13   4.07   1.00    3.81
 331.   10.1  286.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1  328.    3.32   286.5   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

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

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	0.08537	(12020424)	556267.14	3743577.37	0.07768	(12020424)
556211.51	3743511.11	0.07602	(12020424)	556212.12	3743491.64	0.07268	(12020424)
556212.20	3743468.61	0.06861	(12020424)	556212.20	3743447.63	0.06543	(16110824)
556212.88	3743426.98	0.06514	(14120924)	556212.88	3743403.28	0.06476	(14120924)
556212.88	3743380.94	0.06417	(14120924)	556214.23	3743358.94	0.06313	(14120924)
556213.56	3743337.62	0.06227	(14120924)	556213.22	3743315.61	0.06113	(14120924)
556213.22	3743271.61	0.05840	(14120924)	556214.91	3743248.59	0.05821b	(12122924)
556215.25	3743227.27	0.05848b	(12122924)	556172.26	3743162.95	0.06304b	(12122924)
556113.36	3743164.31	0.06892b	(12122924)	555825.30	3743159.90	0.07699b	(12122924)
555869.64	3743163.97	0.07881b	(12122924)	555911.62	3743161.26	0.07886b	(12122924)
555593.79	3743143.18	0.06605	(12120424)	555332.94	3743363.00	0.10127	(14121524)
555382.32	3743364.99	0.10853	(14121524)	554993.81	3743124.40	0.04113	(12121324)
555073.22	3743246.43	0.05915	(12121324)	555239.74	3743255.78	0.06758	(12121324)
555433.36	3742022.73	0.00978	(16092024)	555348.71	3742090.44	0.01054	(14121224)
555540.35	3741977.02	0.00976	(15032024)	555632.11	3741980.40	0.01078	(15032024)
555682.56	3741980.40	0.01127	(15032024)	555853.20	3741996.66	0.01454	(16111424)
555931.42	3741996.32	0.01597	(16111424)	555981.19	3741993.27	0.01674	(16111424)
555836.95	3742073.18	0.01567	(16111424)	555467.56	3742088.75	0.01043	(16092024)
555569.47	3742015.62	0.01047	(15032024)	555322.64	3742026.11	0.01006	(14121224)
555170.62	3742238.40	0.01232	(14121224)	552518.62	3742635.91	0.00517	(12110924)
552151.07	3742961.57	0.00553	(12110924)	552104.59	3743002.77	0.00545	(12110924)
552147.90	3743107.35	0.00555	(12110924)	552511.02	3742385.96	0.00439	(15110324)
552396.18	3742346.58	0.00434	(15110324)	554748.71	3741897.68	0.00813	(14090724)
554624.49	3741840.49	0.00780	(14090724)	555067.24			

```
        3742375.24        0.01373  (14121224)
        554920.60   3742586.43        0.01613  (12121324)                554947.30
        3742550.17        0.01546  (12121324)
        554864.41   3742535.03        0.01490  (12121324)                554941.32
        3742393.57        0.01309  (14121224)
        555036.96   3742730.68        0.02046  (12121324)                555018.23
        3742600.78        0.01695  (14121224)
        555688.41   3742524.26        0.02417  (16111424)                555640.59
        3742489.10        0.02114  (16111424)
        555702.48   3742734.30        0.03424  (16111424)                555658.92
        3742351.21        0.01755  (16111424)
        555468.83   3742309.41        0.01322  (16112024)                555024.76
        3744296.72        0.09489  (12121524)
        556539.92   3743618.77        0.05242  (12020424)                556518.18
        3743768.24        0.05158  (13011724)
        556624.24   3743711.65        0.04345  (12020424)                556613.05
        3743868.53        0.05334  (13011724)
        556893.94   3743855.99        0.03767  (13011724)                556507.22
        3744010.11        0.05424  (12122324)
        557195.85   3744195.39        0.03629  (12122324)                557240.64
        3744050.63        0.02575  (13011724)
        551720.23   3743871.95        0.00563  (13012624)                551713.09
        3743823.26        0.00557  (13083024)
        551720.88   3743686.93        0.00560  (13083024)                551723.47
        3743526.58        0.00532  (13083024)
        553601.74   3741280.79        0.00629  (12121324)                554152.43
        3741075.58        0.00976  (14090724)
        554291.40   3741227.54        0.00818  (14090724)                554094.63
        3741115.84        0.00976  (14090724)
        554501.84   3741076.63        0.00675  (14090724)                553871.76
        3741110.78        0.00740  (14090724)
        554124.33   3741453.24        0.00541  (14090724)                555828.45
        3742342.52        0.02203  (16111424)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        09:01:04

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

                              *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR
                              SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , VOL2        ,
                                  VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                        ** CONC OF PM_10    IN
                                        MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)               X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
        555821.54   3742752.86        0.03826  (16111424)                555474.96
        3742811.58        0.02776  (13020224)
        555504.84   3742897.96        0.03495  (16111424)                557195.16
        3744349.69        0.04162  (12122324)
        557198.52   3744248.16        0.03898  (12122324)                557193.27
        3744425.80        0.04145  (12122324)
        555470.59   3745232.95        0.02789  (12100824)                550726.90
        3743617.42        0.00502  (13083024)
        550066.60   3744391.95        0.00562  (12081724)                557807.51
        3744815.58        0.02563  (12122324)
```

```
        555574.11   3741789.80        0.00850  (15032024)              555481.59
        3741918.55        0.00896  (16092024)
        555144.29   3742414.37        0.01462  (14121224)              555129.31
        3742292.02        0.01291  (14121224)
        556633.34   3741897.60        0.01836  (14010224)              556634.03
        3741731.26        0.01640  (13012224)
        556637.78   3741538.02        0.01417
        (13012224)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                     ***       09:01:04

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

                                                  *** THE SUMMARY OF HIGHEST 24-HR RESULTS ***


                                    ** CONC OF PM_10    IN
                                    MICROGRAMS/M**3                          **


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

ALL      HIGH   1ST HIGH VALUE IS       0.10853  ON 14121524: AT (  555382.32,  3743364.99,
89.00,    89.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                     ***       09:01:04

                      PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
```

```
ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 8/30/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops PM25\14174 Ops
PM25.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand Palms\14174 Ops\
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2189641 Riverside_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "14174 Ops PM25.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1         VOLUME     555077.183  3743877.483      101.400
   LOCATION VOL2         VOLUME     555076.833  3743681.226       95.860
   LOCATION VOL3         VOLUME     555235.610  3743876.432      101.680
   LOCATION VOL4         VOLUME     555236.297  3743681.914       96.880
   LOCATION VOL5         VOLUME     555393.699  3743877.807      102.410
   LOCATION VOL6         VOLUME     555546.290  3743683.976       96.950
   LOCATION VOL7         VOLUME     555705.066  3743881.244      101.530
   LOCATION VOL8         VOLUME     555705.754  3743685.350       98.000
   LOCATION VOL9         VOLUME     555546.290  3743878.494      102.060
   LOCATION VOL10        VOLUME     555393.012  3743681.226       96.860
** Source Parameters **
   SRCPARAM VOL1         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL2         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL3         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL4         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL5         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL6         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL7         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL8         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL9         0.0006350293     5.000    45.398     1.400
   SRCPARAM VOL10        0.0006350293     5.000    45.398     1.400
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
```

```
**
**
RE STARTING
   INCLUDED "14174 Ops PM25.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE KPSP_V9_ADJU\KPSP_v9.SFC
   PROFFILE KPSP_V9_ADJU\KPSP_v9.PFL
   SURFDATA 93138 2012
   UAIRDATA 3190 2012
   PROFBASE 125.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "14174 OPS PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "14174 Ops PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of           0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***       09:03:02

                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - -
```

```
** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for    10 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Accepts FLAGPOLE Receptor . Heights.
     * The User Specified a Pollutant Type of: PM_2.5

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     10 Source(s);       1 Source Group(s); and      97 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     10 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  16216

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing
                                                                Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   125.00 ;  Decay Coef. =
0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                               ;  Emission Rate
                 Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp
**Output Print File:
aermod.out

**Detailed Error/Message File:   14174 Ops
PM25.err
```

```
 **File for Summary of Results:   14174 Ops
 PM25.sum
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        09:03:02

                     PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                        BASE    RELEASE    INIT.    INIT.
              URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY       SZ
   SOURCE  SCALAR VARY
     ID         CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
     (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - -

 VOL1             0   0.63503E-03  555077.2 3743877.5   101.4     5.00    45.40     1.40
 YES
 VOL2             0   0.63503E-03  555076.8 3743681.2    95.9     5.00    45.40     1.40
 YES
 VOL3             0   0.63503E-03  555235.6 3743876.4   101.7     5.00    45.40     1.40
 YES
 VOL4             0   0.63503E-03  555236.3 3743681.9    96.9     5.00    45.40     1.40
 YES
 VOL5             0   0.63503E-03  555393.7 3743877.8   102.4     5.00    45.40     1.40
 YES
 VOL6             0   0.63503E-03  555546.3 3743684.0    97.0     5.00    45.40     1.40
 YES
 VOL7             0   0.63503E-03  555705.1 3743881.2   101.5     5.00    45.40     1.40
 YES
 VOL8             0   0.63503E-03  555705.8 3743685.3    98.0     5.00    45.40     1.40
 YES
 VOL9             0   0.63503E-03  555546.3 3743878.5   102.1     5.00    45.40     1.40
 YES
 VOL10            0   0.63503E-03  555393.0 3743681.2    96.9     5.00    45.40     1.40
 YES
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        09:03:02

                     PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                 SOURCE IDs
 -----------                                                 ----------


  ALL        VOL1        , VOL2        , VOL3        , VOL4        , VOL5        , VOL6        ,
  VOL7        , VOL8        ,

             VOL9        , VOL10       ,
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***        09:03:02
```

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID URBAN POP SOURCE IDs
-------- --------- ----------

2189641. VOL1 , VOL2 , VOL3 , VOL4 , VOL5 ,
VOL6 , VOL7 ,
VOL8 ,

VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(556210.5, 3743579.9, 96.5, 96.5, 2.0); (556267.1,
3743577.4, 96.4, 96.4, 2.0);
(556211.5, 3743511.1, 95.2, 95.2, 2.0); (556212.1,
3743491.6, 94.5, 94.5, 2.0);
(556212.2, 3743468.6, 94.0, 94.0, 2.0); (556212.2,
3743447.6, 94.0, 94.0, 2.0);
(556212.9, 3743427.0, 93.4, 93.4, 2.0); (556212.9,
3743403.3, 93.0, 93.0, 2.0);
(556212.9, 3743380.9, 92.8, 92.8, 2.0); (556214.2,
3743358.9, 92.1, 92.1, 2.0);
(556213.6, 3743337.6, 92.0, 92.0, 2.0); (556213.2,
3743315.6, 91.7, 91.7, 2.0);
(556213.2, 3743271.6, 91.0, 91.0, 2.0); (556214.9,
3743248.6, 90.4, 90.4, 2.0);
(556215.2, 3743227.3, 90.0, 90.0, 2.0); (556172.3,
3743162.9, 89.0, 89.0, 2.0);
(556113.4, 3743164.3, 89.0, 89.0, 2.0); (555825.3,
3743159.9, 88.0, 88.0, 2.0);
(555869.6, 3743164.0, 88.0, 88.0, 2.0); (555911.6,
3743161.3, 88.5, 88.5, 2.0);
(555593.8, 3743143.2, 86.4, 86.4, 2.0); (555332.9,
3743363.0, 88.8, 88.8, 2.0);
(555382.3, 3743365.0, 89.0, 89.0, 2.0); (554993.8,
3743124.4, 80.6, 80.6, 2.0);
(555073.2, 3743246.4, 84.0, 84.0, 2.0); (555239.7,
3743255.8, 85.7, 85.7, 2.0);
(555433.4, 3742022.7, 69.0, 69.0, 2.0); (555348.7,
3742090.4, 69.0, 69.0, 2.0);
(555540.4, 3741977.0, 68.0, 68.0, 2.0); (555632.1,
3741980.4, 68.0, 68.0, 2.0);
(555682.6, 3741980.4, 68.0, 68.0, 2.0); (555853.2,
3741996.7, 68.1, 68.1, 2.0);
(555931.4, 3741996.3, 68.0, 68.0, 2.0); (555981.2,
3741993.3, 68.6, 68.6, 2.0);
(555837.0, 3742073.2, 69.3, 69.3, 2.0); (555467.6,
3742088.8, 69.0, 69.0, 2.0);
(555569.5, 3742015.6, 68.0, 68.0, 2.0); (555322.6,
3742026.1, 69.9, 69.9, 2.0);
(555170.6, 3742238.4, 70.0, 70.0, 2.0); (552518.6,

```
    3742635.9,      96.0,      96.0,       2.0);
    ( 552151.1, 3742961.6,      97.0,      97.0,       2.0);         ( 552104.6,
    3743002.8,      97.0,      97.0,       2.0);
    ( 552147.9, 3743107.3,      96.4,      96.4,       2.0);         ( 552511.0,
    3742386.0,      98.0,      98.0,       2.0);
    ( 552396.2, 3742346.6,      99.0,      99.0,       2.0);         ( 554748.7,
    3741897.7,      73.0,      73.0,       2.0);
    ( 554624.5, 3741840.5,      75.0,      75.0,       2.0);         ( 555067.2,
    3742375.2,      71.0,      71.0,       2.0);
    ( 554920.6, 3742586.4,      72.4,      72.4,       2.0);         ( 554947.3,
    3742550.2,      72.0,      72.0,       2.0);
    ( 554864.4, 3742535.0,      72.0,      72.0,       2.0);         ( 554941.3,
    3742393.6,      72.0,      72.0,       2.0);
    ( 555037.0, 3742730.7,      73.9,      73.9,       2.0);         ( 555018.2,
    3742600.8,      72.0,      72.0,       2.0);
    ( 555688.4, 3742524.3,      77.2,      77.2,       2.0);         ( 555640.6,
    3742489.1,      76.0,      76.0,       2.0);
    ( 555702.5, 3742734.3,      80.3,      80.3,       2.0);         ( 555658.9,
    3742351.2,      73.5,      73.5,       2.0);
    ( 555468.8, 3742309.4,      72.0,      72.0,       2.0);         ( 555024.8, 3744296.7,
    114.4,     434.0,       2.0);
    ( 556539.9, 3743618.8,      97.0,      97.0,       2.0);         ( 556518.2,
    3743768.2,      99.0,      99.0,       2.0);
    ( 556624.2, 3743711.6,      98.0,      98.0,       2.0);         ( 556613.1, 3743868.5,
    101.1,     101.1,       2.0);
    ( 556893.9, 3743856.0,     100.7,     100.7,       2.0);         ( 556507.2, 3744010.1,
    103.8,     103.8,       2.0);
    ( 557195.9, 3744195.4,     107.0,     107.0,       2.0);         ( 557240.6, 3744050.6,
    103.0,     103.0,       2.0);
    ( 551720.2, 3743871.9,     100.0,     478.0,       2.0);         ( 551713.1, 3743823.3,
    100.0,     478.0,       2.0);
    ( 551720.9, 3743686.9,     100.0,     100.0,       2.0);         ( 551723.5, 3743526.6,
    100.0,     100.0,       2.0);
    ( 553601.7, 3741280.8,     104.0,     104.0,       2.0);         ( 554152.4, 3741075.6,
    106.0,     106.0,       2.0);
    ( 554291.4, 3741227.5,     104.0,     104.0,       2.0);         ( 554094.6, 3741115.8,
    106.0,     106.0,       2.0);
    ( 554501.8, 3741076.6,     102.9,     102.9,       2.0);         ( 553871.8, 3741110.8,
    105.0,     105.0,       2.0);
    ( 554124.3, 3741453.2,      97.4,      97.4,       2.0);         ( 555828.5,
    3742342.5,      73.2,      73.2,       2.0);
    ( 555821.5, 3742752.9,      81.9,      81.9,       2.0);         ( 555475.0,
    3742811.6,      79.9,      79.9,       2.0);
    ( 555504.8, 3742898.0,      81.4,      81.4,       2.0);         ( 557195.2, 3744349.7,
    111.1,     111.1,       2.0);
    ( 557198.5, 3744248.2,     108.8,     108.8,       2.0);         ( 557193.3, 3744425.8,
    112.7,     112.7,       2.0);
    ( 555470.6, 3745232.9,     144.6,     434.0,       2.0);         ( 550726.9, 3743617.4,
    110.0,     110.0,       2.0);
    ( 550066.6, 3744391.9,     113.9,     113.9,       2.0);         ( 557807.5, 3744815.6,
    130.0,     422.0,       2.0);
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***        09:03:02

                        PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                            (METERS)

    ( 555574.1, 3741789.8,      68.0,      68.0,       2.0);         ( 555481.6,
    3741918.5,      68.3,      68.3,       2.0);
    ( 555144.3, 3742414.4,      71.0,      71.0,       2.0);         ( 555129.3,
```

```
    3742292.0,      71.0,      71.0,       2.0);
    ( 556633.3, 3741897.6,      68.0,      68.0,       2.0);         ( 556634.0,
    3741731.3,      66.0,      66.0,       2.0);
    ( 556637.8, 3741538.0,      65.0,      65.0,
    2.0);
```

```
 *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       09:03:02

                      PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                              *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                 (1=YES; 0=NO)

              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
              1   1 1 1 1 1 1 1 1 1 1
              1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

                  NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
                  INCLUDED IN THE DATA FILE.



                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES
                                    ***
                                                              (METERS/SEC)

                                                   1.54,   3.09,   5.14,   8.23,  10.80,
```

```
 *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***       09:03:02

                      PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:
   KPSP_V9_ADJU\KPSP_v9.SFC                                                           Met
   Version:  16216
   Profile file:
   KPSP_V9_ADJU\KPSP_v9.PFL
   Surface format:
   FREE

   Profile format:
   FREE

   Surface station no.:    93138                  Upper air station no.:     3190
                  Name: UNKNOWN                                     Name:
                  UNKNOWN
```

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-28.7	0.293	-9.000	-9.000	-999.	381.	94.4	0.13	4.07	1.00	3.32	328.	10.1	286.4	2.0
12	01	01	1	02	-5.5	0.102	-9.000	-9.000	-999.	122.	17.6	0.13	4.07	1.00	1.23	320.	10.1	284.2	2.0
12	01	01	1	03	-19.4	0.196	-9.000	-9.000	-999.	209.	42.5	0.13	4.07	1.00	2.27	306.	10.1	283.1	2.0
12	01	01	1	04	-16.5	0.181	-9.000	-9.000	-999.	184.	35.9	0.13	4.07	1.00	2.10	328.	10.1	282.5	2.0
12	01	01	1	05	-20.0	0.202	-9.000	-9.000	-999.	218.	44.9	0.13	4.07	1.00	2.33	328.	10.1	283.8	2.0
12	01	01	1	06	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	325.	10.1	283.1	2.0
12	01	01	1	07	-18.7	0.193	-9.000	-9.000	-999.	203.	40.9	0.13	4.07	1.00	2.23	327.	10.1	284.2	2.0
12	01	01	1	08	-9.3	0.150	-9.000	-9.000	-999.	140.	32.5	0.13	4.07	0.52	1.74	297.	10.1	284.9	2.0
12	01	01	1	09	50.6	0.130	0.399	0.011	45.	112.	-3.9	0.13	4.07	0.32	0.92	282.	10.1	291.4	2.0
12	01	01	1	10	126.5	0.172	0.815	0.008	154.	171.	-3.6	0.13	4.07	0.25	1.20	233.	10.1	294.2	2.0
12	01	01	1	11	179.5	0.134	1.299	0.005	439.	118.	-1.2	0.13	4.07	0.23	0.75	344.	10.1	297.5	2.0
12	01	01	1	12	203.7	0.185	1.649	0.005	791.	192.	-2.8	0.13	4.07	0.22	1.23	100.	10.1	298.8	2.0
12	01	01	1	13	199.8	0.234	1.913	0.005	1259.	271.	-5.7	0.13	4.07	0.22	1.76	110.	10.1	299.9	2.0
12	01	01	1	14	167.6	0.236	1.916	0.005	1507.	275.	-7.0	0.13	4.07	0.24	1.84	124.	10.1	300.4	2.0
12	01	01	1	15	108.5	0.273	1.697	0.005	1617.	342.	-16.8	0.13	4.07	0.27	2.40	92.	10.1	300.4	2.0
12	01	01	1	16	27.5	0.235	1.080	0.005	1640.	275.	-42.5	0.13	4.07	0.37	2.27	144.	10.1	299.2	2.0
12	01	01	1	17	-5.6	0.106	-9.000	-9.000	-999.	95.	19.2	0.13	4.07	0.66	1.28	204.	10.1	294.9	2.0
12	01	01	1	18	-17.6	0.188	-9.000	-9.000	-999.	196.	39.0	0.13	4.07	1.00	2.18	314.	10.1	292.0	2.0
12	01	01	1	19	-25.3	0.260	-9.000	-9.000	-999.	318.	74.4	0.13	4.07	1.00	2.96	322.	10.1	289.9	2.0
12	01	01	1	20	-21.1	0.217	-9.000	-9.000	-999.	243.	51.7	0.13	4.07	1.00	2.49	314.	10.1	289.2	2.0
12	01	01	1	21	-26.7	0.275	-9.000	-9.000	-999.	346.	83.0	0.13	4.07	1.00	3.12	314.	10.1	290.4	2.0
12	01	01	1	22	-22.1	0.226	-9.000	-9.000	-999.	259.	56.2	0.13	4.07	1.00	2.59	317.	10.1	288.8	2.0
12	01	01	1	23	-28.1	0.285	-9.000	-9.000	-999.	365.	89.2	0.13	4.07	1.00	3.23	328.	10.1	285.4	2.0
12	01	01	1	24	-33.3	0.338	-9.000	-9.000	-999.	472.	125.8	0.13	4.07	1.00	3.81	331.	10.1	286.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	10.1	1	328.	3.32	286.5	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

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

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): VOL1 , VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
556210.54	3743579.94	0.03798	(12020424)	556267.14	3743577.37	0.03456	(12020424)
556211.51	3743511.11	0.03382	(12020424)	556212.12	3743491.64	0.03233	(12020424)
556212.20	3743468.61	0.03052	(12020424)	556212.20	3743447.63	0.02910	(16110824)
556212.88	3743426.98	0.02898	(14120924)	556212.88	3743403.28	0.02881	(14120924)
556212.88	3743380.94	0.02855	(14120924)	556214.23	3743358.94	0.02808	(14120924)
556213.56	3743337.62	0.02770	(14120924)	556213.22	3743315.61	0.02719	(14120924)
556213.22	3743271.61	0.02598	(14120924)	556214.91	3743248.59	0.02590b	(12122924)
556215.25	3743227.27	0.02601b	(12122924)	556172.26	3743162.95	0.02804b	(12122924)
556113.36	3743164.31	0.03066b	(12122924)	555825.30	3743159.90	0.03425b	(12122924)
555869.64	3743163.97	0.03506b	(12122924)	555911.62	3743161.26	0.03508b	(12122924)
555593.79	3743143.18	0.02938	(12120424)	555332.94	3743363.00	0.04505	(14121524)
555382.32	3743364.99	0.04828	(14121524)	554993.81	3743124.40	0.01829	(12121324)
555073.22	3743246.43	0.02631	(12121324)	555239.74	3743255.78	0.03006	(12121324)
555433.36	3742022.73	0.00435	(16092024)	555348.71	3742090.44	0.00469	(14121224)
555540.35	3741977.02	0.00434	(15032024)	555632.11	3741980.40	0.00479	(15032024)
555682.56	3741980.40	0.00502	(15032024)	555853.20	3741996.66	0.00647	(16111424)
555931.42	3741996.32	0.00710	(16111424)	555981.19	3741993.27	0.00745	(16111424)
555836.95	3742073.18	0.00697	(16111424)	555467.56	3742088.75	0.00464	(16092024)
555569.47	3742015.62	0.00466	(15032024)	555322.64	3742026.11	0.00448	(14121224)
555170.62	3742238.40	0.00548	(14121224)	552518.62	3742635.91	0.00230	(12110924)
552151.07	3742961.57	0.00246	(12110924)	552104.59	3743002.77	0.00242	(12110924)
552147.90	3743107.35	0.00247	(12110924)	552511.02	3742385.96	0.00195	(15110324)
552396.18	3742346.58	0.00193	(15110324)	554748.71	3741897.68	0.00362	(14090724)
554624.49	3741840.49	0.00347	(14090724)	555067.24			

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     3742375.24       0.00611  (14121224)
     554920.60   3742586.43       0.00718  (12121324)                  554947.30
     3742550.17       0.00688  (12121324)
     554864.41   3742535.03       0.00663  (12121324)                  554941.32
     3742393.57       0.00582  (14121224)
     555036.96   3742730.68       0.00910  (12121324)                  555018.23
     3742600.78       0.00754  (14121224)
     555688.41   3742524.26       0.01075  (16111424)                  555640.59
     3742489.10       0.00940  (16111424)
     555702.48   3742734.30       0.01523  (16111424)                  555658.92
     3742351.21       0.00781  (16111424)
     555468.83   3742309.41       0.00588  (16112024)                  555024.76
     3744296.72       0.04221  (12121524)
     556539.92   3743618.77       0.02332  (12020424)                  556518.18
     3743768.24       0.02295  (13011724)
     556624.24   3743711.65       0.01933  (12020424)                  556613.05
     3743868.53       0.02373  (13011724)
     556893.94   3743855.99       0.01676  (13011724)                  556507.22
     3744010.11       0.02413  (12122324)
     557195.85   3744195.39       0.01614  (12122324)                  557240.64
     3744050.63       0.01146  (13011724)
     551720.23   3743871.95       0.00250  (13012624)                  551713.09
     3743823.26       0.00248  (13083024)
     551720.88   3743686.93       0.00249  (13083024)                  551723.47
     3743526.58       0.00237  (13083024)
     553601.74   3741280.79       0.00280  (12121324)                  554152.43
     3741075.58       0.00434  (14090724)
     554291.40   3741227.54       0.00364  (14090724)                  554094.63
     3741115.84       0.00434  (14090724)
     554501.84   3741076.63       0.00300  (14090724)                  553871.76
     3741110.78       0.00329  (14090724)
     554124.33   3741453.24       0.00241  (14090724)                  555828.45
     3742342.52       0.00980  (16111424)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***        08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                   ***        09:03:02

                      PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR
                              SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1         , VOL2        ,
                                  VOL3        , VOL4        , VOL5        ,
                 VOL6        , VOL7        , VOL8        , VOL9        , VOL10       ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                        ** CONC OF PM_2.5   IN
                                        MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD
     (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - -
     555821.54   3742752.86       0.01702  (16111424)                  555474.96
     3742811.58       0.01235  (13020224)
     555504.84   3742897.96       0.01555  (16111424)                  557195.16
     3744349.69       0.01851  (12122324)
     557198.52   3744248.16       0.01734  (12122324)                  557193.27
     3744425.80       0.01844  (12122324)
     555470.59   3745232.95       0.01240  (12100824)                  550726.90
     3743617.42       0.00223  (13083024)
     550066.60   3744391.95       0.00250  (12081724)                  557807.51
     3744815.58       0.01140  (12122324)
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        555574.11   3741789.80        0.00378  (15032024)                555481.59
        3741918.55        0.00398  (16092024)
        555144.29   3742414.37        0.00650  (14121224)                555129.31
        3742292.02        0.00574  (14121224)
        556633.34   3741897.60        0.00817  (14010224)                556634.03
        3741731.26        0.00730  (13012224)
        556637.78   3741538.02        0.00630
        (13012224)
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***       09:03:02

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

                                                  *** THE SUMMARY OF HIGHEST 24-HR RESULTS ***


                                      ** CONC OF PM_2.5   IN
                                      MICROGRAMS/M**3                          **


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

ALL      HIGH   1ST HIGH VALUE IS       0.04828  ON 14121524: AT (  555382.32,  3743364.99,
89.00,    89.00,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 22112  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\14174 Thousand
Palms\14174 Ops\ ***       08/30/23
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***       09:03:02

                      PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of          709 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          289 Calm Hours Identified

 A Total of          420 Missing Hours Identified (  0.96 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
```

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ME W186      82       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187      82       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
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