



**1101 California Warehouse
MOBILE SOURCE HEALTH RISK ASSESSMENT
CITY OF REDLANDS**

PREPARED BY:

Haseeb Qureshi
hqureshi@urbanxroads.com

Michael Tirohn
mtirohn@urbanxroads.com

OCTOBER 12, 2023

TABLE OF CONTENTS

TABLE OF CONTENTS.....	I
APPENDICES.....	I
LIST OF EXHIBITS	II
LIST OF TABLES	II
LIST OF ABBREVIATED TERMS	III
EXECUTIVE SUMMARY	1
1 INTRODUCTION.....	5
1.1 Site Location.....	5
1.2 Project Description.....	6
2 BACKGROUND.....	10
2.1 Background on Recommended Methodology	10
2.2 Construction Health Risk Assessment.....	10
2.3 Operational Health Risk Assessment	13
2.4 Exposure Quantification.....	19
2.5 Carcinogenic Chemical Risk.....	21
2.6 Non-carcinogenic Exposures.....	22
2.7 Potential Project DPM-Source Cancer and Non-Cancer Risks	23
3 REFERENCES.....	27
4 CERTIFICATIONS.....	29

APPENDICES

- APPENDIX 2.1: CALEEMOD OUTPUTS**
- APPENDIX 2.2: EMFAC EMISSIONS SUMMARY**
- APPENDIX 2.3: AERMOD MODEL INPUT/OUTPUT**
- APPENDIX 2.4: RISK CALCULATIONS**

LIST OF EXHIBITS

EXHIBIT 1-A: LOCATION MAP	7
EXHIBIT 1-B: SITE PLAN.....	8
EXHIBIT 2-A: MODELED CONSTRUCTION EMISSION SOURCES	12
EXHIBIT 2-B: MODELED ON-SITE EMISSION SOURCES	16
EXHIBIT 2-C: MODELED OFF-SITE EMISSION SOURCES	17
EXHIBIT 2-D: RECEPTOR LOCATIONS.....	25

LIST OF TABLES

TABLE ES-1: SUMMARY OF CONSTRUCTION CANCER AND NON-CANCER RISKS	3
TABLE ES-2: SUMMARY OF OPERATIONAL CANCER AND NON-CANCER RISKS.....	3
TABLE ES-3: SUMMARY OF CONSTRUCTION AND OPERATIONAL CANCER AND NON-CANCER RISKS	4
TABLE 2-1: CONSTRUCTION DURATION	11
TABLE 2-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS.....	11
TABLE 2-3: 2025 WEIGHTED AVERAGE DPM EMISSIONS FACTORS	14
TABLE 2-4: DPM EMISSIONS FROM PROJECT TRUCKS (2025 ANALYSIS YEAR)	18
TABLE 2-5: AERMOD MODEL PARAMETERS	19
TABLE 2-6: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (CONSTRUCTION ACTIVITY)	20
TABLE 2-7: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (30 YEAR RESIDENTIAL)	20
TABLE 2-8: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (25 YEAR WORKER)	20
TABLE 2-9: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (9 YEAR SCHOOL CHILD)	21

LIST OF ABBREVIATED TERMS

(1)	Reference
μg	Microgram
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
APS	Auxiliary Power System
AQMD	Air Quality Management District
ARB	Air Resources Board
CEQA	California Environmental Quality Act
CPF	Cancer Potency Factor
DPM	Diesel Particulate Matter
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
HHD	Heavy Heavy-Duty
HI	Hazard Index
HRA	Health Risk Assessment
LHD	Light Heavy-Duty
MEIR	Maximally Exposed Individual Receptor
MEIW	Maximally Exposed Individual Worker
MEISC	Maximally Exposed Individual School Child
MHD	Medium Heavy-Duty
NAD	North American Datum
OEHHA	Office of Environmental Health Hazard Assessment
PM_{10}	Particulate Matter 10 microns in diameter or less
Project	1101 California Warehouse
REL	Reference Exposure Level
SCAQMD	South Coast Air Quality Management District
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
TA	Traffic Analysis
TRU	Transport Refrigeration Unit
URF	Unit Risk Factor
UTM	Universal Transverse Mercator
VMT	Vehicle Miles Traveled

This page intentionally left blank

EXECUTIVE SUMMARY

This report evaluates the potential health risk impacts to sensitive receptors (which are residents) and adjacent workers associated with the development of the Project, more specifically, health risk impacts as a result of exposure to Toxic Air Contaminants (TACs) including diesel particulate matter (DPM) as a result of heavy-duty diesel trucks accessing the site. This section summarizes the significance criteria and Project health risks.

The results of the health risk assessment from Project-generated DPM emissions are provided in Table ES-1, ES-2, and ES-3 below for the Project.

CONSTRUCTION IMPACTS

The land use with the greatest potential exposure to Project construction-source DPM emissions is Location R5 which is located approximately 771 feet south of the Project site at an existing residence located at 26380 Tudor Court. R5 is placed in the private outdoor living area (backyard) facing the Project site. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project construction-source DPM emissions is estimated at 0.30 in one million, which is less than the SCAQMD's significance 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. Although Location R5 is not the nearest receptor to the Project site, it would experience the highest concentrations of DPM during Project construction due to meteorological conditions at the site. Because all other modeled receptors would experience lower concentrations of DPM during Project construction, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction activity. All other receptors during construction activity would experience less risk than what is identified for this location. The modeled receptors are illustrated on Exhibit 2-D.

OPERATIONAL IMPACTS

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to Project operational-source DPM emissions is Location R5 which is located approximately 771 feet south of the Project site at an existing residence located at 26380 Tudor Court. R5 is placed in the private outdoor living area (backyard) facing the Project site. At the MEIR, the maximum incremental cancer risk attributable to Project operational-source DPM emissions is estimated at 0.15 in one million, which is less than the SCAQMD's significance 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 significance threshold of 1.0. Although Location R2 is not the nearest receptor to the Project site, it would experience the highest concentrations of DPM during Project operation due to meteorological conditions at the site. Because all other modeled receptors are located at a greater distance than the MEIR analyzed herein, and DPM dissipates with distance from the source, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR

identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project operational activity. All other receptors would experience less risk than what is identified for this location. The modeled receptors are illustrated on Exhibit 2-D.

Worker Exposure Scenario¹:

The worker receptor land use with the greatest potential exposure to Project operational -source DPM emissions is Location R1, which represents the potential worker receptor located approximately 105 feet west of the Project site. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact is 0.12 in one million which is less than the SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Location R1 is the worker receptor that would experience the highest concentrations of DPM during Project operation due to meteorological conditions at the site. All other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby workers. The modeled receptors are illustrated on Exhibit 2-D.

School Child Exposure Scenario:

The nearest school is Mission Elementary School, located approximately 1,631 feet south of the Project site and represented by Location R6. The maximally exposed individual school child (MEISC) is the school receptor that would experience the highest modeled concentrations of DPM, and thus the highest risk. At the MEISC, the maximum incremental cancer risk impact attributable to the Project is calculated to be 0.01 in one million, which is less than the significance threshold of 10 in one million. At this same location, non-cancer risks attributable to the Project were calculated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Because all other modeled school receptors would be exposed to lower concentrations of DPM, all other school receptors in the vicinity of the of the Project would be exposed to less emissions and therefore less risk than the MEISC identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby school children.

CONSTRUCTION AND OPERATIONAL IMPACTS

The land use with the greatest potential exposure to Project construction-source and operational-source DPM emissions is Location R5. At the MEIR, the maximum incremental cancer risk attributable to Project construction-source and operational-source DPM emissions is estimated at 0.42 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

¹ SCAQMD guidance does not require assessment of the potential health risk to on-site workers. Excerpts from the document OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines—The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2003), also indicate that it is not necessary to examine the health effects to on-site workers unless required by RCRA (Resource Conservation and Recovery Act) / CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) or the worker resides on-site.

threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to nearby residences. The modeled receptors are illustrated on Exhibit 2-D.

TABLE ES-1: SUMMARY OF CONSTRUCTION CANCER AND NON-CANCER RISKS

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold
0.83 Year Exposure	Maximum Exposed Sensitive Receptor (Location R5)	0.30	10	NO
Time Period	Location	Maximum Hazard Index	Significance Threshold	Exceeds Significance Threshold
Annual Average	Maximum Exposed Sensitive Receptor (Location R5)	<0.01	1.0	NO

TABLE ES-2: SUMMARY OF OPERATIONAL CANCER AND NON-CANCER RISKS

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold
30 Year Exposure	Maximum Exposed Sensitive Receptor (Location R5)	0.15	10	NO
25 Year Exposure	Maximum Exposed Worker Receptor (Location R1)	0.12	10	NO
9 Year Exposure	Maximum Exposed Individual School Child (Location R6)	0.01	10	NO
Time Period	Location	Maximum Hazard Index	Significance Threshold	Exceeds Significance Threshold
Annual Average	Maximum Exposed Sensitive Receptor (Location R5)	<0.01	1.0	NO
Annual Average	Maximum Exposed Worker Receptor (Location R1)	<0.01	1.0	NO
Annual Average	Maximum Exposed Individual School Child (Location R6)	<0.01	1.0	NO

TABLE ES-3: SUMMARY OF CONSTRUCTION AND OPERATIONAL CANCER AND NON-CANCER RISKS

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold
30 Year Exposure	Maximum Exposed Sensitive Receptor (Location R5)	0.02	10	NO
Time Period	Location	Maximum Hazard Index	Significance Threshold	Exceeds Significance Threshold
Annual Average	Maximum Exposed Sensitive Receptor (Location R5)	<0.01	1.0	NO

1 INTRODUCTION

This HRA has been prepared in accordance with the document Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (1) and is comprised of all relevant and appropriate procedures presented by the United States Environmental Protection Agency (U.S. EPA), California EPA and SCAQMD. Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of ten (10) persons per million as the maximum acceptable incremental cancer risk due to TAC exposure from a project such as the proposed Project. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulatively considerable impact.

The AQMD 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* (2). In this report the AQMD states (Page D-3):

“...the AQMD 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 toxic air contaminant (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.”

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Non-carcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). A REL is a concentration at or below which health effects are not likely to occur. A hazard index less than one (1.0) means that adverse health effects are not expected. In this HRA, non-carcinogenic exposures of less than 1.0 are considered less-than-significant. Both the cancer risk and non-carcinogenic risk thresholds are applied to the nearest sensitive receptors below.

1.1 SITE LOCATION

The proposed Project is located on the southwest corner of California Street and Lugonia Avenue in the City of Redlands as shown on Exhibit 1-A. The Project is located on the former Splash Kingdom amusement park site (currently non-operational).

1.2 PROJECT DESCRIPTION

The proposed 1101 California Warehouse is to consist of a 357,610 square foot warehouse building, assuming 20% general light industrial use (71,522 square feet) and 80% general warehousing use (286,088 square feet). The Project is anticipated to be built out and occupied by the year 2025. The preliminary site plan is illustrated on Exhibit 1-B.

Per the *1101 California Warehouse Traffic Analysis* prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 842 vehicular trip-ends per day, which includes 194 truck trips per day (3).

EXHIBIT 1-A: LOCATION MAP

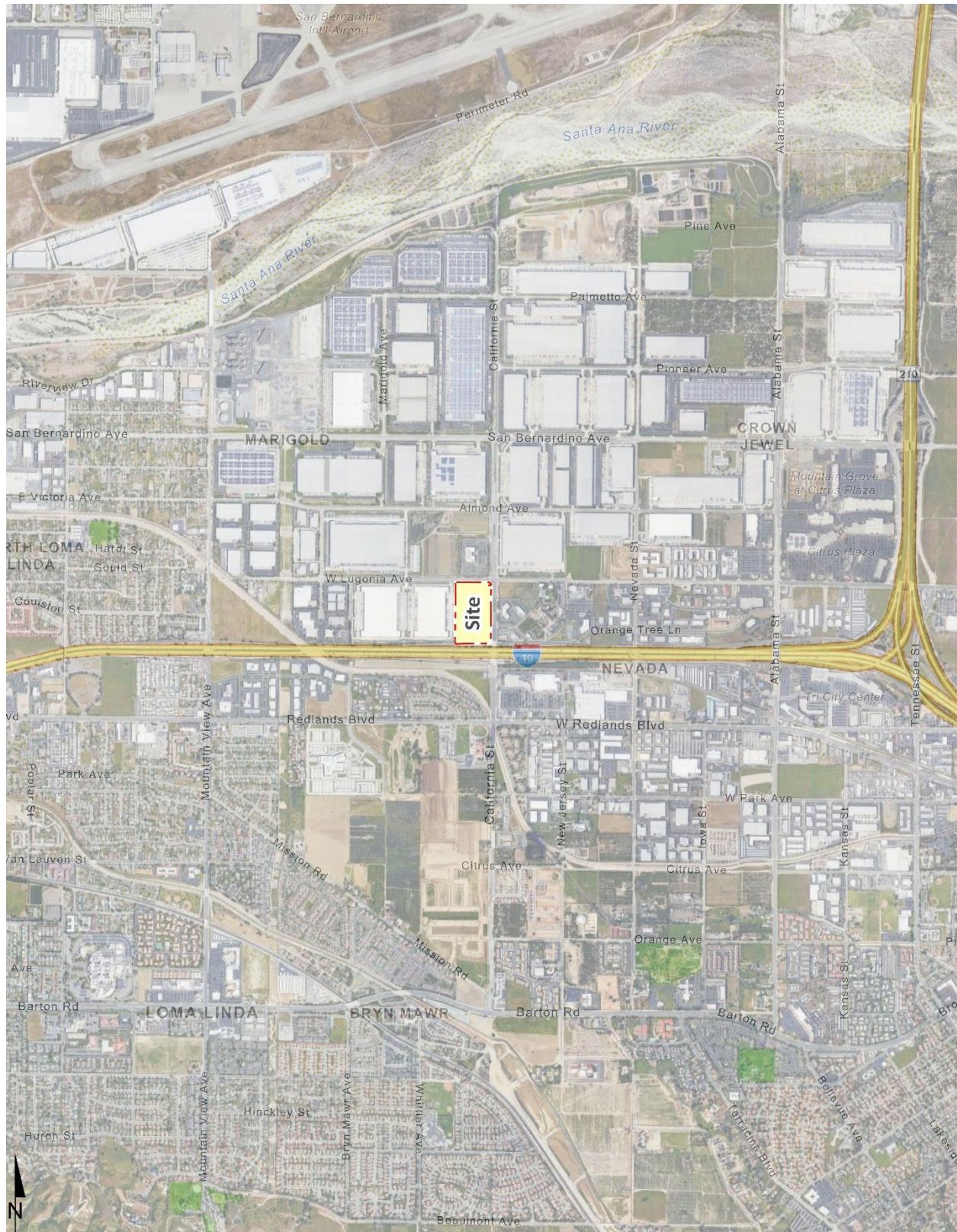
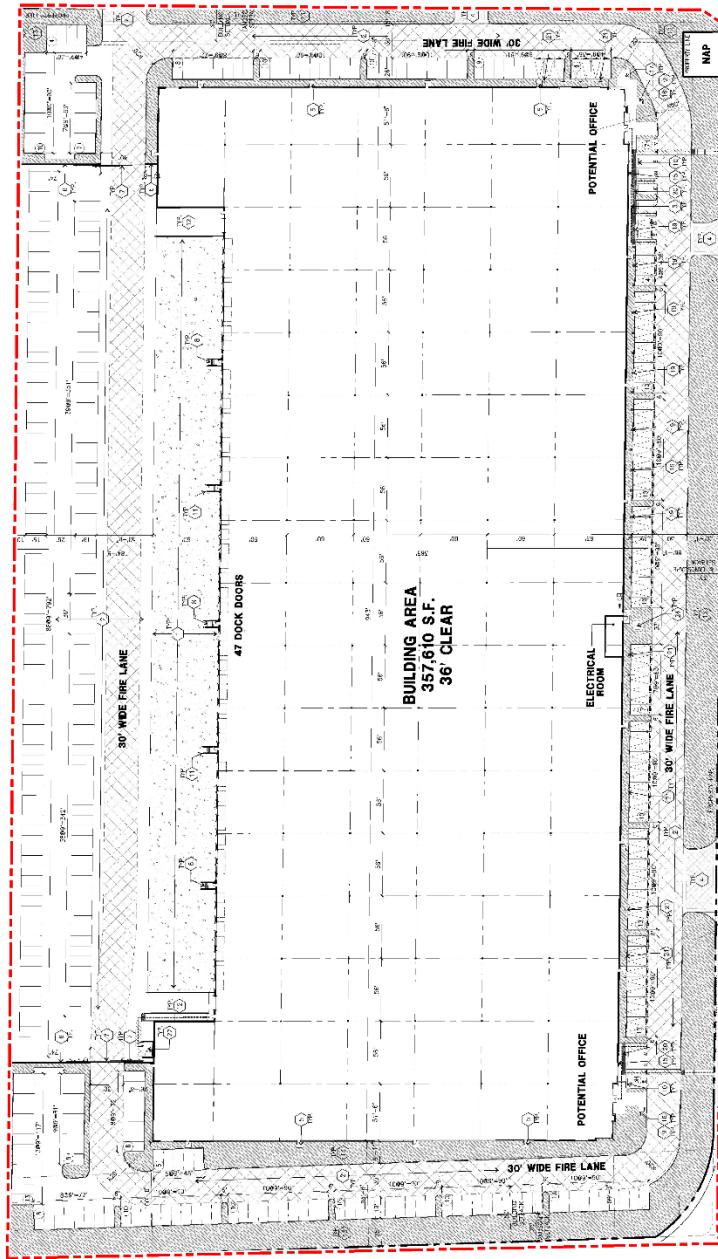


EXHIBIT 1-B: SITE PLAN



This page intentionally left blank

2 BACKGROUND

2.1 BACKGROUND ON RECOMMENDED METHODOLOGY

This HRA is based on applicable guidelines to produce conservative estimates of human health risk posed by exposure to DPM. The conservative nature of this analysis is due primarily to the following factors:

- The ARB-adopted diesel exhaust Unit Risk Factor (URF) of 300 in one million per $\mu\text{g}/\text{m}^3$ is based upon the upper 95 percentile of estimated risk for each of the epidemiological studies utilized to develop the URF. Using the 95th percentile URF represents a very conservative (health-protective) risk posed by DPM because it represents breathing rates that are high for the human body.
- The emissions derived assume that every truck accessing the Project site will idle for 15 minutes under the unmitigated scenario, and this is an overestimation of actual idling times and thus conservative.² The California Air Resources Board (CARB's) anti-idling requirements impose a 5-minute maximum idling time and therefore the analysis conservatively overestimates DPM emissions from idling by a factor of 3.

2.2 CONSTRUCTION HEALTH RISK ASSESSMENT

2.2.1 EMISSIONS CALCULATIONS

The emissions calculations for the construction HRA component are based on an assumed mix of construction equipment and hauling activity as presented in the *1101 California Warehouse Air Quality Impact Analysis* (“technical study”) prepared by Urban Crossroads, Inc. (4).

Construction related DPM emissions are expected to occur primarily as a function of the operation of heavy-duty construction equipment.

As discussed in the technical study, the Project would result in approximately 219 total working-days of construction activity. The construction duration by phase is shown on Table 2-1. A detailed summary of construction equipment assumptions by phase is provided in Table 2-2. The Caleemod emissions outputs are presented in Appendix 2.1. The modeled emission sources for construction activity are illustrated on Exhibit 2-A.

² Although the Project is required to comply with ARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions should be estimated for 15 minutes of truck idling (personal communication, in person, with Jillian Wong, December 22, 2016), which would take into account on-site idling which occurs while the trucks are waiting to pull up to the truck bays, idling at the bays, idling at check-in and check-out, etc.

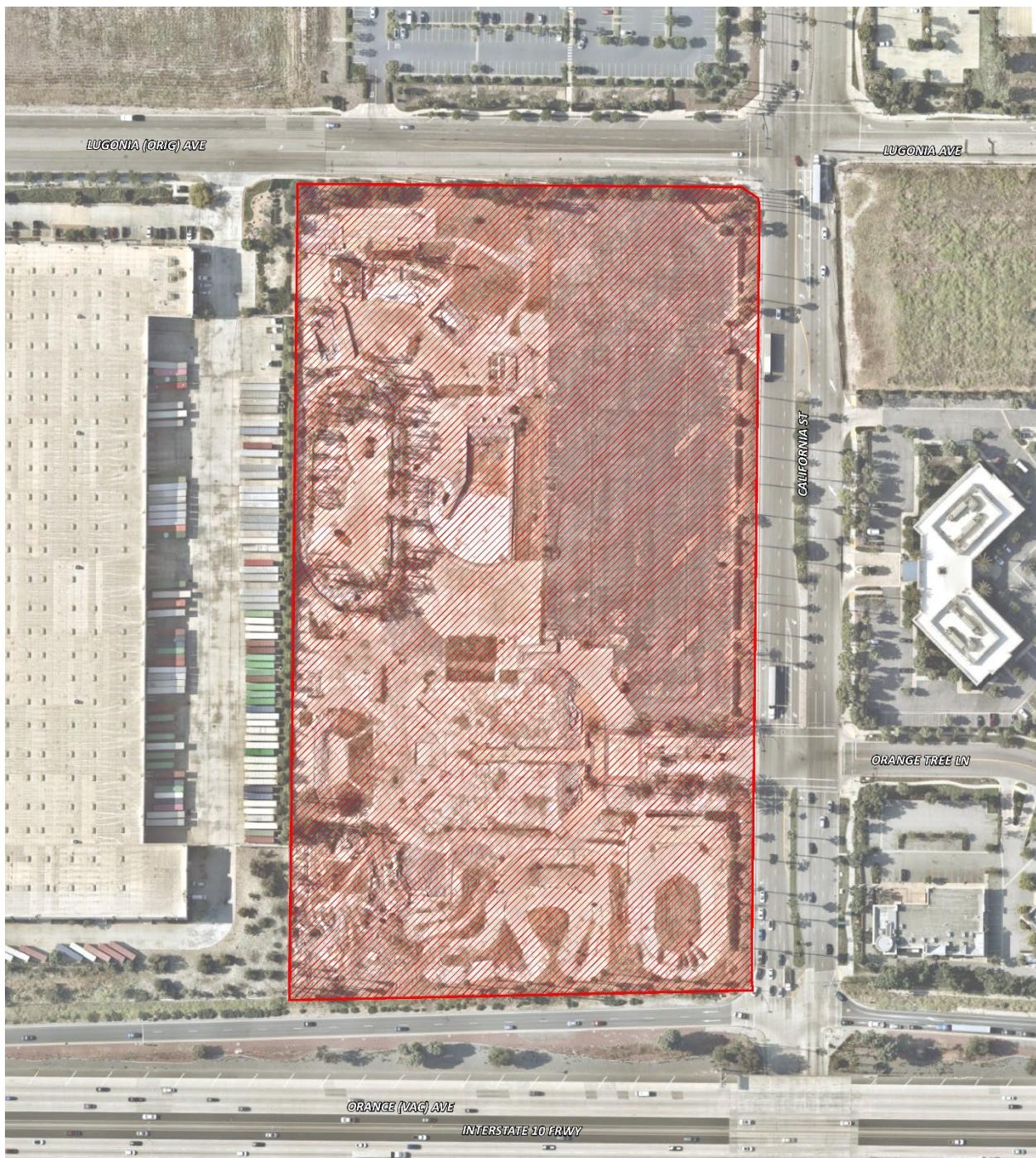
TABLE 2-1: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	7/1/2024	7/26/2024	20
Site Preparation	7/29/2024	8/9/2024	10
Grading	8/12/2024	9/20/2024	30
Building Construction	9/23/2024	5/1/2025	159
Paving	3/21/2025	5/1/2025	30
Architectural Coating	3/21/2025	5/1/2025	30

TABLE 2-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase Name	Equipment	Amount	Hours Per Day
Demolition	Rubber Tired Dozers	2	8
	Excavators	3	8
	Concrete/Industrial Saws	1	8
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Graders	1	8
	Excavators	2	8
	Crawler Tractors	2	8
	Scrapers	2	8
	Rubber Tired Dozers	1	8
Building Construction	Forklifts	3	8
	Generator Sets	1	8
	Cranes	1	8
	Welders	1	8
	Tractors/Loaders/Backhoes	3	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

EXHIBIT 2-A: MODELED CONSTRUCTION EMISSION SOURCES



LEGEND:

Construction Activity

2.3 OPERATIONAL HEALTH RISK ASSESSMENT

2.3.1 ON-SITE AND OFF-SITE TRUCK ACTIVITY

Vehicle DPM emissions were calculated using emission factors for particulate matter less than 10 μm in diameter (PM₁₀) generated with the 2021 version of the EMission FACtor model (EMFAC) developed by the CARB. EMFAC 2021 is a mathematical model that CARB developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources (5). The most recent version of this model, EMFAC 2021, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

Several distinct emission processes are included in EMFAC 2021. Emission factors calculated using EMFAC 2021 are expressed in units of grams per vehicle miles traveled (g/VMT) or grams per idle-hour (g/idle-hr), depending on the emission process. The emission processes and corresponding emission factor units associated with diesel particulate exhaust for this Project are presented below.

For this Project, annual average PM₁₀ emission factors were generated by running EMFAC 2021 in EMFAC Mode for vehicles in the San Bernardino County jurisdiction. The EMFAC Mode generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of temperature, relative humidity, and vehicle speed. The model was run for speeds traveled in the vicinity of the Project. The vehicle travel speeds for each segment modeled are summarized below.

- Idling – on-site loading/unloading and truck gate
- 5 miles per hour – on-site vehicle movement including driving and maneuvering
- 25 miles per hour – off-site vehicle movement including driving and maneuvering.

It is expected that minimal idling would occur at nearby intersections during truck travel on study area roadways (e.g., at an intersection during a red light, or yielding to make a turn). Notwithstanding, the analysis conservatively utilizes a reduced off-site average speed of 25 miles per hour (below the posted speed limit) for travel on study area roadways, use of a lower average speed for off-site travel results in a higher emission factor and therefore any negligible idling that would occur during truck travel along the study area is accounted for.

Calculated emission factors are shown on Table 2-3. As a conservative measure, a 2025 EMFAC 2021 run was conducted and a static 2025 emissions factor data set was used for the entire duration of analysis herein (e.g., 30 years). Use of 2025 emission factors would overstate potential impacts since this approach assumes that emission factors remain “static” and do not change over time due to fleet turnover or cleaner technology with lower emissions that would be incorporated into vehicles after 2025. Additionally, based on EMFAC 2021, Light-Heavy-Duty Trucks are comprised of 51.8% diesel, Medium-Heavy-Duty Trucks are comprised of 91.5% diesel, and Heavy-Heavy-Duty Trucks are comprised of 85.1% diesel. Trucks fueled by diesel are

accounted for by these percentages accordingly in the emissions factor generation. Appendix 2.2 includes additional details on the emissions estimates from EMFAC.

The vehicle DPM exhaust emissions were calculated for running exhaust emissions. The running exhaust emissions were calculated by applying the running exhaust PM₁₀ emission factor (g/VMT) from EMFAC over the total distance traveled. The following equation was used to estimate off-site emissions for each of the different vehicle classes comprising the mobile sources (6):

$$Emissions_{Speed\ A} = EF_{Run\ Exhaust} \times Distance \times \frac{Number\ of\ Trips\ per\ Day}{Seconds\ per\ Day}$$

Where:

- $Emissions_{Speed\ A}$ = Vehicle emissions at a given speed A (g/s)
- $EF_{Run\ Exhaust}$ = EMFAC running exhaust PM₁₀ emission factor at speed A (g/vmt)
- $Distance$ = Total distance traveled per trip (miles)

Similar to off-site traffic, on-site vehicle running emissions were calculated by applying the running exhaust PM₁₀ emission factor (g/VMT) from EMFAC and the total vehicle trip number over the length of the driving path using the same formula presented above for on-site emissions. In addition, on-site vehicle idling exhaust emissions were calculated by applying the idle exhaust PM₁₀ emission factor (g/idle-hr) from EMFAC and the total truck trip over the total assumed idle time (15 minutes). The following equation was used to estimate the on-site vehicle idling emissions for each of the different vehicle classes (6):

$$Emissions_{Idle} = EF_{Idle} \times Number\ of\ Trips \times Idling\ Time \times \frac{60\ minutes\ per\ hour}{seconds\ per\ day}$$

Where:

- $Emissions_{Idle}$ = Vehicle emissions during Idling (g/s)
- EF_{Idle} = EMFAC idle exhaust PM₁₀ emission factor (g/s)
- $Number\ of\ Trips$ = Number of trips per day
- $Idling\ Time$ = Idling time (minutes per trip)

TABLE 2-3: 2025 WEIGHTED AVERAGE DPM EMISSIONS FACTORS

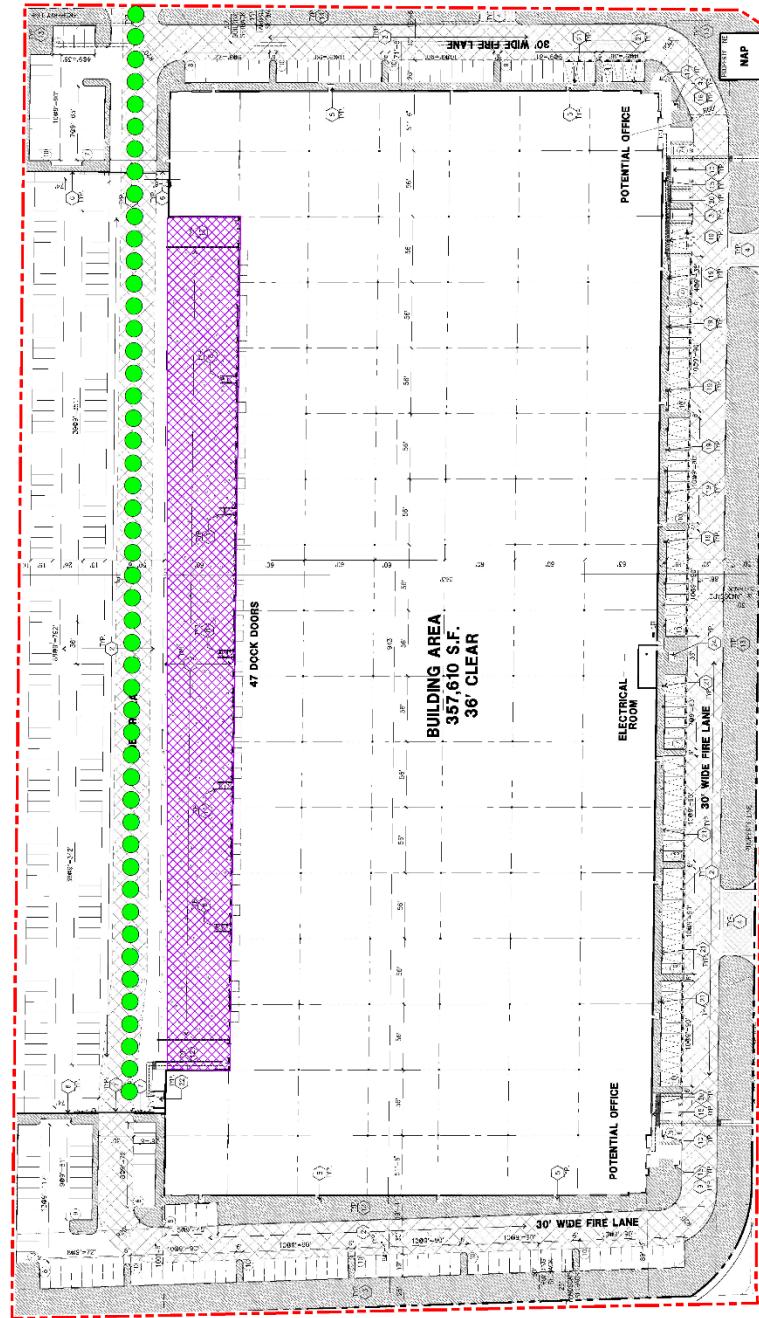
Speed	Weighted Average
0 (idling)	0.07949 (g/idle-hr)
5	0.01932 (g/s)
25	0.00818 (g/s)

Each roadway was modeled as a line source (made up of multiple adjacent volume sources). Due to the large number of volume sources modeled for this analysis, the corresponding coordinates

of each volume source have not been included in this report but are included in Appendix 2.3. The DPM emission rate for each volume source was calculated by multiplying the emission factor (based on the average travel speed along the roadway) by the number of trips and the distance traveled along each roadway segment and dividing the result by the number of volume sources along that roadway, as illustrated on Table 2-4. The modeled emission sources are illustrated on Exhibit 2-B for on-site sources and Exhibit 2-C for off-site sources. The modeling domain is limited to the Project's primary truck route and includes off-site sources in the study area for more than $\frac{3}{4}$ mile. This modeling domain is more inclusive and conservative than using only a $\frac{1}{4}$ mile modeling domain which is the distance supported by several reputable studies which conclude that the greatest potential risks occur within a $\frac{1}{4}$ mile of the primary source of emissions (7) (in the case of the Project, the primary source of emissions is the on-site idling and on-site travel).

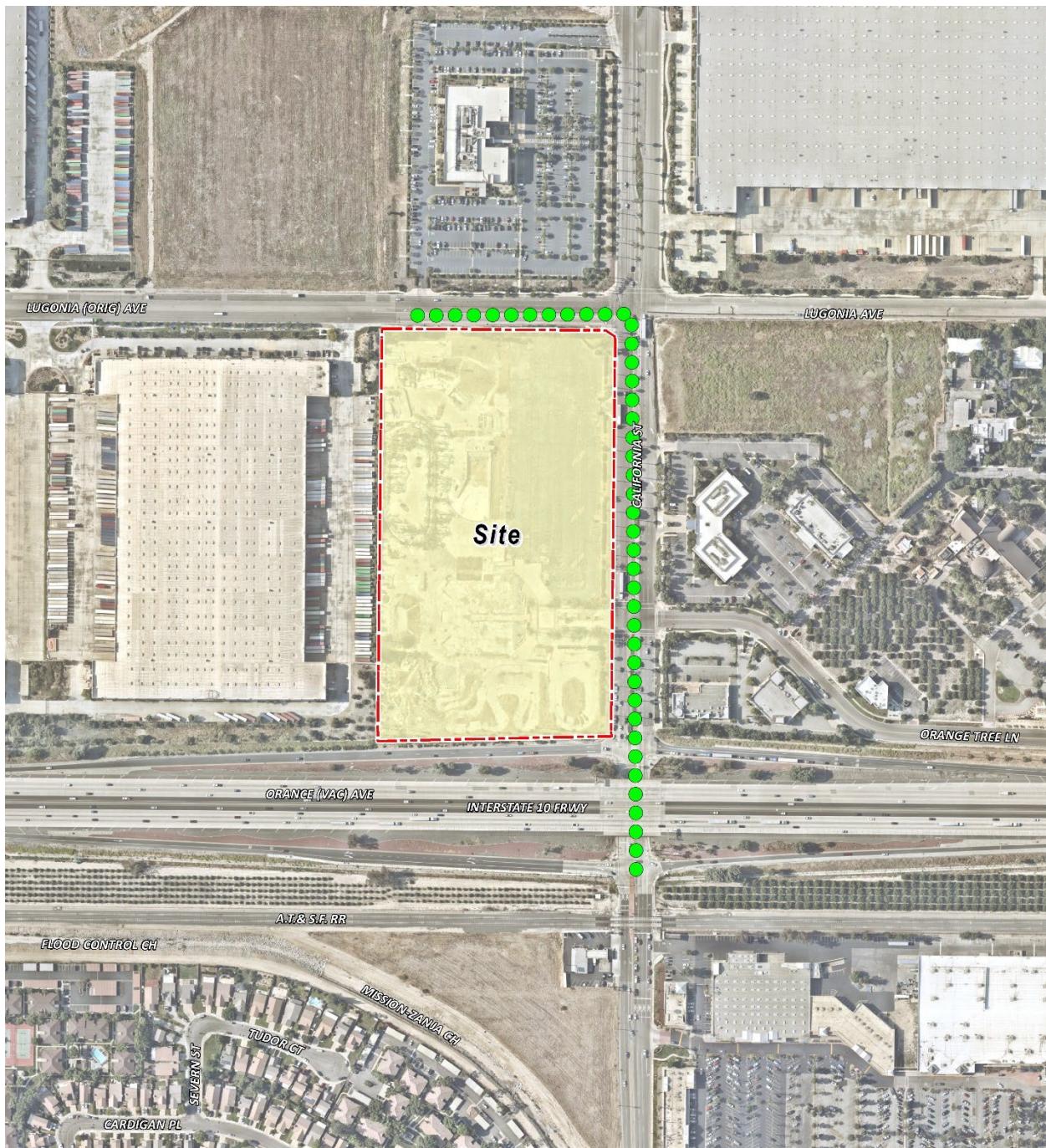
On-site truck idling was estimated to occur as trucks enter and travel through the Project site. Although the Project's diesel-fueled truck and equipment operators will be required by State law to comply with CARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions be calculated assuming 15 minutes of truck idling (8), which would take into account on-site idling which occurs while the trucks are waiting to pull up to the truck bays, idling at the bays, idling at truck trailer parking areas, etc. As such, this analysis calculates truck idling at 15 minutes, consistent with SCAQMD's recommendation.

As summarized in the *Vineyard Avenue Warehouse Traffic Analysis* prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 842 actual vehicular trip-ends per day (421 vehicles inbound + 421 vehicles outbound) which includes 648 passenger vehicle trips (324 passenger vehicles inbound + 324 passenger vehicles outbound) and 194 two-way truck trips (97 trucks inbound per day + 97 trucks outbound) per day (3).

EXHIBIT 2-B: MODELED ON-SITE EMISSION SOURCES**LEGEND:**

Site Boundary Idling Activity Truck Movements

EXHIBIT 2-C: MODELED OFF-SITE EMISSION SOURCES



LEGEND:

Site Boundary Truck Movements

TABLE 2-4: DPM EMISSIONS FROM PROJECT TRUCKS (2025 ANALYSIS YEAR)

Truck Emission Rates						
Source	Trucks Per Day	VMT ^a (miles/day)	Truck Emission Rate ^b (grams/mile)	Truck Emission Rate ^b (grams/idle-hour)	Daily Truck Emissions ^c (grams/day)	Modeled Emission Rates (g/second)
On-Site Idling	97			0.0795	1.93	2.231E-05
On-Site Travel	194	33.93	0.0193		0.66	7.589E-06
Off-Site Travel - Lugonia Avenue / California Avenue 100%	194	78.73	0.0082		0.64	7.452E-06

^a Vehicle miles traveled are for modeled truck route only.

^b Emission rates determined using EMFAC 2021. Idle emission rates are expressed in grams per idle hour rather than grams per mile.

^c This column includes the total truck travel and truck idle emissions. For idle emissions this column includes emissions based on the assumption that each truck idles for 15 minutes.

2.4 EXPOSURE QUANTIFICATION

The analysis herein has been conducted in accordance with the guidelines in the Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (1). The Environmental Protection Agency's (U.S. EPA's) AERMOD model has been utilized. For purposes of this analysis, the Lakes AERMOD View (Version 11.2.0) was used to calculate annual average particulate concentrations associated with site operations. Lakes AERMOD View was utilized to incorporate the U.S. EPA's latest AERMOD Version 22112 (9).

The model offers additional flexibility by allowing the user to assign an initial release height and vertical dispersion parameters for mobile sources representative of a roadway. For this HRA, the roadways were modeled as adjacent volume sources. Roadways were modeled using the U.S. EPA's haul route methodology for modeling of on-site and off-site truck movement. More specifically, the Haul Road Volume Source Calculator in Lakes AERMOD View has been utilized to determine the release height parameters. Based on the US EPA methodology, the Project's modeled sources would result in a release height of 3.49 meters and an initial lateral dimension of 4.0 meters, and an initial vertical dimension of 3.25 meters.

Model parameters are presented in Table 2-5 (10). The model requires additional input parameters including emission data and local meteorology. Meteorological data from the SCAQMD's Redlands monitoring station was used to represent local weather conditions and prevailing winds (11).

TABLE 2-5: AERMOD MODEL PARAMETERS

Dispersion Coefficient (Urban/Rural)	Urban (population 2,035,210)
Terrain (Flat/Elevated)	Elevated (Regulatory Default)
Averaging Time	1 year (5-year Meteorological Data Set)
Receptor Height	0 meters (Regulatory Default)

Universal Transverse Mercator (UTM) coordinates for World Geodetic System (WGS) 84 were used to locate the Project site boundaries, each volume source location, and receptor locations in the Project vicinity. The AERMOD dispersion model summary output files for the Project are presented in Appendix 2.3. Modeled sensitive receptors were placed at residential and non-residential locations.

Receptors may be placed at applicable structure locations for residential and worker property and not necessarily the boundaries of the properties containing these uses because the human receptors (residents and workers) spend a majority of their time at the residence or in the workplace's building, and not on the property line. It should be noted that the primary purpose of receptor placement is focused on long-term exposure. For example, the HRA evaluates the potential health risks to residents, workers, and school children over a period of 30, 25, or 9 years of exposure, respectively. Notwithstanding, as a conservative measure, receptors were placed at either the outdoor living area or the building façade, whichever is closer to the Project site.

For purposes of this HRA, receptors include both residential and non-residential (worker) land uses in the vicinity of the Project. These receptors are included in the HRA since residents,

workers, and school children may be exposed at these locations over a long-term duration of 30, 25, and 9 years, respectively. This methodology is consistent with SCAQMD and OEHHA recommended guidance.

Any impacts to residents or workers located further away from the Project site than the modeled residential and workers would have a lesser impact than what has already been disclosed in the HRA at the MEIR, MEISC, and MEIW because concentrations dissipate with distance.

All receptors were set to existing elevation height so that only ground-level concentrations are analyzed. United States Geological Survey (USGS) Digital Elevation Model (DEM) terrain data based on a 7.5-minute topographic quadrangle map series using AERMAP was utilized in the HRA modeling to set elevations (12).

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the 2015 OEHHA Guidelines. Tables 2-6 through 2-9 summarize the Exposure Parameters for residents, workers, and school children based on 2015 OEHHA Guidelines. Appendix 2.4 includes the detailed risk calculation.

TABLE 2-6: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (CONSTRUCTION ACTIVITY)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
0 to 2	1,090	10	0.83	1.00	250	8

TABLE 2-7: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (30 YEAR RESIDENTIAL)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
-0.25 to 0	361	10	0.25	0.85	350	24
0 to 2	1,090	10	2	0.85	350	24
2 to 16	572	3	14	0.72	350	24
16 to 30	261	1	14	0.73	350	24

TABLE 2-8: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (25 YEAR WORKER)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Exposure Frequency (days/year)	Exposure Time (hours/day)
16 to 41	230	1	25	250	12

TABLE 2-9: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (9 YEAR SCHOOL CHILD)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Exposure Frequency (days/year) ^a	Exposure Time (hours/day)
4 to 13	631	3	9	180	12

^a To represent the unique characteristics of the school-based population, the assessment employed the U.S. Environmental Protection Agency's guidance to develop viable dose estimates based on reasonable maximum exposures (RME). RME's are defined as the "highest exposure that is reasonably expected to occur" for a given receptor population. As a result, lifetime risk values for the student population were adjusted to account for an exposure duration of 180 days per year for nine (9) years. The 9 year exposure duration is also consistent with OEHHA Recommendations and consistent with the exposure duration utilized in school-based risk assessments for various schools within the Los Angeles County Unified School District (LAUSD) that have been accepted by the SCAQMD.

2.5 CARCINOGENIC CHEMICAL RISK

Excess cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens over a specified exposure duration. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in one million implies a likelihood that up to 10 people, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time.

Guidance from CARB and the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA) recommends a refinement to the standard point estimate approach when alternate human body weights and breathing rates are utilized to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose. Once determined, contaminant dose is multiplied by the cancer potency factor (CPF) in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day)⁻¹ to derive the cancer risk estimate. Therefore, to assess exposures, the following dose algorithm was utilized.

$$DOSE_{AIR} = \left(C_{AIR} \times \frac{BR}{BW} \times A \times EF \right) \times (1 \times 10^{-6})$$

Where:

- $DOSE_{AIR}$ = chronic daily intake (mg/kg/day)
- C_{AIR} = concentration of contaminant in air ($\mu\text{g/m}^3$)
- $\frac{BR}{BW}$ = daily breathing rate normalized to body weight
(L/kg BW-day)
- A = inhalation absorption factor

EF	=	exposure frequency (days/365 days)
BW	=	body weight (kg)
1×10^{-6}	=	conversion factors (μg to mg, L to m^3)

$$RISK_{AIR} = DOSE_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

Where:

$DOSE_{AIR}$	=	chronic daily intake (mg/kg/day)
CPF	=	cancer potency factor
ASF	=	age sensitivity factor
FAH	=	fraction of time at home
ED	=	number of years within particular age group
AT	=	averaging time

2.6 NON-CARCINOGENIC EXPOSURES

An evaluation of the potential noncarcinogenic effects of chronic exposures was also conducted. Adverse health effects are evaluated by comparing a compound's annual concentration with its toxicity factor or Reference Exposure Level (REL). The REL for diesel particulates was obtained from OEHHA for this analysis. The chronic reference exposure level (REL) for DPM was established by OEHHA as 5 $\mu\text{g}/\text{m}^3$ (13).

Non-cancer health effects are expressed as a hazard index (HI), which is calculated using the following equation:

$$HI_{DPM} = \frac{C_{DPM}}{REL_{DPM}}$$

Where:

HI_{DPM}	=	Hazard index (unitless)
C_{DPM}	=	Annual average DPM concentration ($\mu\text{g}/\text{m}^3$)
REL_{DPM}	=	REL for DPM (the DPM concentration at which no adverse health effects are anticipated).

2.7 POTENTIAL PROJECT DPM-SOURCE CANCER AND NON-CANCER RISKS

CONSTRUCTION IMPACTS

The land use with the greatest potential exposure to Project construction-source DPM emissions is Location R5 which is located approximately 771 feet south of the Project site at an existing residence located at 26380 Tudor Court. R5 is placed in the private outdoor living area (backyard) facing the Project site. At the MEIR, the maximum incremental cancer risk attributable to Project construction-source DPM emissions is estimated at 0.30 in one million, which is less than the SCAQMD's significance 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. Although Location R5 is not the nearest receptor to the Project site, it would experience the highest concentrations of DPM during Project construction due to meteorological conditions at the site. Because all other modeled receptors would experience lower concentrations of DPM during Project construction, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction activity. All other receptors during construction activity would experience less risk than what is identified for this location. The modeled receptors are illustrated on Exhibit 2-D.

OPERATIONAL IMPACTS

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to Project operational-source DPM emissions is Location R5 which is located approximately 771 feet south of the Project site at an existing residence located at 26380 Tudor Court. R5 is placed in the private outdoor living area (backyard) facing the Project site. At the MEIR, the maximum incremental cancer risk attributable to Project operational-source DPM emissions is estimated at 0.15 in one million, which is less than the SCAQMD's significance 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 significance threshold of 1.0. Although Location R2 is not the nearest receptor to the Project site, it would experience the highest concentrations of DPM during Project operation due to meteorological conditions at the site. Because all other modeled receptors are located at a greater distance than the MEIR analyzed herein, and DPM dissipates with distance from the source, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project operational activity. All other receptors would experience less risk than what is identified for this location. The modeled receptors are illustrated on Exhibit 2-D.

Worker Exposure Scenario³:

The worker receptor land use with the greatest potential exposure to Project operational -source DPM emissions is Location R1, which represents the potential worker receptor located approximately 105 feet west of the Project site. At the MEIW, the maximum incremental cancer risk impact is 0.12 in one million which is less than the SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Location R1 is the worker receptor that would experience the highest concentrations of DPM during Project operation due to meteorological conditions at the site. All other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby workers. The modeled receptors are illustrated on Exhibit 2-D.

School Child Exposure Scenario:

The nearest school is Mission Elementary School, located approximately 1,631 feet south of the Project site and represented by Location R6. The MEISC is the school receptor that would experience the highest modeled concentrations of DPM, and thus the highest risk. At the MEISC, the maximum incremental cancer risk impact attributable to the Project is calculated to be 0.01 in one million, which is less than the significance threshold of 10 in one million. At this same location, non-cancer risks attributable to the Project were calculated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Because all other modeled school receptors would be exposed to lower concentrations of DPM, all other school receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEISC identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby school children.

CONSTRUCTION AND OPERATIONAL IMPACTS

The land use with the greatest potential exposure to Project construction-source and operational-source DPM emissions is Location R5. At the MEIR, the maximum incremental cancer risk attributable to Project construction-source and operational-source DPM emissions is estimated at 0.42 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 nearby residences. The modeled receptors are illustrated on Exhibit 2-D.

It should be noted that the receptors presented in Exhibit 2-D do not represent all modeled receptors.

³ SCAQMD guidance does not require assessment of the potential health risk to on-site workers. Excerpts from the document OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines—The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2003), also indicate that it is not necessary to examine the health effects to on-site workers unless required by RCRA (Resource Conservation and Recovery Act) / CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) or the worker resides on-site.

EXHIBIT 2-D: RECEPTOR LOCATIONS



LEGEND:

[Red square] Site Boundary [Blue circle with cross] Receptor Locations [Blue line with dot] Distance from receptor to Project site boundary (in feet)

This page intentionally left blank

3 REFERENCES

1. **South Coast Air Quality Management District.** Mobile Source Toxics Analysis. [Online] 2003. http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html.
2. **Goss, Tracy A and Kroeger, Amy.** White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. [Online] South Coast Air Quality Management District, 2003. [Cited: June 6, 2019.] <http://www.aqmd.gov/docs/default-source/agendas/environmental-justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2>.
3. **Urban Crossroads, Inc.** *1101 California Avenue Traffic Analysis*. 2023.
4. —. *1101 California Warehouse Air Quality Impact Analysis*. 2023.
5. **California Air Resources Board.** EMFAC 2021. [Online] <https://arb.ca.gov/emfac/>.
6. **California Department of Transportation.** EMFAC Software. [Online] <http://www.dot.ca.gov/hq/env/air/pages/emfac.htm>.
7. **Air Resources Board.** *Air Quality and Land Use Handbook: A Community Health Perspective*. 2005.
8. **South Coast Air Quality Management District.** Final 2016 Air Quality Management Plan (AQMP). [Online] March 2017. <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=11>.
9. **Environmental Protection Agency.** User's Guide for the AMS/EPA Regulatory Model (AERMOD). [Online] June 2022. https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_userguide.pdf.
10. —. User's Guide for the AMS/EPA Regulatory Model (AERMOD). [Online] April 2018. https://www3.epa.gov/ttn/scram/models/aermod/aermod_userguide.pdf.
11. **South Coast Air Quality Management District.** Data for AERMOD. [Online] [Cited: May 9, 2022.] <https://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod>.
12. **Environmental Protection Agency.** User's Guide for the AERMOD Terrain Preprocessor (AERMAP). [Online] 2018. https://gaftp.epa.gov/Air/aqmg/SCRAM/models/related/aermap/aermap_userguide_v18081.pdf.
13. **Office of Environmental Health Hazard Assessment.** Chemical Toxicity Database. [Online] <https://oehha.ca.gov/chemicals>.

This page intentionally left blank

4 CERTIFICATIONS

The contents of this health risk assessment represent an accurate depiction of the impacts to sensitive receptors associated with the proposed 1101 California Warehouse Project. The information contained in this health risk assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me at (949) 660-1994.

Haseeb Qureshi
Principal
URBAN CROSSROADS, INC.
(949) 660-1994
hqureshi@urbanxroads.com

EDUCATION

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

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

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

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June 2013
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 – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

This page intentionally left blank

APPENDIX 2.1:

CALEEMOD OUTPUTS

15517 - 1101 California (Construction) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

3.3. Site Preparation (2024) - Unmitigated

3.5. Grading (2024) - Unmitigated

3.7. Building Construction (2024) - Unmitigated

3.9. Building Construction (2025) - Unmitigated

3.11. Paving (2025) - Unmitigated

3.13. Architectural Coating (2025) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15517 - 1101 California (Construction)
Construction Start Date	7/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	24.0
Location	1101 California St, Redlands, CA 92374, USA
County	San Bernardino-South Coast
City	Redlands
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5394
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.14

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
Unrefrigerated Warehouse-No Rail	286	1000sqft	6.57	286,088	87,490	—	—	—

Industrial Park	71.5	1000sqft	1.64	71,522	0.00	—	—	—
Parking Lot	401	Space	3.61	0.00	0.00	—	—	—
Other Asphalt Surfaces	6.83	Acre	6.83	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.	6.15	63.5	51.6	41.6	0.15	1.71	6.66	8.37	1.51	2.75	4.22	—	20,940	20,940	1.82	2.32	30.9	21,709
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unmit.	3.67	63.5	22.4	37.9	0.05	0.87	2.92	3.79	0.80	0.70	1.50	—	8,169	8,169	0.40	0.33	0.36	8,279
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unmit.	1.31	5.51	9.73	10.6	0.02	0.35	1.37	1.72	0.32	0.39	0.71	—	3,386	3,386	0.24	0.28	2.31	3,477
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unmit.	0.24	1.00	1.78	1.93	< 0.005	0.06	0.25	0.31	0.06	0.07	0.13	—	561	561	0.04	0.05	0.38	576

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	6.15	3.92	51.6	41.5	0.15	1.71	6.66	8.37	1.51	2.75	4.22	—	20,940	20,940	1.82	2.32	30.9	21,709
2025	3.73	63.5	22.3	41.6	0.05	0.87	2.92	3.79	0.80	0.70	1.50	—	8,397	8,397	0.39	0.33	13.9	8,520
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2024	2.51	2.07	14.6	24.7	0.04	0.56	2.33	2.89	0.51	0.56	1.08	—	5,961	5,961	0.30	0.30	0.32	6,057
2025	3.67	63.5	22.4	37.9	0.05	0.87	2.92	3.79	0.80	0.70	1.50	—	8,169	8,169	0.40	0.33	0.36	8,279
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2024	1.31	0.98	9.73	10.6	0.02	0.35	1.37	1.72	0.32	0.39	0.71	—	3,386	3,386	0.24	0.28	2.31	3,477
2025	0.66	5.51	3.96	6.92	0.01	0.15	0.59	0.74	0.14	0.14	0.28	—	1,590	1,590	0.08	0.07	1.27	1,615
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2024	0.24	0.18	1.78	1.93	< 0.005	0.06	0.25	0.31	0.06	0.07	0.13	—	561	561	0.04	0.05	0.38	576
2025	0.12	1.00	0.72	1.26	< 0.005	0.03	0.11	0.13	0.02	0.03	0.05	—	263	263	0.01	0.01	0.21	267

3. Construction Emissions Details

3.1. Demolition (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	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	2.99	2.99	—	0.45	0.45	—	—	—	—	—	—	
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	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.17	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	
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	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.03	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	
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	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	216	216	0.01	0.01	0.86	219
Vendor	0.02	< 0.005	0.18	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.44	164
Hauling	0.32	0.05	2.99	1.67	0.02	0.05	0.64	0.69	0.03	0.18	0.21	—	2,436	2,436	0.27	0.39	5.13	2,565

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	—	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.59	8.59	< 0.005	< 0.005	0.01	9.00
Hauling	0.02	< 0.005	0.17	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	0.12	140
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.49
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.1	22.1	< 0.005	< 0.005	0.02	23.2

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	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
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	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146	—	—
Dust From Material Movement:	—	—	—	—	—	—	0.16	0.16	—	0.07	0.07	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1	—	—
Dust From Material Movement:	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.01	256	—	—
Vendor	0.01	< 0.005	0.11	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.1	94.1	0.01	0.01	0.26	98.7	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.42	6.42	< 0.005	< 0.005	0.01	6.51	—	—
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.58	2.58	< 0.005	< 0.005	< 0.005	2.70	—	—

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	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.43	0.43	< 0.005	< 0.005	< 0.005	0.45
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	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.82	2.48	0.01	0.12	—	0.12	0.11	—	0.11	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.51	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
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	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.03	0.01	0.29	0.15	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	251	251	0.02	0.04	0.70	263
Hauling	1.82	0.29	17.0	9.48	0.09	0.26	3.64	3.89	0.17	1.00	1.17	—	13,803	13,803	1.52	2.22	29.1	14,533
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22.0	22.0	< 0.005	< 0.005	0.04	22.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.6	20.6	< 0.005	< 0.005	0.02	21.6
Hauling	0.15	0.02	1.47	0.78	0.01	0.02	0.30	0.32	0.01	0.08	0.10	—	1,135	1,135	0.13	0.18	1.03	1,193
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.41	3.41	< 0.005	< 0.005	< 0.005	3.58
Hauling	0.03	< 0.005	0.27	0.14	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	188	188	0.02	0.03	0.17	198

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	
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	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.30	0.25	2.38	2.78	< 0.005	0.11	—	0.11	0.10	—	0.10	—	515	515	0.02	< 0.005	—	517
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	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.06	0.05	0.43	0.51	< 0.005	0.02	—	0.02	0.02	—	0.02	—	85.2	85.2	< 0.005	< 0.005	—	85.5
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	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.79	0.73	12.7	0.00	0.00	1.96	1.96	0.00	0.46	0.46	—	2,162	2,162	0.09	0.07	8.65	2,195	
Vendor	0.14	0.04	1.55	0.83	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,348	1,348	0.10	0.20	3.76	1,414	
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	0.82	0.74	0.86	9.60	0.00	0.00	1.96	1.96	0.00	0.46	0.46	—	1,982	1,982	0.09	0.07	0.22	2,007	
Vendor	0.14	0.04	1.61	0.84	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,349	1,349	0.10	0.20	0.10	1,411	
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	0.16	0.14	0.17	1.97	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	393	393	0.02	0.01	0.73	399	
Vendor	0.03	0.01	0.32	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	264	264	0.02	0.04	0.32	276	
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	0.03	0.03	0.03	0.36	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.1	65.1	< 0.005	< 0.005	0.12	66.0	
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.7	43.7	< 0.005	0.01	0.05	45.8	
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	
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	
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	
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	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.76	0.69	0.66	11.7	0.00	0.00	1.96	1.96	0.00	0.46	0.46	—	2,116	2,116	0.09	0.07	7.85	2,149
Vendor	0.13	0.04	1.47	0.80	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,327	1,327	0.10	0.20	3.73	1,393
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	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.72	0.65	0.73	8.82	0.00	0.00	1.96	1.96	0.00	0.46	0.46	—	1,940	1,940	0.09	0.07	0.20	1,965

Vendor	0.13	0.04	1.54	0.80	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,327	1,327	0.10	0.20	0.10	1,390
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	0.17	0.15	0.19	2.20	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	466	466	0.02	0.02	0.80	473
Vendor	0.03	0.01	0.37	0.19	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	314	314	0.02	0.05	0.38	329
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	0.03	0.03	0.03	0.40	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.1	77.1	< 0.005	< 0.005	0.13	78.2
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	52.0	52.0	< 0.005	0.01	0.06	54.5
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

3.11. 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	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.95	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	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.61	0.82	< 0.005	0.03	—	0.03	0.03	—	0.03	—	124	124	0.01	< 0.005	—	125	
Paving	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	0.01	0.11	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	20.6	20.6	< 0.005	< 0.005	—	20.6	
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.08	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215	
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	0.07	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	196	
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	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.03	16.4	
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	—	2.67	2.67	< 0.005	< 0.005	< 0.005	2.71
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

3.13. 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	—	59.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	
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	—	59.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Off-Road Equipment	0.02	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.7
Architectural Coatings	—	4.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.42	2.42	< 0.005	< 0.005	—	2.43
Architectural Coatings	—	0.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.13	2.34	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	423	423	0.02	0.01	1.57	430
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	0.14	0.13	0.15	1.76	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	388	388	0.02	0.01	0.04	393
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	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.3	32.3	< 0.005	< 0.005	0.06	32.8
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.36	5.36	< 0.005	< 0.005	0.01	5.43
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
Demolition	Demolition	7/1/2024	7/26/2024	5.00	20.0	20
Site Preparation	Site Preparation	7/29/2024	8/9/2024	5.00	10.0	10
Grading	Grading	8/12/2024	9/20/2024	5.00	30.0	30
Building Construction	Building Construction	9/23/2024	5/1/2025	5.00	159	300
Paving	Paving	3/21/2025	5/1/2025	5.00	30.0	20
Architectural Coating	Architectural Coating	3/21/2025	5/1/2025	5.00	30.0	20

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
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
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
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
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	5.00	10.2	HHDT,MHDT
Demolition	Hauling	34.6	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	3.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	8.00	10.2	HHDT,MHDT
Grading	Hauling	196	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	150	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	43.0	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	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	30.0	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

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	536,415	178,805	27,273

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	60,101	—
Site Preparation	—	—	35.0	0.00	—
Grading	47,054	—	72.0	0.00	—
Paving	0.00	0.00	0.00	0.00	10.4

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
Unrefrigerated Warehouse-No Rail	0.00	0%
Industrial Park	0.00	0%
Parking Lot	3.61	100%
Other Asphalt Surfaces	6.83	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	532	0.03	< 0.005
2025	0.00	532	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	26.6	annual days of extreme heat
Extreme Precipitation	4.20	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	6.46	annual hectares burned

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

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ 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	3	0	0	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	100
AQ-PM	57.4
AQ-DPM	82.8
Drinking Water	96.3
Lead Risk Housing	29.2
Pesticides	74.7
Toxic Releases	44.2
Traffic	81.0
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	47.6
Haz Waste Facilities/Generators	96.8
Impaired Water Bodies	12.5
Solid Waste	0.00
Sensitive Population	—
Asthma	34.7
Cardio-vascular	45.1
Low Birth Weights	75.6
Socioeconomic Factor Indicators	—
Education	39.2
Housing	89.1

Linguistic	17.3
Poverty	55.9
Unemployment	14.4

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	37.76466059
Employed	27.51186963
Median HI	26.53663544
Education	—
Bachelor's or higher	60.5800077
High school enrollment	100
Preschool enrollment	11.52316181
Transportation	—
Auto Access	62.47914795
Active commuting	28.56409598
Social	—
2-parent households	37.02040293
Voting	39.83061722
Neighborhood	—
Alcohol availability	30.07827538
Park access	50.53252919
Retail density	65.94379571
Supermarket access	72.28281791
Tree canopy	43.62889773

Housing	—
Homeownership	9.303220839
Housing habitability	37.12305916
Low-inc homeowner severe housing cost burden	73.38637239
Low-inc renter severe housing cost burden	66.31592455
Uncrowded housing	31.19466188
Health Outcomes	—
Insured adults	48.58206082
Arthritis	92.2
Asthma ER Admissions	65.8
High Blood Pressure	95.2
Cancer (excluding skin)	82.6
Asthma	30.0
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	71.2
Diagnosed Diabetes	92.6
Life Expectancy at Birth	79.7
Cognitively Disabled	52.2
Physically Disabled	60.6
Heart Attack ER Admissions	32.7
Mental Health Not Good	41.5
Chronic Kidney Disease	95.6
Obesity	56.2
Pedestrian Injuries	53.3
Physical Health Not Good	67.2
Stroke	91.3
Health Risk Behaviors	—

Binge Drinking	13.6
Current Smoker	36.3
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	7.3
Elderly	81.9
English Speaking	84.0
Foreign-born	37.0
Outdoor Workers	85.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	69.4
Traffic Density	74.6
Traffic Access	23.0
Other Indices	—
Hardship	54.2
Other Decision Support	—
2016 Voting	58.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	32.0
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	Schedule taken from client data Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis Construction schedule compressed to account for 2025 Opening Year
Construction: Off-Road Equipment	T/L/Bs replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases Standard 8 hours work days
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
Construction: Architectural Coatings	SCAQMD Rule 1113

15517 - 1101 California (Operations) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15517 - 1101 California (Operations)
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	24.0
Location	1101 California St, Redlands, CA 92374, USA
County	San Bernardino-South Coast
City	Redlands
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5394
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Unrefrigerated Warehouse-No Rail	286	1000sqft	6.57	286,088	87,490	—	—	—

Industrial Park	71.5	1000sqft	1.64	71,522	0.00	—	—	—
Parking Lot	401	Space	3.61	0.00	0.00	—	—	—
Other Asphalt Surfaces	6.83	Acre	6.83	0.00	0.00	—	—	—
User Defined Industrial	358	User Defined Unit	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power

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.	7.44	13.8	19.5	59.1	0.22	0.31	12.1	12.4	0.29	3.13	3.41	351	27,142	27,493	37.4	3.10	82.1	29,432
Mit.	7.44	13.8	19.5	59.1	0.22	0.31	12.1	12.4	0.29	3.13	3.41	351	24,556	24,907	37.1	3.07	82.1	26,831
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	10%	9%	1%	1%	—	9%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.53	11.1	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	351	26,509	26,860	37.4	3.11	8.64	28,730
Mit.	4.53	11.1	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	351	23,923	24,274	37.1	3.08	8.64	26,129

% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	10%	10%	1%	1%	—	9%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unmit.	5.66	12.4	15.9	43.2	0.17	0.23	9.84	10.1	0.22	2.55	2.77	351	21,734	22,085	37.0	2.47	32.7	23,780
Mit.	5.66	12.4	15.9	43.2	0.17	0.23	9.84	10.1	0.22	2.55	2.77	351	19,148	19,499	36.8	2.44	32.7	21,179
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	12%	12%	1%	1%	—	11%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unmit.	1.03	2.27	2.90	7.89	0.03	0.04	1.80	1.84	0.04	0.47	0.51	58.1	3,598	3,656	6.13	0.41	5.41	3,937
Mit.	1.03	2.27	2.90	7.89	0.03	0.04	1.80	1.84	0.04	0.47	0.51	58.1	3,170	3,228	6.09	0.40	5.41	3,506
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	12%	12%	1%	1%	—	11%

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	4.67	3.05	19.4	43.6	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,947	23,947	1.55	2.67	75.4	24,858
Area	2.77	10.7	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	—	2,586	2,586	0.24	0.03	—	2,601
Water	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Waste	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	7.44	13.8	19.5	59.1	0.22	0.31	12.1	12.4	0.29	3.13	3.41	351	27,142	27,493	37.4	3.10	82.1	29,432

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.53	2.90	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,378	23,378	1.56	2.69	1.96	24,220
Area	—	8.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,586	2,586	0.24	0.03	—	2,601
Water	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Waste	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	4.53	11.1	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	351	26,509	26,860	37.4	3.11	8.64	28,730
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.76	2.51	15.8	32.6	0.17	0.22	9.84	10.1	0.21	2.55	2.75	—	18,559	18,559	1.21	2.05	26.0	19,227
Area	1.89	9.93	0.09	10.7	< 0.005	0.02	—	0.02	0.01	—	0.01	—	43.8	43.8	< 0.005	< 0.005	—	44.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,586	2,586	0.24	0.03	—	2,601
Water	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Waste	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	5.66	12.4	15.9	43.2	0.17	0.23	9.84	10.1	0.22	2.55	2.77	351	21,734	22,085	37.0	2.47	32.7	23,780
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.46	2.88	5.94	0.03	0.04	1.80	1.84	0.04	0.47	0.50	—	3,073	3,073	0.20	0.34	4.31	3,183
Area	0.35	1.81	0.02	1.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.25	7.25	< 0.005	< 0.005	—	7.28
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	428	428	0.04	< 0.005	—	431
Water	—	—	—	—	—	—	—	—	—	—	—	26.2	90.2	116	2.70	0.06	—	203
Waste	—	—	—	—	—	—	—	—	—	—	—	31.9	0.00	31.9	3.19	0.00	—	112
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.11	1.11
Total	1.03	2.27	2.90	7.89	0.03	0.04	1.80	1.84	0.04	0.47	0.51	58.1	3,598	3,656	6.13	0.41	5.41	3,937

2.6. Operations Emissions by Sector, Mitigated

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	4.67	3.05	19.4	43.6	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,947	23,947	1.55	2.67	75.4	24,858
Area	2.77	10.7	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Waste	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	7.44	13.8	19.5	59.1	0.22	0.31	12.1	12.4	0.29	3.13	3.41	351	24,556	24,907	37.1	3.07	82.1	26,831
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.53	2.90	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,378	23,378	1.56	2.69	1.96	24,220
Area	—	8.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Waste	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	4.53	11.1	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	351	23,923	24,274	37.1	3.08	8.64	26,129
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.76	2.51	15.8	32.6	0.17	0.22	9.84	10.1	0.21	2.55	2.75	—	18,559	18,559	1.21	2.05	26.0	19,227
Area	1.89	9.93	0.09	10.7	< 0.005	0.02	—	0.02	0.01	—	0.01	—	43.8	43.8	< 0.005	< 0.005	—	44.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228

Waste	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	5.66	12.4	15.9	43.2	0.17	0.23	9.84	10.1	0.22	2.55	2.77	351	19,148	19,499	36.8	2.44	32.7	21,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.46	2.88	5.94	0.03	0.04	1.80	1.84	0.04	0.47	0.50	—	3,073	3,073	0.20	0.34	4.31	3,183
Area	0.35	1.81	0.02	1.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.25	7.25	< 0.005	< 0.005	—	7.28
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	< 0.005	< 0.005	< 0.005	—	< 0.005	—
Water	—	—	—	—	—	—	—	—	—	—	—	26.2	90.2	116	2.70	0.06	—	203
Waste	—	—	—	—	—	—	—	—	—	—	—	31.9	0.00	31.9	3.19	0.00	—	112
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.11	1.11
Total	1.03	2.27	2.90	7.89	0.03	0.04	1.80	1.84	0.04	0.47	0.51	58.1	3,170	3,228	6.09	0.40	5.41	3,506

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unrefrigerated Warehouse-No Rail	1.59	0.36	16.0	9.06	0.14	0.22	4.67	4.89	0.21	1.25	1.47	—	15,069	15,069	1.19	2.26	44.4	15,816
Industrial Park	0.18	0.04	1.78	1.03	0.02	0.03	0.53	0.55	0.02	0.14	0.17	—	1,675	1,675	0.13	0.25	5.10	1,757

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	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	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	2.91	2.65	1.65	33.5	0.07	0.03	6.85	6.89	0.03	1.73	1.76	—	7,203	7,203	0.24	0.17	25.9	7,285	
Total	4.67	3.05	19.4	43.6	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,947	23,947	1.55	2.67	75.4	24,858	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unrefrigerated Warehouse-No Rail	1.57	0.35	16.7	9.08	0.14	0.23	4.67	4.89	0.22	1.25	1.47	—	15,072	15,072	1.18	2.26	1.15	15,776	
Industrial Park	0.18	0.04	1.86	1.03	0.02	0.03	0.53	0.55	0.02	0.14	0.17	—	1,675	1,675	0.13	0.25	0.13	1,753	
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	
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	2.77	2.51	1.84	27.0	0.07	0.03	6.85	6.89	0.03	1.73	1.76	—	6,631	6,631	0.25	0.18	0.67	6,691	
Total	4.53	2.90	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,378	23,378	1.56	2.69	1.96	24,220	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unrefrigerated Warehouse-No Rail	0.21	0.05	2.25	1.21	0.02	0.03	0.62	0.65	0.03	0.17	0.19	—	1,826	1,826	0.14	0.27	2.32	1,913	
Industrial Park	0.03	0.01	0.32	0.18	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	262	262	0.02	0.04	0.34	274	

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
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	0.45	0.40	0.31	4.56	0.01	< 0.005	1.09	1.10	< 0.005	0.28	0.28	—	986	986	0.04	0.03	1.64	996
Total	0.69	0.46	2.88	5.94	0.03	0.04	1.80	1.84	0.04	0.47	0.50	—	3,073	3,073	0.20	0.34	4.31	3,183

4.1.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.59	0.36	16.0	9.06	0.14	0.22	4.67	4.89	0.21	1.25	1.47	—	15,069	15,069	1.19	2.26	44.4	15,816
Industrial Park	0.18	0.04	1.78	1.03	0.02	0.03	0.53	0.55	0.02	0.14	0.17	—	1,675	1,675	0.13	0.25	5.10	1,757
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
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	2.91	2.65	1.65	33.5	0.07	0.03	6.85	6.89	0.03	1.73	1.76	—	7,203	7,203	0.24	0.17	25.9	7,285
Total	4.67	3.05	19.4	43.6	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,947	23,947	1.55	2.67	75.4	24,858

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.57	0.35	16.7	9.08	0.14	0.23	4.67	4.89	0.22	1.25	1.47	—	15,072	15,072	1.18	2.26	1.15	15,776	
Industrial Park	0.18	0.04	1.86	1.03	0.02	0.03	0.53	0.55	0.02	0.14	0.17	—	1,675	1,675	0.13	0.25	0.13	1,753	
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	
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	2.77	2.51	1.84	27.0	0.07	0.03	6.85	6.89	0.03	1.73	1.76	—	6,631	6,631	0.25	0.18	0.67	6,691	
Total	4.53	2.90	20.4	37.1	0.22	0.28	12.1	12.3	0.27	3.13	3.39	—	23,378	23,378	1.56	2.69	1.96	24,220	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unrefrigerated Warehouse-No Rail	0.21	0.05	2.25	1.21	0.02	0.03	0.62	0.65	0.03	0.17	0.19	—	1,826	1,826	0.14	0.27	2.32	1,913	
Industrial Park	0.03	0.01	0.32	0.18	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	262	262	0.02	0.04	0.34	274	
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	
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	0.45	0.40	0.31	4.56	0.01	< 0.005	1.09	1.10	< 0.005	0.28	0.28	—	986	986	0.04	0.03	1.64	996	
Total	0.69	0.46	2.88	5.94	0.03	0.04	1.80	1.84	0.04	0.47	0.50	—	3,073	3,073	0.20	0.34	4.31	3,183	

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,262	1,262	0.12	0.01	—	1,269
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,192	1,192	0.11	0.01	—	1,199
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.01	< 0.005	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,586	2,586	0.24	0.03	—	2,601
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,262	1,262	0.12	0.01	—	1,269
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,192	1,192	0.11	0.01	—	1,199

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.01	< 0.005	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,586	2,586	0.24	0.03	—	2,601
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	209	209	0.02	< 0.005	—	210
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.02	< 0.005	—	199
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	21.8	21.8	< 0.005	< 0.005	—	21.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	428	428	0.04	< 0.005	—	431

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	—	< 0.005
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	—	< 0.005

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Industrial Park	0.00	0.00	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
Other Asphalt Surfaces	0.00	0.00	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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Industrial Park	0.00	0.00	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
Other Asphalt Surfaces	0.00	0.00	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
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Industrial Park	0.00	0.00	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
Other Asphalt Surfaces	0.00	0.00	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	—	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	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Industrial Park	0.00	0.00	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
Other Asphalt Surfaces	0.00	0.00	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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouses-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
Industrial Park	0.00	0.00	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
Other Asphalt Surfaces	0.00	0.00	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
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouses-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
Industrial Park	0.00	0.00	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
Other Asphalt Surfaces	0.00	0.00	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
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	—	7.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Architectural Coatings	—	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Landscape Equipment	2.77	2.55	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Total	2.77	10.7	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	7.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	8.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.35	0.32	0.02	1.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.25	7.25	< 0.005	< 0.005	—	7.28	
Total	0.35	1.81	0.02	1.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.25	7.25	< 0.005	< 0.005	—	7.28	

4.3.2. Mitigated

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	—	7.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.77	2.55	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Total	2.77	10.7	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.0	64.0	< 0.005	< 0.005	—	64.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	7.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	8.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.35	0.32	0.02	1.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.25	7.25	< 0.005	< 0.005	—	7.28
Total	0.35	1.81	0.02	1.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.25	7.25	< 0.005	< 0.005	—	7.28

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	127	437	564	13.0	0.31	—	984
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	31.7	108	139	3.26	0.08	—	244
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	127	437	564	13.0	0.31	—	984
Industrial Park	—	—	—	—	—	—	—	—	—	—	31.7	108	139	3.26	0.08	—	244
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	21.0	72.4	93.4	2.16	0.05	—	163
Industrial Park	—	—	—	—	—	—	—	—	—	—	5.25	17.8	23.1	0.54	0.01	—	40.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	26.2	90.2	116	2.70	0.06	—	203	

4.4.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	127	437	564	13.0	0.31	—	984
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	31.7	108	139	3.26	0.08	—	244
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	127	437	564	13.0	0.31	—	984
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	31.7	108	139	3.26	0.08	—	244
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	158	545	703	16.3	0.39	—	1,228
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	21.0	72.4	93.4	2.16	0.05	—	163
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	5.25	17.8	23.1	0.54	0.01	—	40.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	26.2	90.2	116	2.70	0.06	—	203

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	145	0.00	145	14.5	0.00	—	507
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	47.8	0.00	47.8	4.78	0.00	—	167
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	145	0.00	145	14.5	0.00	—	507
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	47.8	0.00	47.8	4.78	0.00	—	167
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	24.0	0.00	24.0	2.40	0.00	—	84.0	
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.79	0.00	—	27.7	
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00	
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	
Total	—	—	—	—	—	—	—	—	—	—	—	31.9	0.00	31.9	3.19	0.00	—	112	

4.5.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouses-Rail	—	—	—	—	—	—	—	—	—	—	—	145	0.00	145	14.5	0.00	—	507
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	47.8	0.00	47.8	4.78	0.00	—	167
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouses-No Rail	—	—	—	—	—	—	—	—	—	—	—	145	0.00	145	14.5	0.00	—	507
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	47.8	0.00	47.8	4.78	0.00	—	167
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	193	0.00	193	19.3	0.00	—	674
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouses-No Rail	—	—	—	—	—	—	—	—	—	—	—	24.0	0.00	24.0	2.40	0.00	—	84.0
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.79	0.00	—	27.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Total	—	—	—	—	—	—	—	—	—	—	—	31.9	0.00	31.9	3.19	0.00	—	112

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.11	1.11
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.11	1.11	1.11

4.6.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.69	6.69
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.11	1.11
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.11	1.11

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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

4.9. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Unrefrigerated Warehouse-No Rail	174	15.2	6.01	46,453	5,277	460	182	1,409,382
Industrial Park	20.0	16.2	15.9	6,896	598	482	476	205,764

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	648	396	382	209,516	9,833	6,013	5,796	3,179,356

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	174	15.2	6.01	46,453	5,277	460	182	1,409,382
Industrial Park	20.0	16.2	15.9	6,896	598	482	476	205,764
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	648	396	382	209,516	9,833	6,013	5,796	3,179,356

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

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	536,415	178,805	27,273

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Unrefrigerated Warehouse-No Rail	1,321,356	349	0.0330	0.0040	0.00
Industrial Park	1,248,194	349	0.0330	0.0040	0.00
Parking Lot	137,714	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	0.0330	0.0040	0.00

5.11.2. Mitigated

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)
Unrefrigerated Warehouse-No Rail	< 0.005	349	0.0330	0.0040	0.00

Industrial Park	< 0.005	349	0.0330	0.0040	0.00
Parking Lot	0.00	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	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)
Unrefrigerated Warehouse-No Rail	66,157,850	1,405,013
Industrial Park	16,539,463	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	66,157,850	1,405,013
Industrial Park	16,539,463	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
----------	------------------	-------------------------

Unrefrigerated Warehouse-No Rail	269	—
Industrial Park	88.7	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	269	—
Industrial Park	88.7	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Industrial	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
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0

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
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.15.2. Mitigated

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
----------------	-----------	----------------	---------------	----------------	------------	-------------

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
--------------------------	----------------------	---------------	-------------

5.18.1.2. Mitigated

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
--------------------	---------------	-------------

5.18.1.2. Mitigated

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)
-----------	--------	------------------------------	------------------------------

5.18.2.2. Mitigated

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	26.6	annual days of extreme heat

Extreme Precipitation	4.20	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	6.46	annual hectares burned

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

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ 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	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	100
AQ-PM	57.4
AQ-DPM	82.8
Drinking Water	96.3
Lead Risk Housing	29.2
Pesticides	74.7

Toxic Releases	44.2
Traffic	81.0
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	47.6
Haz Waste Facilities/Generators	96.8
Impaired Water Bodies	12.5
Solid Waste	0.00
Sensitive Population	—
Asthma	34.7
Cardio-vascular	45.1
Low Birth Weights	75.6
Socioeconomic Factor Indicators	—
Education	39.2
Housing	89.1
Linguistic	17.3
Poverty	55.9
Unemployment	14.4

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	37.76466059
Employed	27.51186963
Median HI	26.53663544
Education	—

Bachelor's or higher	60.5800077
High school enrollment	100
Preschool enrollment	11.52316181
Transportation	—
Auto Access	62.47914795
Active commuting	28.56409598
Social	—
2-parent households	37.02040293
Voting	39.83061722
Neighborhood	—
Alcohol availability	30.07827538
Park access	50.53252919
Retail density	65.94379571
Supermarket access	72.28281791
Tree canopy	43.62889773
Housing	—
Homeownership	9.303220839
Housing habitability	37.12305916
Low-inc homeowner severe housing cost burden	73.38637239
Low-inc renter severe housing cost burden	66.31592455
Uncrowded housing	31.19466188
Health Outcomes	—
Insured adults	48.58206082
Arthritis	92.2
Asthma ER Admissions	65.8
High Blood Pressure	95.2
Cancer (excluding skin)	82.6

Asthma	30.0
Coronary Heart Disease	94.7
Chronic Obstructive Pulmonary Disease	71.2
Diagnosed Diabetes	92.6
Life Expectancy at Birth	79.7
Cognitively Disabled	52.2
Physically Disabled	60.6
Heart Attack ER Admissions	32.7
Mental Health Not Good	41.5
Chronic Kidney Disease	95.6
Obesity	56.2
Pedestrian Injuries	53.3
Physical Health Not Good	67.2
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	13.6
Current Smoker	36.3
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	7.3
Elderly	81.9
English Speaking	84.0
Foreign-born	37.0
Outdoor Workers	85.1
Climate Change Adaptive Capacity	—

Impervious Surface Cover	69.4
Traffic Density	74.6
Traffic Access	23.0
Other Indices	—
Hardship	54.2
Other Decision Support	—
2016 Voting	58.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	32.0
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 Healthy Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

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	Schedule taken from client data Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis Construction schedule compressed to account for 2025 Opening Year
Construction: Off-Road Equipment	T/L/Bs replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases Standard 8 hours work days
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
Construction: Architectural Coatings	SCAQMD Rule 1113
Operations: Vehicle Data	Trip characteristics based on information provided in traffic analysis
Operations: Fleet Mix	Passenger Car Mix estimated based on CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, MCY). Truck Fleet Mix based on 2, 3 and 4 axle trucks
Operations: Architectural Coatings	SCAQMD Rule 1113
Operations: Energy Use	Per client data, natural gas will not be utilized
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater

This page intentionally left blank

APPENDIX 2.2:
EMFAC EMISSIONS SUMMARY

Emissions	Phase	Lb/Day	# Days	Emissions	Avg/Lb Day	Avg/Hourly
On-Site Exhaust PM-10	Demolition	1.06	20	21.2	1.06	0.1325
	Site Preparation	1.60	10	16	1.6	0.2
	Grading	1.45	30	43.5	1.45	0.18125
	Building Construction	0.51	159	80.295	0.505	0.063125
	Paving	0.35	30	10.5	0.35	0.04375
	Architectural Coating	0.04	30	1.2	0.04	0.005
		5.01	219	172.695	0.788561644	0.098570205
Off-Site Exhaust PM-10	Demolition	5.50E-02	20	1.1	0.055	0.006875
	Site Preparation	5.00E-03	10	0.05	0.005	0.000625
	Grading	2.65E-01	30	7.95	0.265	0.033125
	Building Construction	2.00E-02	159	3.18	0.02	0.0025
	Paving	0.00E+00	30	0	0	0
	Architectural Coating	0.00E+00	30	0	0	0
		3.45E-01	219	12.28	0.056073059	0.007009132

Phase	Start Date	End Date	No. Days
Demolition	7/1/2024	7/26/2024	20
Site Preparation	7/29/2024	8/9/2024	10
Grading	8/12/2024	9/20/2024	30
Building Construction	9/23/2024	5/1/2025	159
Paving	3/21/2025	5/1/2025	30
Architectural Coating	3/21/2025	5/1/2025	30
Total Days of Construction			219

**AVERAGE EMISSION FACTOR
SAN BERNARDINO COUNTY 2025**

Speed	LHD1	LHD2	MHD	HHD
0	0.319205	0.505674	0.042911	0.01249
5	0.036879	0.053315	0.025739	0.01121
25	0.017081	0.025609	0.006962	0.00555

Speed	Weighted Average Emissions
0	0.07949
5	0.01932
25	0.00818

Truck Emission Rates						
Source	Trucks Per Day	VMT ^a (miles/day)	Truck Emission Rate ^b (grams/mile)	Truck Emission Rate ^b (grams/idle-hour)	Daily Truck Emissions ^c (grams/day)	Modeled Emission Rates (g/second)
On-Site Idling	97			0.0795	1.93	2.231E-05
On-Site Travel	194	33.93	0.0193		0.66	7.589E-06
Off-Site Travel - Lugonia Avenue / California Avenue 100%	194	78.73	0.0082		0.64	7.452E-06

^a Vehicle miles traveled are for modeled truck route only.
^b Emission rates determined using EMFAC 2021. Idle emission rates are expressed in grams per idle hour rather than grams per mile.
^c This column includes the total truck travel and truck idle emissions. For idle emissions this column includes emissions based on the assumption that each truck idles for 15 minutes.

calendar_y	season_m	sub_area	vehicle_class	fuel	temperature	relative_hu	process	speed_tin	pollutant	emission_rate
2025	Annual	San Berna	HHDT	Dsl	60	70	RUNEX	5	PM10	0.013172
2025	Annual	San Berna	HHDT	Dsl	60	70	RUNEX	25	PM10	0.006514
2025	Annual	San Berna	HHDT	Dsl			IDLEX		PM10	0.014673
2025	Annual	San Berna	LHDT1	Dsl	60	70	RUNEX	5	PM10	0.091741
2025	Annual	San Berna	LHDT1	Dsl	60	70	RUNEX	25	PM10	0.04249
2025	Annual	San Berna	LHDT1	Dsl			IDLEX		PM10	0.794055
2025	Annual	San Berna	LHDT2	Dsl	60	70	RUNEX	5	PM10	0.084111
2025	Annual	San Berna	LHDT2	Dsl	60	70	RUNEX	25	PM10	0.040401
2025	Annual	San Berna	LHDT2	Dsl			IDLEX		PM10	0.797765
2025	Annual	San Berna	MHDT	Dsl	60	70	RUNEX	5	PM10	0.028132
2025	Annual	San Berna	MHDT	Dsl	60	70	RUNEX	25	PM10	0.007609
2025	Annual	San Berna	MHDT	Dsl			IDLEX		PM10	0.046902

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: San Bernardino (SC)

Calendar Year: 2025

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar	Vehicle Class	Model Year	Speed	Fuel	Population
San Bernar	2025	HHDT	Aggregate	Aggregate	Gasoline	3.86977
San Bernar	2025	HHDT	Aggregate	Aggregate	Diesel	14693.6
San Bernar	2025	HHDT	Aggregate	Aggregate	Natural Gas	2560.52
San Bernar	2025	LHDT1	Aggregate	Aggregate	Gasoline	16963.1
San Bernar	2025	LHDT1	Aggregate	Aggregate	Diesel	11403
San Bernar	2025	LHDT2	Aggregate	Aggregate	Gasoline	2823.95
San Bernar	2025	LHDT2	Aggregate	Aggregate	Diesel	4888.89
San Bernar	2025	MHDT	Aggregate	Aggregate	Gasoline	1427.42
San Bernar	2025	MHDT	Aggregate	Aggregate	Diesel	15347.5
San Bernar	2025	MHDT	Aggregate	Aggregate	Natural Gas	208.419

HHDT% GAS/NG	0.14859
HHDT% DSL	0.85141
LHDT1% GAS	0.59801
LHDT1% DSL	0.40199
LHDT2% GAS	0.36614
LHDT2% DSL	0.63386
MHDT% GAS	0.08509
MHDT% DSL	0.91491

This page intentionally left blank

APPENDIX 2.3:
AERMOD MODEL INPUT/OUTPUT

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 10/5/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517
Construction\15517 Construction.ADI
**
*****
**
**
*****  

** AERMOD Control Pathway
*****  

**
**
CO STARTING
    TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops
    MODELOPT DEFAULT CONC
    AVERTIME PERIOD
    URBANOPT 2035210 San_Bernardino_County
    POLLUTID DPM
    RUNORNOT RUN
    ERRORFIL "15517 Construction.err"
CO FINISHED
**
*****
**
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC Offsite 100%
** PREFIX
** Length of Side = 14.00
** Configuration = Adjacent
** Emission Rate = 0.0008831358
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 4
** 478944.110, 3769974.661, 351.40, 3.49, 6.51
** 479130.596, 3769977.864, 353.08, 3.49, 6.51
** 479129.528, 3769704.897, 353.95, 3.49, 6.51

```

** 479130.951, 3769511.294, 356.84, 3.49, 6.51

** -----

LOCATION L0000001	VOLUME	478951.109	3769974.781	351.71
LOCATION L0000002	VOLUME	478965.107	3769975.021	352.00
LOCATION L0000003	VOLUME	478979.105	3769975.262	352.00
LOCATION L0000004	VOLUME	478993.103	3769975.502	352.00
LOCATION L0000005	VOLUME	479007.101	3769975.742	352.00
LOCATION L0000006	VOLUME	479021.099	3769975.983	352.00
LOCATION L0000007	VOLUME	479035.097	3769976.223	352.00
LOCATION L0000008	VOLUME	479049.095	3769976.464	352.00
LOCATION L0000009	VOLUME	479063.093	3769976.704	352.44
LOCATION L0000010	VOLUME	479077.091	3769976.945	352.91
LOCATION L0000011	VOLUME	479091.089	3769977.185	353.00
LOCATION L0000012	VOLUME	479105.087	3769977.425	353.00
LOCATION L0000013	VOLUME	479119.084	3769977.666	353.00
LOCATION L0000014	VOLUME	479130.586	3769975.376	353.00
LOCATION L0000015	VOLUME	479130.531	3769961.376	353.00
LOCATION L0000016	VOLUME	479130.476	3769947.377	353.00
LOCATION L0000017	VOLUME	479130.422	3769933.377	353.07
LOCATION L0000018	VOLUME	479130.367	3769919.377	353.39
LOCATION L0000019	VOLUME	479130.312	3769905.377	353.69
LOCATION L0000020	VOLUME	479130.257	3769891.377	353.84
LOCATION L0000021	VOLUME	479130.203	3769877.377	353.99
LOCATION L0000022	VOLUME	479130.148	3769863.377	354.00
LOCATION L0000023	VOLUME	479130.093	3769849.377	354.00
LOCATION L0000024	VOLUME	479130.038	3769835.377	354.00
LOCATION L0000025	VOLUME	479129.984	3769821.378	354.00
LOCATION L0000026	VOLUME	479129.929	3769807.378	354.00
LOCATION L0000027	VOLUME	479129.874	3769793.378	354.00
LOCATION L0000028	VOLUME	479129.819	3769779.378	354.00
LOCATION L0000029	VOLUME	479129.764	3769765.378	354.00
LOCATION L0000030	VOLUME	479129.710	3769751.378	354.00
LOCATION L0000031	VOLUME	479129.655	3769737.378	354.00
LOCATION L0000032	VOLUME	479129.600	3769723.378	354.00
LOCATION L0000033	VOLUME	479129.545	3769709.378	354.00
LOCATION L0000034	VOLUME	479129.598	3769695.379	354.02
LOCATION L0000035	VOLUME	479129.701	3769681.379	354.33
LOCATION L0000036	VOLUME	479129.804	3769667.379	354.64
LOCATION L0000037	VOLUME	479129.907	3769653.380	354.81
LOCATION L0000038	VOLUME	479130.010	3769639.380	354.97
LOCATION L0000039	VOLUME	479130.113	3769625.381	355.86
LOCATION L0000040	VOLUME	479130.216	3769611.381	356.96
LOCATION L0000041	VOLUME	479130.318	3769597.381	357.95
LOCATION L0000042	VOLUME	479130.421	3769583.382	358.86
LOCATION L0000043	VOLUME	479130.524	3769569.382	359.24
LOCATION L0000044	VOLUME	479130.627	3769555.382	359.09
LOCATION L0000045	VOLUME	479130.730	3769541.383	358.62
LOCATION L0000046	VOLUME	479130.833	3769527.383	357.55
LOCATION L0000047	VOLUME	479130.936	3769513.384	356.60

** End of LINE VOLUME Source ID = SLINE3

LOCATION VOL1	VOLUME	479011.030	3769863.911	352.290
LOCATION VOL2	VOLUME	479010.777	3769715.148	353.000
** Source Parameters **				
** LINE VOLUME Source ID = SLINE3				
SRCPARAM L0000001	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000002	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000003	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000004	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000005	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000006	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000007	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000008	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000009	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000010	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000011	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000012	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000013	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000014	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000015	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000016	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000017	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000018	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000019	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000020	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000021	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000022	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000023	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000024	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000025	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000026	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000027	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000028	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000029	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000030	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000031	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000032	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000033	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000034	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000035	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000036	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000037	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000038	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000039	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000040	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000041	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000042	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000043	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000044	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000045	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000046	0.0000187901	3.49	6.51	3.25

	SRCPARAM L0000047	0.0000187901	3.49	6.51	3.25
** -----					
	SRCPARAM VOL1	0.0062098185	5.000	44.523	1.400
	SRCPARAM VOL2	0.0062098185	5.000	44.523	1.400
	URBANSRC ALL				
** Variable Emissions Type: "By Hour / Day (HRDOW)"					
** Variable Emission Scenario: "Scenario 1"					
** WeekDays:					
	EMISFACT L0000001	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000001	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000001	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000001	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000002	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000002	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000002	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000002	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000003	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000003	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000003	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000003	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000004	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000004	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000004	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000004	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000005	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000005	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000005	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000005	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000006	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000006	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000006	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000006	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000007	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000007	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000007	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000007	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000008	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000008	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000008	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000008	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000009	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000009	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000009	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000009	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000010	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000010	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0			
	EMISFACT L0000010	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000010	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
	EMISFACT L0000011	HRDOW 0.0 0.0 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
SRCGROUP ALL

SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**

RE STARTING
    INCLUDED "15517 Construction.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**

ME STARTING
    SURFFILE RDLD_V9_ADJU\RDLD_v9.SFC
    PROFILE RDLD_V9_ADJU\RDLD_v9.PFL
    SURFDATA 3171 2012
    UAIRDATA 3190 2012
    SITEDATA 99999 2012
    PROFBASE 481.0 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**

OU STARTING
** Auto-Generated Plotfiles
    PLOTFILE PERIOD ALL "15517 CONSTRUCTION.AD\PE00GALL.PLT" 31
    SUMMFILE "15517 Construction.sum"
OU FINISHED
**
*****
** Project Parameters
*****
**

** PROJCTN CoordinateSystemUTM
** DESCPTN UTM: Universal Transverse Mercator
** DATUM North American Datum 1983
** DTMRGN CONUS
** UNITS m
```

```
** ZONE      11
** ZONEINX   0
**
** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 10/5/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517
Construction\15517 Construction.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
    TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops
    MODELOPT DFAULT CONC
    AVERTIME PERIOD
    URBANOPT 2035210 San_Bernardino_County
    POLLUTID DPM
    RUNORNOT RUN
    ERRORFIL "15517 Construction.err"
CO FINISHED
**
*****
**
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC Offsite 100%
** PREFIX
** Length of Side = 14.00
** Configuration = Adjacent
** Emission Rate = 0.0008831358
** Vertical Dimension = 6.99
** SZINIT = 3.25
```

```

** Nodes = 4
** 478944.110, 3769974.661, 351.40, 3.49, 6.51
** 479130.596, 3769977.864, 353.08, 3.49, 6.51
** 479129.528, 3769704.897, 353.95, 3.49, 6.51
** 479130.951, 3769511.294, 356.84, 3.49, 6.51
** -----
LOCATION L0000001 VOLUME 478951.109 3769974.781 351.71
LOCATION L0000002 VOLUME 478965.107 3769975.021 352.00
LOCATION L0000003 VOLUME 478979.105 3769975.262 352.00
LOCATION L0000004 VOLUME 478993.103 3769975.502 352.00
LOCATION L0000005 VOLUME 479007.101 3769975.742 352.00
LOCATION L0000006 VOLUME 479021.099 3769975.983 352.00
LOCATION L0000007 VOLUME 479035.097 3769976.223 352.00
LOCATION L0000008 VOLUME 479049.095 3769976.464 352.00
LOCATION L0000009 VOLUME 479063.093 3769976.704 352.44
LOCATION L0000010 VOLUME 479077.091 3769976.945 352.91
LOCATION L0000011 VOLUME 479091.089 3769977.185 353.00
LOCATION L0000012 VOLUME 479105.087 3769977.425 353.00
LOCATION L0000013 VOLUME 479119.084 3769977.666 353.00
LOCATION L0000014 VOLUME 479130.586 3769975.376 353.00
LOCATION L0000015 VOLUME 479130.531 3769961.376 353.00
LOCATION L0000016 VOLUME 479130.476 3769947.377 353.00
LOCATION L0000017 VOLUME 479130.422 3769933.377 353.07
LOCATION L0000018 VOLUME 479130.367 3769919.377 353.39
LOCATION L0000019 VOLUME 479130.312 3769905.377 353.69
LOCATION L0000020 VOLUME 479130.257 3769891.377 353.84
LOCATION L0000021 VOLUME 479130.203 3769877.377 353.99
LOCATION L0000022 VOLUME 479130.148 3769863.377 354.00
LOCATION L0000023 VOLUME 479130.093 3769849.377 354.00
LOCATION L0000024 VOLUME 479130.038 3769835.377 354.00
LOCATION L0000025 VOLUME 479129.984 3769821.378 354.00
LOCATION L0000026 VOLUME 479129.929 3769807.378 354.00
LOCATION L0000027 VOLUME 479129.874 3769793.378 354.00
LOCATION L0000028 VOLUME 479129.819 3769779.378 354.00
LOCATION L0000029 VOLUME 479129.764 3769765.378 354.00
LOCATION L0000030 VOLUME 479129.710 3769751.378 354.00
LOCATION L0000031 VOLUME 479129.655 3769737.378 354.00
LOCATION L0000032 VOLUME 479129.600 3769723.378 354.00
LOCATION L0000033 VOLUME 479129.545 3769709.378 354.00
LOCATION L0000034 VOLUME 479129.598 3769695.379 354.02
LOCATION L0000035 VOLUME 479129.701 3769681.379 354.33
LOCATION L0000036 VOLUME 479129.804 3769667.379 354.64
LOCATION L0000037 VOLUME 479129.907 3769653.380 354.81
LOCATION L0000038 VOLUME 479130.010 3769639.380 354.97
LOCATION L0000039 VOLUME 479130.113 3769625.381 355.86
LOCATION L0000040 VOLUME 479130.216 3769611.381 356.96
LOCATION L0000041 VOLUME 479130.318 3769597.381 357.95
LOCATION L0000042 VOLUME 479130.421 3769583.382 358.86
LOCATION L0000043 VOLUME 479130.524 3769569.382 359.24
LOCATION L0000044 VOLUME 479130.627 3769555.382 359.09

```

LOCATION L0000045	VOLUME	479130.730	3769541.383	358.62
LOCATION L0000046	VOLUME	479130.833	3769527.383	357.55
LOCATION L0000047	VOLUME	479130.936	3769513.384	356.60
** End of LINE VOLUME Source ID = SLINE3				
LOCATION VOL1	VOLUME	479011.030	3769863.911	352.290
LOCATION VOL2	VOLUME	479010.777	3769715.148	353.000
** Source Parameters **				
** LINE VOLUME Source ID = SLINE3				
SRCPARAM L0000001	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000002	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000003	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000004	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000005	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000006	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000007	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000008	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000009	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000010	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000011	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000012	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000013	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000014	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000015	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000016	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000017	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000018	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000019	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000020	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000021	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000022	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000023	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000024	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000025	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000026	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000027	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000028	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000029	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000030	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000031	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000032	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000033	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000034	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000035	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000036	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000037	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000038	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000039	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000040	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000041	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000042	0.0000187901	3.49	6.51	3.25

SRCPARAM L0000043	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000044	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000045	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000046	0.0000187901	3.49	6.51	3.25
SRCPARAM L0000047	0.0000187901	3.49	6.51	3.25
** -----				
SRCPARAM VOL1	0.0062098185	5.000	44.523	1.400
SRCPARAM VOL2	0.0062098185	5.000	44.523	1.400
URBANSRC ALL				

** Variable Emissions Type: "By Hour / Day (HRDOW)"

** Variable Emission Scenario: "Scenario 1"

** WeekDays:

EMISFACT L0000001	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000001	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000001	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000001	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000002	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000002	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000002	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000002	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000003	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000003	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000003	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000003	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000004	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000004	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000004	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000004	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000005	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000005	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000005	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000005	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000006	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000006	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000006	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000006	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000007	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000007	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000007	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000007	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000008	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000008	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000008	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000008	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000009	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000009	HRDOW 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000009	HRDOW 1.0 1.0 1.0 1.0 0.0 0.0 0.0 0.0
EMISFACT L0000009	HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000010	HRDOW 0.0 0.0 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 0.0
EMISFACT VOL2           HRDOW 0.0 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 0.0
EMISFACT VOL2           HRDOW 0.0 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 0.0
EMISFACT VOL2           HRDOW 0.0 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 0.0
EMISFACT VOL2           HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP ALL

SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**

RE STARTING
    INCLUDED "15517 Construction.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**

ME STARTING
    SURFFILE RDLD_V9_ADJU\RDLD_v9.SFC
    PROFILE RDLD_V9_ADJU\RDLD_v9.PFL
    SURFDATA 3171 2012
    UAIRDATA 3190 2012
    SITEDATA 99999 2012
    PROFBASE 481.0 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**

OU STARTING
** Auto-Generated Plotfiles
    PLOTFILE PERIOD ALL "15517 CONSTRUCTION.AD\PE00GALL.PLT" 31
    SUMMFILE "15517 Construction.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 779 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 779 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 1
*** MODELOPTs: RegDEFAULT CONC ELEV 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. DDPLET = 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 49 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2035210.0 ; Urban Roughness Length = 1.000 m
* Urban Roughness Length of 1.0 Meter Used.
* ADJ_U* - Use ADJ_U* option for SBL in AERMET

* TEMP_Sub - Meteorological data includes TEMP substitutions
* Model Assumes No FLAGPOLE Receptor Heights.
* The User Specified a Pollutant Type of: DPM

**Model Calculates PERIOD Averages Only

**This Run Includes: 49 Source(s); 1 Source Group(s); and 34 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 PONTHOR(s)
and: 49 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RЛИNEXT 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 PERIOD Averages by Receptor
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
Hours m for Missing
Hours b for Both Calm
and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 481.00 ; 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 = 3.6 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 15517 Construction.err

**File for Summary of Results: 15517 Construction.sum

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 13:35:42

PAGE 2
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.			
SOURCE		EMISSION RATE						
SZ	SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.			
	ID	SCALAR VARY			HEIGHT			
(METERS)		CATS.	(METERS)	(METERS)	(METERS)			
		BY						
L0000001	3.25	0	0.18790E-04	478951.1	3769974.8	351.7	3.49	6.51
	YES	HRDOW						
L0000002	3.25	0	0.18790E-04	478965.1	3769975.0	352.0	3.49	6.51
	YES	HRDOW						
L0000003	3.25	0	0.18790E-04	478979.1	3769975.3	352.0	3.49	6.51
	YES	HRDOW						
L0000004	3.25	0	0.18790E-04	478993.1	3769975.5	352.0	3.49	6.51
	YES	HRDOW						
L0000005	3.25	0	0.18790E-04	479007.1	3769975.7	352.0	3.49	6.51
	YES	HRDOW						
L0000006	3.25	0	0.18790E-04	479021.1	3769976.0	352.0	3.49	6.51
	YES	HRDOW						
L0000007	3.25	0	0.18790E-04	479035.1	3769976.2	352.0	3.49	6.51
	YES	HRDOW						
L0000008	3.25	0	0.18790E-04	479049.1	3769976.5	352.0	3.49	6.51
	YES	HRDOW						
L0000009	3.25	0	0.18790E-04	479063.1	3769976.7	352.4	3.49	6.51
	YES	HRDOW						
L0000010	3.25	0	0.18790E-04	479077.1	3769976.9	352.9	3.49	6.51
	YES	HRDOW						
L0000011	3.25	0	0.18790E-04	479091.1	3769977.2	353.0	3.49	6.51
	YES	HRDOW						
L0000012	3.25	0	0.18790E-04	479105.1	3769977.4	353.0	3.49	6.51
	YES	HRDOW						
L0000013	3.25	0	0.18790E-04	479119.1	3769977.7	353.0	3.49	6.51
	YES	HRDOW						

L0000014		0	0.18790E-04	479130.6	3769975.4	353.0	3.49	6.51
3.25	YES	HRDOW						
L0000015		0	0.18790E-04	479130.5	3769961.4	353.0	3.49	6.51
3.25	YES	HRDOW						
L0000016		0	0.18790E-04	479130.5	3769947.4	353.0	3.49	6.51
3.25	YES	HRDOW						
L0000017		0	0.18790E-04	479130.4	3769933.4	353.1	3.49	6.51
3.25	YES	HRDOW						
L0000018		0	0.18790E-04	479130.4	3769919.4	353.4	3.49	6.51
3.25	YES	HRDOW						
L0000019		0	0.18790E-04	479130.3	3769905.4	353.7	3.49	6.51
3.25	YES	HRDOW						
L0000020		0	0.18790E-04	479130.3	3769891.4	353.8	3.49	6.51
3.25	YES	HRDOW						
L0000021		0	0.18790E-04	479130.2	3769877.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000022		0	0.18790E-04	479130.1	3769863.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000023		0	0.18790E-04	479130.1	3769849.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000024		0	0.18790E-04	479130.0	3769835.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000025		0	0.18790E-04	479130.0	3769821.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000026		0	0.18790E-04	479129.9	3769807.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000027		0	0.18790E-04	479129.9	3769793.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000028		0	0.18790E-04	479129.8	3769779.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000029		0	0.18790E-04	479129.8	3769765.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000030		0	0.18790E-04	479129.7	3769751.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000031		0	0.18790E-04	479129.7	3769737.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000032		0	0.18790E-04	479129.6	3769723.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000033		0	0.18790E-04	479129.5	3769709.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000034		0	0.18790E-04	479129.6	3769695.4	354.0	3.49	6.51
3.25	YES	HRDOW						
L0000035		0	0.18790E-04	479129.7	3769681.4	354.3	3.49	6.51
3.25	YES	HRDOW						
L0000036		0	0.18790E-04	479129.8	3769667.4	354.6	3.49	6.51
3.25	YES	HRDOW						
L0000037		0	0.18790E-04	479129.9	3769653.4	354.8	3.49	6.51
3.25	YES	HRDOW						
L0000038		0	0.18790E-04	479130.0	3769639.4	355.0	3.49	6.51
3.25	YES	HRDOW						

L0000039	0	0.18790E-04	479130.1	3769625.4	355.9	3.49	6.51
3.25	YES	HRDOW					
L0000040	0	0.18790E-04	479130.2	3769611.4	357.0	3.49	6.51
3.25	YES	HRDOW					
▲ *** AERMOD - VERSION 22112 ***			*** C:\Users\Michael Tirohn\Desktop\HRAs\15517				
1101 California\15517 Ops ***			10/05/23				
*** AERMET - VERSION 16216 ***			***				
			***	13:35:42			

PAGE 3
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER EMISSION RATE	BASE	RELEASE	INIT.
SOURCE		EMISSION RATE			
SZ	SOURCE	PART. (GRAMS/SEC)	X	Y	ELEV.
		SCALAR VARY			HEIGHT
ID		CATS.	(METERS)	(METERS)	(METERS)
(METERS)		BY			(METERS)
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -

L0000041	0	0.18790E-04	479130.3	3769597.4	357.9	3.49	6.51
3.25	YES	HRDOW					
L0000042	0	0.18790E-04	479130.4	3769583.4	358.9	3.49	6.51
3.25	YES	HRDOW					
L0000043	0	0.18790E-04	479130.5	3769569.4	359.2	3.49	6.51
3.25	YES	HRDOW					
L0000044	0	0.18790E-04	479130.6	3769555.4	359.1	3.49	6.51
3.25	YES	HRDOW					
L0000045	0	0.18790E-04	479130.7	3769541.4	358.6	3.49	6.51
3.25	YES	HRDOW					
L0000046	0	0.18790E-04	479130.8	3769527.4	357.6	3.49	6.51
3.25	YES	HRDOW					
L0000047	0	0.18790E-04	479130.9	3769513.4	356.6	3.49	6.51
3.25	YES	HRDOW					
VOL1	0	0.62098E-02	479011.0	3769863.9	352.3	5.00	44.52
1.40	YES	HRDOW					
VOL2	0	0.62098E-02	479010.8	3769715.1	353.0	5.00	44.52
1.40	YES	HRDOW					
▲ *** AERMOD - VERSION 22112 ***			*** C:\Users\Michael Tirohn\Desktop\HRAs\15517				
1101 California\15517 Ops ***			10/05/23				
*** AERMET - VERSION 16216 ***			***				
			***	13:35:42			

PAGE 4
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID	SOURCE IDs
ALL	,
L0000006	L0000001 , L0000007 , L0000002 , L0000008 , L0000003 , L0000004 , L0000005 , ,
L0000014	L0000009 , L0000015 , L0000010 , L0000016 , L0000011 , L0000012 , L0000013 , ,
L0000022	L0000017 , L0000023 , L0000018 , L0000024 , L0000019 , L0000020 , L0000021 , ,
L0000030	L0000025 , L0000031 , L0000026 , L0000032 , L0000027 , L0000028 , L0000029 , ,
L0000038	L0000033 , L0000039 , L0000034 , L0000040 , L0000035 , L0000036 , L0000037 , ,
L0000046	L0000041 , L0000047 , L0000042 , VOL1 , L0000043 , L0000044 , L0000045 , ,

VOL2 ,

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 13:35:42

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

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
L0000005	2035210. , L0000006	L0000001 , L0000007 , L0000002 , L0000003 , L0000004 , ,
L0000008	,	
L0000014	L0000009 , L0000015	, L0000010 , L0000016 , L0000011 , L0000012 , L0000013 , ,

L0000022 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000030 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 ,
L0000038 , L0000033 , L0000034 , L0000035 , L0000036 , L0000037 ,
L0000046 , L0000041 , L0000042 , L0000043 , L0000044 , L0000045 ,
L0000047 , VOL1 ,

VOL2 ,

↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 13:35:42

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U* PAGE 6

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

SOURCE ID = L0000001 ; 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				
	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01
14	.1000E+01	15	.1000E+01	16	.1000E+01				
	.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				
	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00
14	.0000E+00	15	.0000E+00	16	.0000E+00				
	.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				
	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00
14	.0000E+00	15	.0000E+00	16	.0000E+00				
	.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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 7

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000002 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 8

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000003 ; 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
6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01
14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY					
1	.0000E+00	2	.0000E+00	3	.0000E+00
6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00
14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY					
1	.0000E+00	2	.0000E+00	3	.0000E+00
6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00
14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00
↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517					
1101 California\15517 Ops *** 10/05/23					
*** AERMET - VERSION 16216 *** ***					
*** 13:35:42					

PAGE 9

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000004 ; SOURCE TYPE = VOLUME :											
HOUR	SCALAR	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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 10

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000005	; SOURCE TYPE = VOLUME	:			
HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23

*** AERMET - VERSION 16216 *** ***
 13:35:42

PAGE 11

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000006 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops *** 10/05/23									
*** AERMET - VERSION 16216 *** ***									
13:35:42									

PAGE 12

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000007 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 13
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000008 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 14

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000009 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517											
1101 California\15517 Ops *** 10/05/23											
*** AERMET - VERSION 16216 *** ***											
*** 13:35:42											

PAGE 15

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000010 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23

*** AERMET - VERSION 16216 *** ***

*** 13:35:42

PAGE 16

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000011 ; 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 22112 ***	*** C:\Users\Michael Tirohn\Desktop\HRAs\15517								
1101 California\15517 Ops ***	10/05/23								
*** AERMET - VERSION 16216 ***	***								
	*** 13:35:42								

PAGE 17

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000012 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 18
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000013 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 21

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000016 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 22

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000017 ; SOURCE TYPE = VOLUME :									
HOUR	SCALAR	HOUR	SCALAR	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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517									
1101 California\15517 Ops ***									
*** AERMET - VERSION 16216 *** ***									

PAGE 23

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000018 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops *** 10/05/23 *** AERMET - VERSION 16216 *** *** *** 13:35:42									

PAGE 24

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000019 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 25

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000020 ; SOURCE TYPE = VOLUME :
 HOUR SCALAR 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 26

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000021 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517									
1101 California\15517 Ops *** 10/05/23									
*** AERMET - VERSION 16216 *** ***									
*** 13:35:42									

PAGE 27

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000022 ; 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
14	.1000E+01	15	.1000E+01	16	.1000E+01			13	.1000E+01
		17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00			21	.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
14	.0000E+00	15	.0000E+00	16	.0000E+00			13	.0000E+00
		17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00			21	.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
14	.0000E+00	15	.0000E+00	16	.0000E+00			13	.0000E+00
		17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00			21	.0000E+00

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 28

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000023 ; 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
14	.1000E+01	15	.1000E+01	16	.1000E+01			13	.1000E+01
		17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00			21	.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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** *** 13:35:42

PAGE 29

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000024 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 30

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000025 ; 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
6	.0000E+00	7	.0000E+00	8	.0000E+00	5	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
14	.1000E+01	15	.1000E+01	16	.1000E+01	13	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00	21	.0000E+00
DAY OF WEEK = SATURDAY							
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
6	.0000E+00	7	.0000E+00	8	.0000E+00	5	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00
14	.0000E+00	15	.0000E+00	16	.0000E+00	13	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00	21	.0000E+00
DAY OF WEEK = SUNDAY							
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
6	.0000E+00	7	.0000E+00	8	.0000E+00	5	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00
14	.0000E+00	15	.0000E+00	16	.0000E+00	13	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00	21	.0000E+00
↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517							
1101 California\15517 Ops *** 10/05/23							
*** AERMET - VERSION 16216 *** ***							
*** 13:35:42							

PAGE 31

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000026 ; SOURCE TYPE = VOLUME :

	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR
	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 22112 ***					*** C:\Users\Michael Tirohn\Desktop\HRAs\15517		
1101 California\15517 Ops	***					10/05/23		
*** AERMET - VERSION 16216 ***						***		
	***					13:35:42		

PAGE 32

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR	HOUR SCALAR
	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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517				
1101 California\15517 Ops						10/05/23				
						*** AERMET - VERSION 16216 *** ***				
						*** 13:35:42				

PAGE 33

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000028 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517				

1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 34
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000029 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 35
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000030 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517  

1101 California\15517 Ops *** 10/05/23  

*** AERMET - VERSION 16216 *** ***  

*** *** 13:35:42

```

PAGE 36
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

```

SOURCE ID = L0000031 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 37

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000032 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***

*** 13:35:42

PAGE 38

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000033 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517											
1101 California\15517 Ops *** 10/05/23											
*** AERMET - VERSION 16216 *** ***											

PAGE 39

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000034 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 40

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000035 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 41
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*
 * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY
 OF WEEK (HRDOW) *

SOURCE ID = L0000036 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 42

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000037 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 43

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000038 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 44

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000039 ; 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 22112 ***									*** C:\Users\Michael Tirohn\Desktop\HRAs\15517	
1101 California\15517 Ops ***									10/05/23	
*** AERMET - VERSION 16216 ***									***	
									13:35:42	

PAGE 45

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME :	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 22112 ***									*** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops ***									10/05/23
*** AERMET - VERSION 16216 ***									***
									13:35:42

PAGE 46

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000041 ; SOURCE TYPE = VOLUME :									
HOUR	SCALAR	HOUR	SCALAR	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 22112 ***									*** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops ***									10/05/23
*** AERMET - VERSION 16216 ***									***
									13:35:42

PAGE 47

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000042 ; SOURCE TYPE = VOLUME :									
HOUR	SCALAR	HOUR	SCALAR	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 22112 ***
1101 California\15517 Ops ***
*** AERMET - VERSION 16216 ***
***                                     ***
                                         10/05/23
                                         13:35:42

```

PAGE 48

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 49

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000044 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 13:35:42

PAGE 50

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY

OF WEEK (HRDOW) *

SOURCE ID = L0000045 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517									
1101 California\15517 Ops *** 10/05/23									
*** AERMET - VERSION 16216 *** ***									
13:35:42									

PAGE 51

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000046 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** *** 13:35:42

PAGE 52

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

SOURCE ID = L0000047 ; 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 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 53

*** MODELOPTs: RegDFAULT CONC ELEV 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		

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 54

*** MODELOPTs: RegDFAULT CONC ELEV 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

 ↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517

 1101 California\15517 Ops *** 10/05/23

 *** AERMET - VERSION 16216 ***

 *** 13:35:42

PAGE 55
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

(478876.0, 3769931.4, 351.0, 351.0, 0.0); (478877.6,
 3769651.8, 353.0, 353.0, 0.0);
 (478859.2, 3769802.1, 351.0, 351.0, 0.0); (479179.1,
 3769797.0, 355.0, 355.0, 0.0);
 (479162.3, 3769658.4, 356.1, 356.1, 0.0); (479002.7,
 3770069.2, 352.0, 352.0, 0.0);
 (479180.7, 3770058.9, 354.0, 354.0, 0.0); (479197.0,
 3769435.8, 356.2, 356.2, 0.0);
 (478625.7, 3770048.7, 348.0, 348.0, 0.0); (479108.4,
 3769448.1, 353.9, 353.9, 0.0);
 (478730.5, 3769435.3, 348.0, 348.0, 0.0); (478745.6,
 3769434.8, 348.0, 348.0, 0.0);

```

( 478760.8, 3769434.5,      348.0,      348.0,      0.0);      ( 478777.5,
3769434.0,      348.0,      348.0,      0.0);
( 478793.2, 3769433.5,      348.0,      348.0,      0.0);      ( 478808.6,
3769431.4,      348.0,      348.0,      0.0);
( 478825.1, 3769427.8,      348.0,      348.0,      0.0);      ( 478840.3,
3769423.7,      348.1,      348.1,      0.0);
( 478855.5, 3769418.8,      349.2,      349.2,      0.0);      ( 478870.9,
3769413.4,      350.0,      350.0,      0.0);
( 478885.0, 3769408.6,      350.5,      350.5,      0.0);      ( 478898.4,
3769400.6,      350.9,      350.9,      0.0);
( 478912.0, 3769393.6,      351.0,      351.0,      0.0);      ( 478928.5,
3769364.1,      351.0,      351.0,      0.0);
( 478953.2, 3769343.5,      351.8,      351.8,      0.0);      ( 478969.9,
3769339.1,      352.0,      352.0,      0.0);
( 479021.6, 3769284.1,      353.0,      353.0,      0.0);      ( 479038.3,
3769269.7,      352.9,      352.9,      0.0);
( 479048.3, 3769238.6,      352.9,      352.9,      0.0);      ( 479177.1,
3769144.2,      354.0,      354.0,      0.0);
( 479050.1, 3769128.0,      353.0,      353.0,      0.0);      ( 478653.6,
3769409.1,      348.0,      348.0,      0.0);
( 478719.0, 3769386.4,      348.0,      348.0,      0.0);      ( 478680.6,
3769388.2,      348.0,      348.0,      0.0);
↑ *** AERMOD - VERSION 22112 ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops ***           10/05/23
*** AERMET - VERSION 16216 ***   ***
***                                         13:35:42

```

PAGE 56

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ U*

*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***

(1=YES; 0=NO)

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)

10.80,
1.54, 3.09, 5.14, 8.23,
*** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 57
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*
*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

Surface file: RDLD_V9_ADJU\RDLD_v9.SFC
Met Version: 16216

Profile file: RDLD_V9_ADJU\RDLD_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3171
Name: UNKNOWN

Upper air station no.: 3190
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	-10.6	0.149	-9.000	-9.000	-999.	138.	26.7	0.32	3.22	
1.00		1.30	110.		9.1	285.4		5.5						
12	01	01	1	02	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22	
1.00		0.90	130.		9.1	284.5		5.5						
12	01	01	1	03	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22	
1.00		0.90	100.		9.1	285.0		5.5						
12	01	01	1	04	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22	
1.00		0.90	107.		9.1	284.6		5.5						
12	01	01	1	05	-10.7	0.149	-9.000	-9.000	-999.	138.	26.7	0.32	3.22	
1.00		1.30	98.		9.1	284.9		5.5						

12	01	01	1	06	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00			0.90	86.	9.1	284.5		5.5					
12	01	01	1	07	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00			0.90	91.	9.1	284.0		5.5					
12	01	01	1	08	-4.0	0.102	-9.000	-9.000	-999.	78.	22.9	0.32	3.22
0.54			0.90	107.	9.1	285.0		5.5					
12	01	01	1	09	44.6	0.237	0.382	0.006	43.	276.	-25.6	0.15	3.22
0.33			2.10	81.	10.1	289.1		5.5					
12	01	01	1	10	134.3	0.111	0.882	0.008	176.	99.	-1.0	0.32	3.22
0.26			0.40	72.	9.1	295.1		5.5					
12	01	01	1	11	199.8	0.409	1.429	0.005	503.	627.	-29.4	0.15	3.22
0.23			3.68	78.	10.1	297.9		5.5					
12	01	01	1	12	232.3	0.300	1.889	0.005	999.	402.	-10.0	0.32	3.22
0.22			1.80	333.	9.1	299.4		5.5					
12	01	01	1	13	230.0	0.300	2.134	0.005	1453.	394.	-10.1	0.32	3.22
0.22			1.80	72.	9.1	300.4		5.5					
12	01	01	1	14	194.0	0.294	2.109	0.005	1663.	382.	-11.2	0.32	3.22
0.24			1.80	277.	9.1	301.0		5.5					
12	01	01	1	15	126.3	0.378	1.872	0.005	1784.	557.	-36.5	0.32	3.22
0.27			2.70	243.	9.1	301.0		5.5					
12	01	01	1	16	39.5	0.199	1.278	0.005	1817.	240.	-17.2	0.32	3.22
0.36			1.30	274.	9.1	300.1		5.5					
12	01	01	1	17	-4.7	0.101	-9.000	-9.000	-999.	85.	19.0	0.32	3.22
0.65			0.90	252.	9.1	298.2		5.5					
12	01	01	1	18	-4.9	0.102	-9.000	-9.000	-999.	78.	18.2	0.32	3.22
1.00			0.90	116.	9.1	296.4		5.5					
12	01	01	1	19	-18.8	0.204	-9.000	-9.000	-999.	220.	45.6	0.15	3.22
1.00			2.27	79.	10.1	292.2		5.5					
12	01	01	1	20	-5.0	0.102	-9.000	-9.000	-999.	83.	18.1	0.32	3.22
1.00			0.90	95.	9.1	290.2		5.5					
12	01	01	1	21	-5.0	0.102	-9.000	-9.000	-999.	78.	18.0	0.32	3.22
1.00			0.90	99.	9.1	287.8		5.5					
12	01	01	1	22	-5.0	0.102	-9.000	-9.000	-999.	78.	18.0	0.32	3.22
1.00			0.90	110.	9.1	287.6		5.5					
12	01	01	1	23	-10.6	0.149	-9.000	-9.000	-999.	138.	26.8	0.32	3.22
1.00			1.30	89.	9.1	287.2		5.5					
12	01	01	1	24	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00			0.90	105.	9.1	285.9		5.5					

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	5.5	0	-999.	-99.00	285.5	99.0	-99.00	-99.00
12	01	01	01	9.1	1	110.	1.30	-999.0	99.0	-99.00	-99.00

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

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517

1101 California\15517 Ops *** 10/05/23

*** AERMET - VERSION 16216 *** ***

*** 13:35:42

PAGE 58

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL

		INCLUDING SOURCE(S):	L0000001	, L0000002
, L0000003	, L0000004	, L0000005	,	
	L0000006	, L0000007	, L0000008	, L0000009
, L0000011	, L0000012	, L0000013	,	, L0000010
	L0000014	, L0000015	, L0000016	, L0000017
, L0000019	, L0000020	, L0000021	,	, L0000018
	L0000022	, L0000023	, L0000024	, L0000025
, L0000027	, L0000028	, . . .	,	, L0000026

*** DISCRETE CARTESIAN RECEPTOR POINTS

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

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	
Y-COORD (M)	CONC			
- - - - -	- - - - -	- - - - -	- - - - -	
	478875.95	3769931.43	0.01805	478877.62
3769651.75	0.01812			
	478859.20	3769802.06	0.02057	479179.08
3769797.03	0.03566			
	479162.33	3769658.44	0.03556	479002.72
3770069.16	0.01017			
	479180.66	3770058.94	0.00743	479197.02
3769435.79	0.00485			
	478625.69	3770048.71	0.00210	479108.44
3769448.08	0.00590			
	478730.47	3769435.31	0.00229	478745.64
3769434.80	0.00241			
	478760.82	3769434.54	0.00253	478777.53
3769434.03	0.00267			
	478793.22	3769433.51	0.00280	478808.65
3769431.45	0.00292			
	478825.11	3769427.85	0.00301	478840.28
3769423.74	0.00309			
	478855.45	3769418.85	0.00313	478870.88
3769413.45	0.00316			
	478885.02	3769408.57	0.00318	478898.40
3769400.60	0.00313			
	478912.03	3769393.65	0.00309	478928.48
3769364.08	0.00269			
	478953.17	3769343.51	0.00249	478969.89

3769339.13	0.00247			
	479021.57	3769284.10	0.00194	479038.29
3769269.70	0.00183			
	479048.32	3769238.59	0.00160	479177.08
3769144.21	0.00113			
	479050.08	3769128.04	0.00107	478653.64
3769409.06	0.00165			
	478718.99	3769386.37	0.00185	478680.57
3769388.18	0.00168			
▲ *** AERMOD - VERSION 22112 ***		*** C:\Users\Michael Tirohn\Desktop\HRAs\15517		
1101 California\15517 Ops ***		10/05/23		
*** AERMET - VERSION 16216 ***		***		
	***	13:35:42		

PAGE 59

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848
HRS) RESULTS ***

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

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

ALL	1ST HIGHEST VALUE IS	0.03566 AT (479179.08,	3769797.03,
355.00,	355.00, 0.00) DC	0.03556 AT (479162.33,	3769658.44,
356.14,	356.14, 0.00) DC	0.02057 AT (478859.20,	3769802.06,
351.00,	351.00, 0.00) DC	0.01812 AT (478877.62,	3769651.75,
353.00,	353.00, 0.00) DC	0.01805 AT (478875.95,	3769931.43,
351.00,	351.00, 0.00) DC	0.01017 AT (479002.72,	3770069.16,
352.00,	352.00, 0.00) DC	0.00743 AT (479180.66,	3770058.94,
354.00,	354.00, 0.00) DC	0.00590 AT (479108.44,	3769448.08,
353.95,	353.95, 0.00) DC	0.00485 AT (479197.02,	3769435.79,
356.22,	356.22, 0.00) DC	0.00318 AT (478885.02,	3769408.57,
	10TH HIGHEST VALUE IS		

350.51, 350.51, 0.00) DC

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

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 13:35:42

PAGE 60

*** MODELOPTs: RegDFAULT CONC ELEV 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 388 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 191 Calm Hours Identified

A Total of 197 Missing Hours Identified (0.45 Percent)

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

*** NONE ***

***** WARNING MESSAGES *****

ME W186 779 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 779 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** AERMOD Finishes Successfully ***

**

**

** AERMOD Input Produced by:

** AERMOD View Ver. 11.2.0

** Lakes Environmental Software Inc.

** Date: 10/5/2023

```

** File: C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops\15517
Ops.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**

CO STARTING
    TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops
    MODELOPT DEFAULT CONC
    AVERTIME PERIOD
    URBANOPT 2035210 San_Bernardino_County
    POLLUTID DPM
    RUNORNOT RUN
    ERRORFIL "15517 Ops.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**

SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 0.00002231
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 478962.255, 3769902.775, 351.98, 3.49, 4.00
** 478961.484, 3769683.960, 353.00, 3.49, 4.00
** -----
LOCATION L0000106      VOLUME   478962.240 3769898.480 352.00
LOCATION L0000107      VOLUME   478962.210 3769889.890 352.00
LOCATION L0000108      VOLUME   478962.179 3769881.300 352.00
LOCATION L0000109      VOLUME   478962.149 3769872.710 352.00
LOCATION L0000110      VOLUME   478962.119 3769864.120 352.00
LOCATION L0000111      VOLUME   478962.089 3769855.530 352.00
LOCATION L0000112      VOLUME   478962.058 3769846.941 352.00

```

LOCATION L0000113	VOLUME	478962.028	3769838.351	352.00
LOCATION L0000114	VOLUME	478961.998	3769829.761	352.00
LOCATION L0000115	VOLUME	478961.967	3769821.171	352.00
LOCATION L0000116	VOLUME	478961.937	3769812.581	352.00
LOCATION L0000117	VOLUME	478961.907	3769803.991	352.00
LOCATION L0000118	VOLUME	478961.877	3769795.401	352.00
LOCATION L0000119	VOLUME	478961.846	3769786.811	352.00
LOCATION L0000120	VOLUME	478961.816	3769778.221	352.00
LOCATION L0000121	VOLUME	478961.786	3769769.631	352.00
LOCATION L0000122	VOLUME	478961.755	3769761.041	352.00
LOCATION L0000123	VOLUME	478961.725	3769752.451	352.01
LOCATION L0000124	VOLUME	478961.695	3769743.861	352.03
LOCATION L0000125	VOLUME	478961.665	3769735.271	352.04
LOCATION L0000126	VOLUME	478961.634	3769726.681	352.06
LOCATION L0000127	VOLUME	478961.604	3769718.091	352.32
LOCATION L0000128	VOLUME	478961.574	3769709.501	352.59
LOCATION L0000129	VOLUME	478961.544	3769700.911	352.86
LOCATION L0000130	VOLUME	478961.513	3769692.321	353.00
** End of LINE VOLUME Source ID = SLINE1				
** -----				
** Line Source Represented by Adjacent Volume Sources				
** LINE VOLUME Source ID = SLINE2				
** DESCRSRC Onsite				
** PREFIX				
** Length of Side = 8.59				
** Configuration = Adjacent				
** Emission Rate = 7.589E-06				
** Vertical Dimension = 6.99				
** SZINIT = 3.25				
** Nodes = 2				
** 478944.466, 3769956.154, 351.36, 3.49, 4.00				
** 478944.822, 3769674.647, 353.00, 3.49, 4.00				
** -----				
LOCATION L0000131	VOLUME	478944.472	3769951.859	351.49
LOCATION L0000132	VOLUME	478944.482	3769943.269	351.49
LOCATION L0000133	VOLUME	478944.493	3769934.679	351.49
LOCATION L0000134	VOLUME	478944.504	3769926.089	351.49
LOCATION L0000135	VOLUME	478944.515	3769917.499	351.49
LOCATION L0000136	VOLUME	478944.526	3769908.909	351.49
LOCATION L0000137	VOLUME	478944.537	3769900.319	351.59
LOCATION L0000138	VOLUME	478944.548	3769891.729	351.74
LOCATION L0000139	VOLUME	478944.558	3769883.139	351.88
LOCATION L0000140	VOLUME	478944.569	3769874.549	352.00
LOCATION L0000141	VOLUME	478944.580	3769865.959	352.00
LOCATION L0000142	VOLUME	478944.591	3769857.369	352.00
LOCATION L0000143	VOLUME	478944.602	3769848.779	352.00
LOCATION L0000144	VOLUME	478944.613	3769840.189	352.00
LOCATION L0000145	VOLUME	478944.624	3769831.599	352.00
LOCATION L0000146	VOLUME	478944.634	3769823.009	352.00
LOCATION L0000147	VOLUME	478944.645	3769814.419	352.00

LOCATION L0000148	VOLUME	478944.656	3769805.829	352.00
LOCATION L0000149	VOLUME	478944.667	3769797.239	352.00
LOCATION L0000150	VOLUME	478944.678	3769788.649	352.00
LOCATION L0000151	VOLUME	478944.689	3769780.060	352.00
LOCATION L0000152	VOLUME	478944.700	3769771.470	352.00
LOCATION L0000153	VOLUME	478944.710	3769762.880	352.00
LOCATION L0000154	VOLUME	478944.721	3769754.290	352.00
LOCATION L0000155	VOLUME	478944.732	3769745.700	352.00
LOCATION L0000156	VOLUME	478944.743	3769737.110	352.00
LOCATION L0000157	VOLUME	478944.754	3769728.520	352.00
LOCATION L0000158	VOLUME	478944.765	3769719.930	352.21
LOCATION L0000159	VOLUME	478944.776	3769711.340	352.50
LOCATION L0000160	VOLUME	478944.787	3769702.750	352.79
LOCATION L0000161	VOLUME	478944.797	3769694.160	353.00
LOCATION L0000162	VOLUME	478944.808	3769685.570	353.00
LOCATION L0000163	VOLUME	478944.819	3769676.980	353.00
** End of LINE VOLUME Source ID = SLINE2				
** -----				
** Line Source Represented by Adjacent Volume Sources				
** LINE VOLUME Source ID = SLINE3				
** DESCRSRC Offsite 100%				
** PREFIX				
** Length of Side = 14.00				
** Configuration = Adjacent				
** Emission Rate = 7.452E-06				
** Vertical Dimension = 6.99				
** SZINIT = 3.25				
** Nodes = 4				
** 478944.110, 3769974.661, 351.40, 3.49, 6.51				
** 479130.596, 3769977.864, 353.08, 3.49, 6.51				
** 479129.528, 3769704.897, 353.95, 3.49, 6.51				
** 479130.951, 3769511.294, 356.84, 3.49, 6.51				
** -----				
LOCATION L0000164	VOLUME	478951.109	3769974.781	351.71
LOCATION L0000165	VOLUME	478965.107	3769975.021	352.00
LOCATION L0000166	VOLUME	478979.105	3769975.262	352.00
LOCATION L0000167	VOLUME	478993.103	3769975.502	352.00
LOCATION L0000168	VOLUME	479007.101	3769975.742	352.00
LOCATION L0000169	VOLUME	479021.099	3769975.983	352.00
LOCATION L0000170	VOLUME	479035.097	3769976.223	352.00
LOCATION L0000171	VOLUME	479049.095	3769976.464	352.00
LOCATION L0000172	VOLUME	479063.093	3769976.704	352.44
LOCATION L0000173	VOLUME	479077.091	3769976.945	352.91
LOCATION L0000174	VOLUME	479091.089	3769977.185	353.00
LOCATION L0000175	VOLUME	479105.087	3769977.425	353.00
LOCATION L0000176	VOLUME	479119.084	3769977.666	353.00
LOCATION L0000177	VOLUME	479130.586	3769975.376	353.00
LOCATION L0000178	VOLUME	479130.531	3769961.376	353.00
LOCATION L0000179	VOLUME	479130.476	3769947.377	353.00
LOCATION L0000180	VOLUME	479130.422	3769933.377	353.07

LOCATION L0000181	VOLUME	479130.367	3769919.377	353.39
LOCATION L0000182	VOLUME	479130.312	3769905.377	353.69
LOCATION L0000183	VOLUME	479130.257	3769891.377	353.84
LOCATION L0000184	VOLUME	479130.203	3769877.377	353.99
LOCATION L0000185	VOLUME	479130.148	3769863.377	354.00
LOCATION L0000186	VOLUME	479130.093	3769849.377	354.00
LOCATION L0000187	VOLUME	479130.038	3769835.377	354.00
LOCATION L0000188	VOLUME	479129.984	3769821.378	354.00
LOCATION L0000189	VOLUME	479129.929	3769807.378	354.00
LOCATION L0000190	VOLUME	479129.874	3769793.378	354.00
LOCATION L0000191	VOLUME	479129.819	3769779.378	354.00
LOCATION L0000192	VOLUME	479129.764	3769765.378	354.00
LOCATION L0000193	VOLUME	479129.710	3769751.378	354.00
LOCATION L0000194	VOLUME	479129.655	3769737.378	354.00
LOCATION L0000195	VOLUME	479129.600	3769723.378	354.00
LOCATION L0000196	VOLUME	479129.545	3769709.378	354.00
LOCATION L0000197	VOLUME	479129.598	3769695.379	354.02
LOCATION L0000198	VOLUME	479129.701	3769681.379	354.33
LOCATION L0000199	VOLUME	479129.804	3769667.379	354.64
LOCATION L0000200	VOLUME	479129.907	3769653.380	354.81
LOCATION L0000201	VOLUME	479130.010	3769639.380	354.97
LOCATION L0000202	VOLUME	479130.113	3769625.381	355.86
LOCATION L0000203	VOLUME	479130.216	3769611.381	356.96
LOCATION L0000204	VOLUME	479130.318	3769597.381	357.95
LOCATION L0000205	VOLUME	479130.421	3769583.382	358.86
LOCATION L0000206	VOLUME	479130.524	3769569.382	359.24
LOCATION L0000207	VOLUME	479130.627	3769555.382	359.09
LOCATION L0000208	VOLUME	479130.730	3769541.383	358.62
LOCATION L0000209	VOLUME	479130.833	3769527.383	357.55
LOCATION L0000210	VOLUME	479130.936	3769513.384	356.60

** End of LINE VOLUME Source ID = SLINE3

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000106	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000107	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000108	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000109	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000110	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000111	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000112	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000113	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000114	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000115	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000116	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000117	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000118	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000119	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000120	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000121	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000122	0.0000008924	3.49	4.00	3.25

SRCPARAM L0000123	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000124	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000125	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000126	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000127	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000128	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000129	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000130	0.0000008924	3.49	4.00	3.25
** -----				
** LINE VOLUME Source ID = SLINE2				
SRCPARAM L0000131	0.00000023	3.49	4.00	3.25
SRCPARAM L0000132	0.00000023	3.49	4.00	3.25
SRCPARAM L0000133	0.00000023	3.49	4.00	3.25
SRCPARAM L0000134	0.00000023	3.49	4.00	3.25
SRCPARAM L0000135	0.00000023	3.49	4.00	3.25
SRCPARAM L0000136	0.00000023	3.49	4.00	3.25
SRCPARAM L0000137	0.00000023	3.49	4.00	3.25
SRCPARAM L0000138	0.00000023	3.49	4.00	3.25
SRCPARAM L0000139	0.00000023	3.49	4.00	3.25
SRCPARAM L0000140	0.00000023	3.49	4.00	3.25
SRCPARAM L0000141	0.00000023	3.49	4.00	3.25
SRCPARAM L0000142	0.00000023	3.49	4.00	3.25
SRCPARAM L0000143	0.00000023	3.49	4.00	3.25
SRCPARAM L0000144	0.00000023	3.49	4.00	3.25
SRCPARAM L0000145	0.00000023	3.49	4.00	3.25
SRCPARAM L0000146	0.00000023	3.49	4.00	3.25
SRCPARAM L0000147	0.00000023	3.49	4.00	3.25
SRCPARAM L0000148	0.00000023	3.49	4.00	3.25
SRCPARAM L0000149	0.00000023	3.49	4.00	3.25
SRCPARAM L0000150	0.00000023	3.49	4.00	3.25
SRCPARAM L0000151	0.00000023	3.49	4.00	3.25
SRCPARAM L0000152	0.00000023	3.49	4.00	3.25
SRCPARAM L0000153	0.00000023	3.49	4.00	3.25
SRCPARAM L0000154	0.00000023	3.49	4.00	3.25
SRCPARAM L0000155	0.00000023	3.49	4.00	3.25
SRCPARAM L0000156	0.00000023	3.49	4.00	3.25
SRCPARAM L0000157	0.00000023	3.49	4.00	3.25
SRCPARAM L0000158	0.00000023	3.49	4.00	3.25
SRCPARAM L0000159	0.00000023	3.49	4.00	3.25
SRCPARAM L0000160	0.00000023	3.49	4.00	3.25
SRCPARAM L0000161	0.00000023	3.49	4.00	3.25
SRCPARAM L0000162	0.00000023	3.49	4.00	3.25
SRCPARAM L0000163	0.00000023	3.49	4.00	3.25
** -----				
** LINE VOLUME Source ID = SLINE3				
SRCPARAM L0000164	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000165	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000166	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000167	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000168	0.0000001586	3.49	6.51	3.25

SRCPARAM L0000169	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000170	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000171	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000172	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000173	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000174	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000175	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000176	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000177	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000178	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000179	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000180	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000181	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000182	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000183	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000184	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000185	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000186	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000187	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000188	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000189	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000190	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000191	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000192	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000193	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000194	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000195	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000196	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000197	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000198	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000199	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000200	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000201	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000202	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000203	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000204	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000205	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000206	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000207	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000208	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000209	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000210	0.0000001586	3.49	6.51	3.25

** -----

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

```
**
**
RE STARTING
    INCLUDED "15517 Ops.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
    SURFFILE RDLD_V9_ADJU\RDLD_v9.SFC
    PROFILE RDLD_V9_ADJU\RDLD_v9.PFL
    SURFDATA 3171 2012
    UAIRDATA 3190 2012
    SITEDATA 99999 2012
    PROFBASE 481.0 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
** Auto-Generated Plotfiles
    PLOTFILE PERIOD ALL "15517 Ops.AD\PE00GALL.PLT" 31
    SUMMFILE "15517 Ops.sum"
OU FINISHED
**
*****
** Project Parameters
*****
** PROJCTN CoordinateSystemUTM
** DESCPTN UTM: Universal Transverse Mercator
** DATUM North American Datum 1983
** DTMRGN CONUS
** UNITS m
** ZONE 11
** ZONEINX 0
**
** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 10/5/2023
```

```

** File: C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops\15517
Ops.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**

CO STARTING
    TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\15517 1101 California\15517 Ops
    MODELOPT DEFAULT CONC
    AVERTIME PERIOD
    URBANOPT 2035210 San_Bernardino_County
    POLLUTID DPM
    RUNORNOT RUN
    ERRORFIL "15517 Ops.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**

SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 0.00002231
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 478962.255, 3769902.775, 351.98, 3.49, 4.00
** 478961.484, 3769683.960, 353.00, 3.49, 4.00
** -----
LOCATION L0000106      VOLUME   478962.240 3769898.480 352.00
LOCATION L0000107      VOLUME   478962.210 3769889.890 352.00
LOCATION L0000108      VOLUME   478962.179 3769881.300 352.00
LOCATION L0000109      VOLUME   478962.149 3769872.710 352.00
LOCATION L0000110      VOLUME   478962.119 3769864.120 352.00
LOCATION L0000111      VOLUME   478962.089 3769855.530 352.00
LOCATION L0000112      VOLUME   478962.058 3769846.941 352.00

```

LOCATION L0000113	VOLUME	478962.028	3769838.351	352.00
LOCATION L0000114	VOLUME	478961.998	3769829.761	352.00
LOCATION L0000115	VOLUME	478961.967	3769821.171	352.00
LOCATION L0000116	VOLUME	478961.937	3769812.581	352.00
LOCATION L0000117	VOLUME	478961.907	3769803.991	352.00
LOCATION L0000118	VOLUME	478961.877	3769795.401	352.00
LOCATION L0000119	VOLUME	478961.846	3769786.811	352.00
LOCATION L0000120	VOLUME	478961.816	3769778.221	352.00
LOCATION L0000121	VOLUME	478961.786	3769769.631	352.00
LOCATION L0000122	VOLUME	478961.755	3769761.041	352.00
LOCATION L0000123	VOLUME	478961.725	3769752.451	352.01
LOCATION L0000124	VOLUME	478961.695	3769743.861	352.03
LOCATION L0000125	VOLUME	478961.665	3769735.271	352.04
LOCATION L0000126	VOLUME	478961.634	3769726.681	352.06
LOCATION L0000127	VOLUME	478961.604	3769718.091	352.32
LOCATION L0000128	VOLUME	478961.574	3769709.501	352.59
LOCATION L0000129	VOLUME	478961.544	3769700.911	352.86
LOCATION L0000130	VOLUME	478961.513	3769692.321	353.00
** End of LINE VOLUME Source ID = SLINE1				
** -----				
** Line Source Represented by Adjacent Volume Sources				
** LINE VOLUME Source ID = SLINE2				
** DESCRSRC Onsite				
** PREFIX				
** Length of Side = 8.59				
** Configuration = Adjacent				
** Emission Rate = 7.589E-06				
** Vertical Dimension = 6.99				
** SZINIT = 3.25				
** Nodes = 2				
** 478944.466, 3769956.154, 351.36, 3.49, 4.00				
** 478944.822, 3769674.647, 353.00, 3.49, 4.00				
** -----				
LOCATION L0000131	VOLUME	478944.472	3769951.859	351.49
LOCATION L0000132	VOLUME	478944.482	3769943.269	351.49
LOCATION L0000133	VOLUME	478944.493	3769934.679	351.49
LOCATION L0000134	VOLUME	478944.504	3769926.089	351.49
LOCATION L0000135	VOLUME	478944.515	3769917.499	351.49
LOCATION L0000136	VOLUME	478944.526	3769908.909	351.49
LOCATION L0000137	VOLUME	478944.537	3769900.319	351.59
LOCATION L0000138	VOLUME	478944.548	3769891.729	351.74
LOCATION L0000139	VOLUME	478944.558	3769883.139	351.88
LOCATION L0000140	VOLUME	478944.569	3769874.549	352.00
LOCATION L0000141	VOLUME	478944.580	3769865.959	352.00
LOCATION L0000142	VOLUME	478944.591	3769857.369	352.00
LOCATION L0000143	VOLUME	478944.602	3769848.779	352.00
LOCATION L0000144	VOLUME	478944.613	3769840.189	352.00
LOCATION L0000145	VOLUME	478944.624	3769831.599	352.00
LOCATION L0000146	VOLUME	478944.634	3769823.009	352.00
LOCATION L0000147	VOLUME	478944.645	3769814.419	352.00

LOCATION L0000148	VOLUME	478944.656	3769805.829	352.00
LOCATION L0000149	VOLUME	478944.667	3769797.239	352.00
LOCATION L0000150	VOLUME	478944.678	3769788.649	352.00
LOCATION L0000151	VOLUME	478944.689	3769780.060	352.00
LOCATION L0000152	VOLUME	478944.700	3769771.470	352.00
LOCATION L0000153	VOLUME	478944.710	3769762.880	352.00
LOCATION L0000154	VOLUME	478944.721	3769754.290	352.00
LOCATION L0000155	VOLUME	478944.732	3769745.700	352.00
LOCATION L0000156	VOLUME	478944.743	3769737.110	352.00
LOCATION L0000157	VOLUME	478944.754	3769728.520	352.00
LOCATION L0000158	VOLUME	478944.765	3769719.930	352.21
LOCATION L0000159	VOLUME	478944.776	3769711.340	352.50
LOCATION L0000160	VOLUME	478944.787	3769702.750	352.79
LOCATION L0000161	VOLUME	478944.797	3769694.160	353.00
LOCATION L0000162	VOLUME	478944.808	3769685.570	353.00
LOCATION L0000163	VOLUME	478944.819	3769676.980	353.00
** End of LINE VOLUME Source ID = SLINE2				
** -----				
** Line Source Represented by Adjacent Volume Sources				
** LINE VOLUME Source ID = SLINE3				
** DESCRSRC Offsite 100%				
** PREFIX				
** Length of Side = 14.00				
** Configuration = Adjacent				
** Emission Rate = 7.452E-06				
** Vertical Dimension = 6.99				
** SZINIT = 3.25				
** Nodes = 4				
** 478944.110, 3769974.661, 351.40, 3.49, 6.51				
** 479130.596, 3769977.864, 353.08, 3.49, 6.51				
** 479129.528, 3769704.897, 353.95, 3.49, 6.51				
** 479130.951, 3769511.294, 356.84, 3.49, 6.51				
** -----				
LOCATION L0000164	VOLUME	478951.109	3769974.781	351.71
LOCATION L0000165	VOLUME	478965.107	3769975.021	352.00
LOCATION L0000166	VOLUME	478979.105	3769975.262	352.00
LOCATION L0000167	VOLUME	478993.103	3769975.502	352.00
LOCATION L0000168	VOLUME	479007.101	3769975.742	352.00
LOCATION L0000169	VOLUME	479021.099	3769975.983	352.00
LOCATION L0000170	VOLUME	479035.097	3769976.223	352.00
LOCATION L0000171	VOLUME	479049.095	3769976.464	352.00
LOCATION L0000172	VOLUME	479063.093	3769976.704	352.44
LOCATION L0000173	VOLUME	479077.091	3769976.945	352.91
LOCATION L0000174	VOLUME	479091.089	3769977.185	353.00
LOCATION L0000175	VOLUME	479105.087	3769977.425	353.00
LOCATION L0000176	VOLUME	479119.084	3769977.666	353.00
LOCATION L0000177	VOLUME	479130.586	3769975.376	353.00
LOCATION L0000178	VOLUME	479130.531	3769961.376	353.00
LOCATION L0000179	VOLUME	479130.476	3769947.377	353.00
LOCATION L0000180	VOLUME	479130.422	3769933.377	353.07

LOCATION L0000181	VOLUME	479130.367	3769919.377	353.39
LOCATION L0000182	VOLUME	479130.312	3769905.377	353.69
LOCATION L0000183	VOLUME	479130.257	3769891.377	353.84
LOCATION L0000184	VOLUME	479130.203	3769877.377	353.99
LOCATION L0000185	VOLUME	479130.148	3769863.377	354.00
LOCATION L0000186	VOLUME	479130.093	3769849.377	354.00
LOCATION L0000187	VOLUME	479130.038	3769835.377	354.00
LOCATION L0000188	VOLUME	479129.984	3769821.378	354.00
LOCATION L0000189	VOLUME	479129.929	3769807.378	354.00
LOCATION L0000190	VOLUME	479129.874	3769793.378	354.00
LOCATION L0000191	VOLUME	479129.819	3769779.378	354.00
LOCATION L0000192	VOLUME	479129.764	3769765.378	354.00
LOCATION L0000193	VOLUME	479129.710	3769751.378	354.00
LOCATION L0000194	VOLUME	479129.655	3769737.378	354.00
LOCATION L0000195	VOLUME	479129.600	3769723.378	354.00
LOCATION L0000196	VOLUME	479129.545	3769709.378	354.00
LOCATION L0000197	VOLUME	479129.598	3769695.379	354.02
LOCATION L0000198	VOLUME	479129.701	3769681.379	354.33
LOCATION L0000199	VOLUME	479129.804	3769667.379	354.64
LOCATION L0000200	VOLUME	479129.907	3769653.380	354.81
LOCATION L0000201	VOLUME	479130.010	3769639.380	354.97
LOCATION L0000202	VOLUME	479130.113	3769625.381	355.86
LOCATION L0000203	VOLUME	479130.216	3769611.381	356.96
LOCATION L0000204	VOLUME	479130.318	3769597.381	357.95
LOCATION L0000205	VOLUME	479130.421	3769583.382	358.86
LOCATION L0000206	VOLUME	479130.524	3769569.382	359.24
LOCATION L0000207	VOLUME	479130.627	3769555.382	359.09
LOCATION L0000208	VOLUME	479130.730	3769541.383	358.62
LOCATION L0000209	VOLUME	479130.833	3769527.383	357.55
LOCATION L0000210	VOLUME	479130.936	3769513.384	356.60

** End of LINE VOLUME Source ID = SLINE3

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000106	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000107	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000108	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000109	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000110	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000111	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000112	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000113	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000114	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000115	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000116	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000117	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000118	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000119	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000120	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000121	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000122	0.0000008924	3.49	4.00	3.25

SRCPARAM L0000123	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000124	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000125	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000126	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000127	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000128	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000129	0.0000008924	3.49	4.00	3.25
SRCPARAM L0000130	0.0000008924	3.49	4.00	3.25
** -----				
** LINE VOLUME Source ID = SLINE2				
SRCPARAM L0000131	0.00000023	3.49	4.00	3.25
SRCPARAM L0000132	0.00000023	3.49	4.00	3.25
SRCPARAM L0000133	0.00000023	3.49	4.00	3.25
SRCPARAM L0000134	0.00000023	3.49	4.00	3.25
SRCPARAM L0000135	0.00000023	3.49	4.00	3.25
SRCPARAM L0000136	0.00000023	3.49	4.00	3.25
SRCPARAM L0000137	0.00000023	3.49	4.00	3.25
SRCPARAM L0000138	0.00000023	3.49	4.00	3.25
SRCPARAM L0000139	0.00000023	3.49	4.00	3.25
SRCPARAM L0000140	0.00000023	3.49	4.00	3.25
SRCPARAM L0000141	0.00000023	3.49	4.00	3.25
SRCPARAM L0000142	0.00000023	3.49	4.00	3.25
SRCPARAM L0000143	0.00000023	3.49	4.00	3.25
SRCPARAM L0000144	0.00000023	3.49	4.00	3.25
SRCPARAM L0000145	0.00000023	3.49	4.00	3.25
SRCPARAM L0000146	0.00000023	3.49	4.00	3.25
SRCPARAM L0000147	0.00000023	3.49	4.00	3.25
SRCPARAM L0000148	0.00000023	3.49	4.00	3.25
SRCPARAM L0000149	0.00000023	3.49	4.00	3.25
SRCPARAM L0000150	0.00000023	3.49	4.00	3.25
SRCPARAM L0000151	0.00000023	3.49	4.00	3.25
SRCPARAM L0000152	0.00000023	3.49	4.00	3.25
SRCPARAM L0000153	0.00000023	3.49	4.00	3.25
SRCPARAM L0000154	0.00000023	3.49	4.00	3.25
SRCPARAM L0000155	0.00000023	3.49	4.00	3.25
SRCPARAM L0000156	0.00000023	3.49	4.00	3.25
SRCPARAM L0000157	0.00000023	3.49	4.00	3.25
SRCPARAM L0000158	0.00000023	3.49	4.00	3.25
SRCPARAM L0000159	0.00000023	3.49	4.00	3.25
SRCPARAM L0000160	0.00000023	3.49	4.00	3.25
SRCPARAM L0000161	0.00000023	3.49	4.00	3.25
SRCPARAM L0000162	0.00000023	3.49	4.00	3.25
SRCPARAM L0000163	0.00000023	3.49	4.00	3.25
** -----				
** LINE VOLUME Source ID = SLINE3				
SRCPARAM L0000164	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000165	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000166	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000167	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000168	0.0000001586	3.49	6.51	3.25

SRCPARAM L0000169	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000170	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000171	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000172	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000173	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000174	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000175	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000176	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000177	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000178	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000179	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000180	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000181	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000182	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000183	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000184	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000185	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000186	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000187	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000188	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000189	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000190	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000191	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000192	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000193	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000194	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000195	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000196	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000197	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000198	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000199	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000200	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000201	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000202	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000203	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000204	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000205	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000206	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000207	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000208	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000209	0.0000001586	3.49	6.51	3.25
SRCPARAM L0000210	0.0000001586	3.49	6.51	3.25

** -----

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

```
**  
**  
RE STARTING  
    INCLUDED "15517 Ops.rou"  
RE FINISHED  
**  
*****  
** AERMOD Meteorology Pathway  
*****  
**  
**  
ME STARTING  
    SURFFILE RDLD_V9_ADJU\RDLD_v9.SFC  
    PROFILE RDLD_V9_ADJU\RDLD_v9.PFL  
    SURFDATA 3171 2012  
    UAIRDATA 3190 2012  
    SITEDATA 99999 2012  
    PROFBASE 481.0 METERS  
ME FINISHED  
**  
*****  
** AERMOD Output Pathway  
*****  
**  
**  
OU STARTING  
** Auto-Generated Plotfiles  
    PLOTFILE PERIOD ALL "15517 Ops.AD\PE00GALL.PLT" 31  
    SUMMFILE "15517 Ops.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      325      MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used  
                  0.50  
ME W187      325      MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
```

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

```
↑ *** AERMOD - VERSION 22112 ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops ***           10/05/23
*** AERMET - VERSION 16216 ***   ***
                           ***           12:05:44
```

```
          PAGE    1
*** MODELOPTs:  RegDEFAULT CONC ELEV 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. DDPLTE = 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 105 Source(s),
for Total of 1 Urban Area(s):

```
Urban Population = 2035210.0 ; Urban Roughness Length = 1.000 m
```

- * Urban Roughness Length of 1.0 Meter Used.
- * ADJ_U* - Use ADJ_U* option for SBL in AERMET
- * TEMP_Sub - Meteorological data includes TEMP substitutions
- * Model Assumes No FLAGPOLE Receptor Heights.
- * The User Specified a Pollutant Type of: DPM

```
**Model Calculates PERIOD Averages Only
```

```
**This Run Includes: 105 Source(s); 1 Source Group(s); and 34
Receptor(s)
```

```
with:      0 POINT(s), including
           0 POINTCAP(s) and      0 POINTHOR(s)
and:      105 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 PERIOD Averages by Receptor
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
Hours m for Missing
and Missing Hours b for Both Calm

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 481.00 ; 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: 15517 Ops.err

**File for Summary of Results: 15517 Ops.sum

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 12:05:44

PAGE 2
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION RATE		BASE	RELEASE	INIT.	
SOURCE		EMISSION RATE						
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
		SCALAR	VARY					
ID		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		BY						
L0000106	3.25	0	0.89240E-06	478962.2	3769898.5	352.0	3.49	4.00
YES								
L0000107	3.25	0	0.89240E-06	478962.2	3769889.9	352.0	3.49	4.00
YES								
L0000108	3.25	0	0.89240E-06	478962.2	3769881.3	352.0	3.49	4.00
YES								
L0000109	3.25	0	0.89240E-06	478962.1	3769872.7	352.0	3.49	4.00
YES								
L0000110	3.25	0	0.89240E-06	478962.1	3769864.1	352.0	3.49	4.00
YES								
L0000111	3.25	0	0.89240E-06	478962.1	3769855.5	352.0	3.49	4.00
YES								
L0000112	3.25	0	0.89240E-06	478962.1	3769846.9	352.0	3.49	4.00
YES								
L0000113	3.25	0	0.89240E-06	478962.0	3769838.4	352.0	3.49	4.00
YES								
L0000114	3.25	0	0.89240E-06	478962.0	3769829.8	352.0	3.49	4.00
YES								
L0000115	3.25	0	0.89240E-06	478962.0	3769821.2	352.0	3.49	4.00
YES								
L0000116	3.25	0	0.89240E-06	478961.9	3769812.6	352.0	3.49	4.00
YES								
L0000117	3.25	0	0.89240E-06	478961.9	3769804.0	352.0	3.49	4.00
YES								
L0000118	3.25	0	0.89240E-06	478961.9	3769795.4	352.0	3.49	4.00
YES								
L0000119	3.25	0	0.89240E-06	478961.8	3769786.8	352.0	3.49	4.00
YES								
L0000120	3.25	0	0.89240E-06	478961.8	3769778.2	352.0	3.49	4.00
YES								
L0000121	3.25	0	0.89240E-06	478961.8	3769769.6	352.0	3.49	4.00
YES								
L0000122	3.25	0	0.89240E-06	478961.8	3769761.0	352.0	3.49	4.00
YES								
L0000123	3.25	0	0.89240E-06	478961.7	3769752.5	352.0	3.49	4.00
YES								
L0000124	3.25	0	0.89240E-06	478961.7	3769743.9	352.0	3.49	4.00
YES								
L0000125	3.25	0	0.89240E-06	478961.7	3769735.3	352.0	3.49	4.00
YES								
L0000126		0	0.89240E-06	478961.6	3769726.7	352.1	3.49	4.00

3.25	YES							
L0000127		0	0.89240E-06	478961.6	3769718.1	352.3	3.49	4.00
3.25	YES							
L0000128		0	0.89240E-06	478961.6	3769709.5	352.6	3.49	4.00
3.25	YES							
L0000129		0	0.89240E-06	478961.5	3769700.9	352.9	3.49	4.00
3.25	YES							
L0000130		0	0.89240E-06	478961.5	3769692.3	353.0	3.49	4.00
3.25	YES							
L0000131		0	0.23000E-06	478944.5	3769951.9	351.5	3.49	4.00
3.25	YES							
L0000132		0	0.23000E-06	478944.5	3769943.3	351.5	3.49	4.00
3.25	YES							
L0000133		0	0.23000E-06	478944.5	3769934.7	351.5	3.49	4.00
3.25	YES							
L0000134		0	0.23000E-06	478944.5	3769926.1	351.5	3.49	4.00
3.25	YES							
L0000135		0	0.23000E-06	478944.5	3769917.5	351.5	3.49	4.00
3.25	YES							
L0000136		0	0.23000E-06	478944.5	3769908.9	351.5	3.49	4.00
3.25	YES							
L0000137		0	0.23000E-06	478944.5	3769900.3	351.6	3.49	4.00
3.25	YES							
L0000138		0	0.23000E-06	478944.5	3769891.7	351.7	3.49	4.00
3.25	YES							
L0000139		0	0.23000E-06	478944.6	3769883.1	351.9	3.49	4.00
3.25	YES							
L0000140		0	0.23000E-06	478944.6	3769874.5	352.0	3.49	4.00
3.25	YES							
L0000141		0	0.23000E-06	478944.6	3769866.0	352.0	3.49	4.00
3.25	YES							
L0000142		0	0.23000E-06	478944.6	3769857.4	352.0	3.49	4.00
3.25	YES							
L0000143		0	0.23000E-06	478944.6	3769848.8	352.0	3.49	4.00
3.25	YES							
L0000144		0	0.23000E-06	478944.6	3769840.2	352.0	3.49	4.00
3.25	YES							
L0000145		0	0.23000E-06	478944.6	3769831.6	352.0	3.49	4.00
3.25	YES							

↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 12:05:44

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

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION RATE		BASE	RELEASE	INIT.	
SOURCE		EMISSION RATE						
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
		SCALAR	VARY					
ID		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)		BY						
L0000146	3.25	0	0.23000E-06	478944.6	3769823.0	352.0	3.49	4.00
YES								
L0000147	3.25	0	0.23000E-06	478944.6	3769814.4	352.0	3.49	4.00
YES								
L0000148	3.25	0	0.23000E-06	478944.7	3769805.8	352.0	3.49	4.00
YES								
L0000149	3.25	0	0.23000E-06	478944.7	3769797.2	352.0	3.49	4.00
YES								
L0000150	3.25	0	0.23000E-06	478944.7	3769788.6	352.0	3.49	4.00
YES								
L0000151	3.25	0	0.23000E-06	478944.7	3769780.1	352.0	3.49	4.00
YES								
L0000152	3.25	0	0.23000E-06	478944.7	3769771.5	352.0	3.49	4.00
YES								
L0000153	3.25	0	0.23000E-06	478944.7	3769762.9	352.0	3.49	4.00
YES								
L0000154	3.25	0	0.23000E-06	478944.7	3769754.3	352.0	3.49	4.00
YES								
L0000155	3.25	0	0.23000E-06	478944.7	3769745.7	352.0	3.49	4.00
YES								
L0000156	3.25	0	0.23000E-06	478944.7	3769737.1	352.0	3.49	4.00
YES								
L0000157	3.25	0	0.23000E-06	478944.8	3769728.5	352.0	3.49	4.00
YES								
L0000158	3.25	0	0.23000E-06	478944.8	3769719.9	352.2	3.49	4.00
YES								
L0000159	3.25	0	0.23000E-06	478944.8	3769711.3	352.5	3.49	4.00
YES								
L0000160	3.25	0	0.23000E-06	478944.8	3769702.8	352.8	3.49	4.00
YES								
L0000161	3.25	0	0.23000E-06	478944.8	3769694.2	353.0	3.49	4.00
YES								
L0000162	3.25	0	0.23000E-06	478944.8	3769685.6	353.0	3.49	4.00
YES								
L0000163	3.25	0	0.23000E-06	478944.8	3769677.0	353.0	3.49	4.00
YES								
L0000164	3.25	0	0.15860E-06	478951.1	3769974.8	351.7	3.49	6.51
YES								
L0000165	3.25	0	0.15860E-06	478965.1	3769975.0	352.0	3.49	6.51
YES								
L0000166		0	0.15860E-06	478979.1	3769975.3	352.0	3.49	6.51

3.25	YES							
L0000167		0	0.15860E-06	478993.1	3769975.5	352.0	3.49	6.51
3.25	YES							
L0000168		0	0.15860E-06	479007.1	3769975.7	352.0	3.49	6.51
3.25	YES							
L0000169		0	0.15860E-06	479021.1	3769976.0	352.0	3.49	6.51
3.25	YES							
L0000170		0	0.15860E-06	479035.1	3769976.2	352.0	3.49	6.51
3.25	YES							
L0000171		0	0.15860E-06	479049.1	3769976.5	352.0	3.49	6.51
3.25	YES							
L0000172		0	0.15860E-06	479063.1	3769976.7	352.4	3.49	6.51
3.25	YES							
L0000173		0	0.15860E-06	479077.1	3769976.9	352.9	3.49	6.51
3.25	YES							
L0000174		0	0.15860E-06	479091.1	3769977.2	353.0	3.49	6.51
3.25	YES							
L0000175		0	0.15860E-06	479105.1	3769977.4	353.0	3.49	6.51
3.25	YES							
L0000176		0	0.15860E-06	479119.1	3769977.7	353.0	3.49	6.51
3.25	YES							
L0000177		0	0.15860E-06	479130.6	3769975.4	353.0	3.49	6.51
3.25	YES							
L0000178		0	0.15860E-06	479130.5	3769961.4	353.0	3.49	6.51
3.25	YES							
L0000179		0	0.15860E-06	479130.5	3769947.4	353.0	3.49	6.51
3.25	YES							
L0000180		0	0.15860E-06	479130.4	3769933.4	353.1	3.49	6.51
3.25	YES							
L0000181		0	0.15860E-06	479130.4	3769919.4	353.4	3.49	6.51
3.25	YES							
L0000182		0	0.15860E-06	479130.3	3769905.4	353.7	3.49	6.51
3.25	YES							
L0000183		0	0.15860E-06	479130.3	3769891.4	353.8	3.49	6.51
3.25	YES							
L0000184		0	0.15860E-06	479130.2	3769877.4	354.0	3.49	6.51
3.25	YES							
L0000185		0	0.15860E-06	479130.1	3769863.4	354.0	3.49	6.51
3.25	YES							
▲ *** AERMOD - VERSION 22112 ***					*** C:\Users\Michael Tirohn\Desktop\HRAs\15517			
1101 California\15517 Ops ***					10/05/23			
*** AERMET - VERSION 16216 ***					***			
					12:05:44			

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

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION RATE		BASE	RELEASE	INIT.	
SOURCE	SOURCE	EMISSION RATE	PART. (GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
SZ	ID	SCALAR VARY	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
			BY					
L0000186	3.25	0	0.15860E-06	479130.1	3769849.4	354.0	3.49	6.51
YES								
L0000187	3.25	0	0.15860E-06	479130.0	3769835.4	354.0	3.49	6.51
YES								
L0000188	3.25	0	0.15860E-06	479130.0	3769821.4	354.0	3.49	6.51
YES								
L0000189	3.25	0	0.15860E-06	479129.9	3769807.4	354.0	3.49	6.51
YES								
L0000190	3.25	0	0.15860E-06	479129.9	3769793.4	354.0	3.49	6.51
YES								
L0000191	3.25	0	0.15860E-06	479129.8	3769779.4	354.0	3.49	6.51
YES								
L0000192	3.25	0	0.15860E-06	479129.8	3769765.4	354.0	3.49	6.51
YES								
L0000193	3.25	0	0.15860E-06	479129.7	3769751.4	354.0	3.49	6.51
YES								
L0000194	3.25	0	0.15860E-06	479129.7	3769737.4	354.0	3.49	6.51
YES								
L0000195	3.25	0	0.15860E-06	479129.6	3769723.4	354.0	3.49	6.51
YES								
L0000196	3.25	0	0.15860E-06	479129.5	3769709.4	354.0	3.49	6.51
YES								
L0000197	3.25	0	0.15860E-06	479129.6	3769695.4	354.0	3.49	6.51
YES								
L0000198	3.25	0	0.15860E-06	479129.7	3769681.4	354.3	3.49	6.51
YES								
L0000199	3.25	0	0.15860E-06	479129.8	3769667.4	354.6	3.49	6.51
YES								
L0000200	3.25	0	0.15860E-06	479129.9	3769653.4	354.8	3.49	6.51
YES								
L0000201	3.25	0	0.15860E-06	479130.0	3769639.4	355.0	3.49	6.51
YES								
L0000202	3.25	0	0.15860E-06	479130.1	3769625.4	355.9	3.49	6.51
YES								
L0000203	3.25	0	0.15860E-06	479130.2	3769611.4	357.0	3.49	6.51
YES								
L0000204	3.25	0	0.15860E-06	479130.3	3769597.4	357.9	3.49	6.51
YES								
L0000205	3.25	0	0.15860E-06	479130.4	3769583.4	358.9	3.49	6.51
YES								
L0000206		0	0.15860E-06	479130.5	3769569.4	359.2	3.49	6.51

3.25 YES
 L0000207 0 0.15860E-06 479130.6 3769555.4 359.1 3.49 6.51
 3.25 YES
 L0000208 0 0.15860E-06 479130.7 3769541.4 358.6 3.49 6.51
 3.25 YES
 L0000209 0 0.15860E-06 479130.8 3769527.4 357.6 3.49 6.51
 3.25 YES
 L0000210 0 0.15860E-06 479130.9 3769513.4 356.6 3.49 6.51
 3.25 YES
 ↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 12:05:44

PAGE 5

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID	SOURCE IDs
-----	-----
ALL	
L0000111 , L0000112	, L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , , L0000113
L0000119 , L0000120	, L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , , L0000121
L0000127 , L0000128	, L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , , L0000129
L0000135 , L0000136	, L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , , L0000137
L0000143 , L0000144	, L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , , L0000145
L0000151 , L0000152	, L0000146 , L0000147 , L0000148 , L0000149 , L0000150 , , L0000153
L0000159 , L0000160	, L0000154 , L0000155 , L0000156 , L0000157 , L0000158 , , L0000161
L0000167 , L0000168	, L0000162 , L0000163 , L0000164 , L0000165 , L0000166 , , L0000169
	, L0000170 , L0000171 , L0000172 , L0000173 , L0000174 , ,

L0000175	, L0000176	, L0000177	,				
L0000183	, L0000184	, L0000178	, L0000179	, L0000180	, L0000181	, L0000182	,
L0000191	, L0000192	, L0000186	, L0000187	, L0000188	, L0000189	, L0000190	,
L0000199	, L0000200	, L0000194	, L0000195	, L0000196	, L0000197	, L0000198	,
L0000207	, L0000208	, L0000202	, L0000203	, L0000204	, L0000205	, L0000206	,
		L0000210	,				

↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 12:05:44

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*
 PAGE 6

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs					
-----	-----	-----					
L0000110	2035210. , L0000111	, L0000106 , L0000112	, L0000107	, L0000108	, L0000109	,	
L0000113	,						
L0000119	, L0000120	, L0000114 , L0000121	, L0000115 , L0000121	, L0000116	, L0000117	, L0000118	,
L0000127	, L0000128	, L0000122 , L0000129	, L0000123 , L0000129	, L0000124	, L0000125	, L0000126	,
L0000135	, L0000136	, L0000130 , L0000136	, L0000131 , L0000137	, L0000132	, L0000133	, L0000134	,
L0000143	, L0000144	, L0000138 , L0000144	, L0000139 , L0000145	, L0000140	, L0000141	, L0000142	,
L0000151	, L0000152	, L0000146 , L0000152	, L0000147 , L0000153	, L0000148	, L0000149	, L0000150	,

L0000159	, L0000154 , L0000160	, L0000155 , L0000161	, L0000156 ,	, L0000157	, L0000158	,
L0000167	, L0000162 , L0000168	, L0000163 , L0000169	, L0000164 ,	, L0000165	, L0000166	,
L0000175	, L0000170 , L0000176	, L0000171 , L0000177	, L0000172 ,	, L0000173	, L0000174	,
L0000183	, L0000178 , L0000184	, L0000179 , L0000185	, L0000180 ,	, L0000181	, L0000182	,
L0000191	, L0000186 , L0000192	, L0000187 , L0000193	, L0000188 ,	, L0000189	, L0000190	,
L0000199	, L0000194 , L0000200	, L0000195 , L0000201	, L0000196 ,	, L0000197	, L0000198	,
L0000207	, L0000202 , L0000208	, L0000203 , L0000209	, L0000204 ,	, L0000205	, L0000206	,

 L0000210 ,

▲ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
 *** 12:05:44

PAGE 7
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

(478876.0, 3769931.4,	351.0,	351.0,	0.0);	(478877.6,
3769651.8, 353.0,	353.0,	0.0);		
(478859.2, 3769802.1,	351.0,	351.0,	0.0);	(479179.1,
3769797.0, 355.0,	355.0,	0.0);		
(479162.3, 3769658.4,	356.1,	356.1,	0.0);	(479002.7,
3770069.2, 352.0,	352.0,	0.0);		
(479180.7, 3770058.9,	354.0,	354.0,	0.0);	(479197.0,
3769435.8, 356.2,	356.2,	0.0);		
(478625.7, 3770048.7,	348.0,	348.0,	0.0);	(479108.4,
3769448.1, 353.9,	353.9,	0.0);		
(478730.5, 3769435.3,	348.0,	348.0,	0.0);	(478745.6,
3769434.8, 348.0,	348.0,	0.0);		
(478760.8, 3769434.5,	348.0,	348.0,	0.0);	(478777.5,
3769434.0, 348.0,	348.0,	0.0);		
(478793.2, 3769433.5,	348.0,	348.0,	0.0);	(478808.6,
3769431.4, 348.0,	348.0,	0.0);		

(478825.1, 3769427.8, 348.0, 348.0, 0.0); (478840.3,
 3769423.7, 348.1, 348.1, 0.0); (478855.5, 3769418.8, 349.2, 349.2, 0.0); (478870.9,
 3769413.4, 350.0, 350.0, 0.0); (478885.0, 3769408.6, 350.5, 350.5, 0.0); (478898.4,
 3769400.6, 350.9, 350.9, 0.0); (478912.0, 3769393.6, 351.0, 351.0, 0.0); (478928.5,
 3769364.1, 351.0, 351.0, 0.0); (478953.2, 3769343.5, 351.8, 351.8, 0.0); (478969.9,
 3769339.1, 352.0, 352.0, 0.0); (479021.6, 3769284.1, 353.0, 353.0, 0.0); (479038.3,
 3769269.7, 352.9, 352.9, 0.0); (479048.3, 3769238.6, 352.9, 352.9, 0.0); (479177.1,
 3769144.2, 354.0, 354.0, 0.0); (479050.1, 3769128.0, 353.0, 353.0, 0.0); (478653.6,
 3769409.1, 348.0, 348.0, 0.0); (478719.0, 3769386.4, 348.0, 348.0, 0.0); (478680.6,
 3769388.2, 348.0, 348.0, 0.0);
 ↗ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** *** 12:05:44

PAGE 8

*** MODELOPTs: RegDEFAULT CONC ELEV 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

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

CATEGORIES ***

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED

(METERS/SEC)

1.54, 3.09, 5.14, 8.23,
10.80,
1101 California\15517 Ops *** 10/05/23
*** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
*** AERMET - VERSION 16216 *** ***
*** 12:05:44

PAGE 9

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

Surface file: RDLD_V9_ADJU\RDLD_v9.SFC

Met Version: 16216

Profile file: RDLD_V9_ADJU\RDLD_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3171
Name: UNKNOWN

Upper air station no.: 3190
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	-10.6	0.149	-9.000	-9.000	-999.	138.	26.7	0.32	3.22
1.00		1.30		110.	9.1	285.4	5.5						
12	01	01	1	02	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00	0.90		130.		9.1	284.5	5.5						
12	01	01	1	03	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00	0.90		100.		9.1	285.0	5.5						
12	01	01	1	04	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00	0.90		107.		9.1	284.6	5.5						
12	01	01	1	05	-10.7	0.149	-9.000	-9.000	-999.	138.	26.7	0.32	3.22
1.00	1.30		98.		9.1	284.9	5.5						
12	01	01	1	06	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00	0.90		86.		9.1	284.5	5.5						
12	01	01	1	07	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00	0.90		91.		9.1	284.0	5.5						

12	01	01	1	08	-4.0	0.102	-9.000	-9.000	-999.	78.	22.9	0.32	3.22
0.54		0.90	107.		9.1	285.0		5.5					
12	01	01	1	09	44.6	0.237	0.382	0.006	43.	276.	-25.6	0.15	3.22
0.33		2.10	81.		10.1	289.1		5.5					
12	01	01	1	10	134.3	0.111	0.882	0.008	176.	99.	-1.0	0.32	3.22
0.26		0.40	72.		9.1	295.1		5.5					
12	01	01	1	11	199.8	0.409	1.429	0.005	503.	627.	-29.4	0.15	3.22
0.23		3.68	78.		10.1	297.9		5.5					
12	01	01	1	12	232.3	0.300	1.889	0.005	999.	402.	-10.0	0.32	3.22
0.22		1.80	333.		9.1	299.4		5.5					
12	01	01	1	13	230.0	0.300	2.134	0.005	1453.	394.	-10.1	0.32	3.22
0.22		1.80	72.		9.1	300.4		5.5					
12	01	01	1	14	194.0	0.294	2.109	0.005	1663.	382.	-11.2	0.32	3.22
0.24		1.80	277.		9.1	301.0		5.5					
12	01	01	1	15	126.3	0.378	1.872	0.005	1784.	557.	-36.5	0.32	3.22
0.27		2.70	243.		9.1	301.0		5.5					
12	01	01	1	16	39.5	0.199	1.278	0.005	1817.	240.	-17.2	0.32	3.22
0.36		1.30	274.		9.1	300.1		5.5					
12	01	01	1	17	-4.7	0.101	-9.000	-9.000	-999.	85.	19.0	0.32	3.22
0.65		0.90	252.		9.1	298.2		5.5					
12	01	01	1	18	-4.9	0.102	-9.000	-9.000	-999.	78.	18.2	0.32	3.22
1.00		0.90	116.		9.1	296.4		5.5					
12	01	01	1	19	-18.8	0.204	-9.000	-9.000	-999.	220.	45.6	0.15	3.22
1.00		2.27	79.		10.1	292.2		5.5					
12	01	01	1	20	-5.0	0.102	-9.000	-9.000	-999.	83.	18.1	0.32	3.22
1.00		0.90	95.		9.1	290.2		5.5					
12	01	01	1	21	-5.0	0.102	-9.000	-9.000	-999.	78.	18.0	0.32	3.22
1.00		0.90	99.		9.1	287.8		5.5					
12	01	01	1	22	-5.0	0.102	-9.000	-9.000	-999.	78.	18.0	0.32	3.22
1.00		0.90	110.		9.1	287.6		5.5					
12	01	01	1	23	-10.6	0.149	-9.000	-9.000	-999.	138.	26.8	0.32	3.22
1.00		1.30	89.		9.1	287.2		5.5					
12	01	01	1	24	-5.0	0.102	-9.000	-9.000	-999.	78.	17.9	0.32	3.22
1.00		0.90	105.		9.1	285.9		5.5					

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
12	01	01	01	5.5	0	-999.	-99.00	285.5	99.0	-99.00	-99.00
12	01	01	01	9.1	1	110.	1.30	-999.0	99.0	-99.00	-99.00

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

↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
 1101 California\15517 Ops *** 10/05/23
 *** AERMET - VERSION 16216 *** ***
 *** 12:05:44

PAGE 10

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000106 , L0000107
 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 , L0000113 , L0000114 , L0000115
 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 , L0000121 , L0000122 , L0000123
 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 , L0000129 , L0000130 , L0000131
 , L0000132 , L0000133 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

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

Y-COORD (M)	X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
			CONC	
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
3769651.75	478875.95	3769931.43	0.00157	478877.62
	0.00132			
3769797.03	478859.20	3769802.06	0.00195	479179.08
	0.00115			
3770069.16	479162.33	3769658.44	0.00125	479002.72
	0.00069			
3769435.79	479180.66	3770058.94	0.00047	479197.02
	0.00030			
3769448.08	478625.69	3770048.71	0.00023	479108.44
	0.00039			
3769434.80	478730.47	3769435.31	0.00023	478745.64
	0.00023			
3769434.03	478760.82	3769434.54	0.00024	478777.53
	0.00025			
3769431.45	478793.22	3769433.51	0.00026	478808.65
	0.00026			
3769423.74	478825.11	3769427.85	0.00027	478840.28
	0.00027			
3769413.45	478855.45	3769418.85	0.00027	478870.88
	0.00027			
3769400.60	478885.02	3769408.57	0.00027	478898.40
	0.00027			
3769364.08	478912.03	3769393.65	0.00026	478928.48
	0.00024			
3769339.13	478953.17	3769343.51	0.00022	478969.89
	0.00022			
3769269.70	479021.57	3769284.10	0.00018	479038.29
	0.00017			
3769048.32	479048.32	3769238.59	0.00015	479177.08

3769144.21	0.00011			
479050.08	3769128.04	0.00011		478653.64
3769409.06	0.00018			
478718.99	3769386.37	0.00019		478680.57
3769388.18	0.00018			
↑ *** AERMOD - VERSION 22112 ***		*** C:\Users\Michael Tirohn\Desktop\HRAs\15517		
1101 California\15517 Ops ***		10/05/23		
*** AERMET - VERSION 16216 ***		***		
	***	12:05:44		

PAGE 11

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848
HRS) RESULTS ***

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

**

NETWORK

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

ALL	1ST HIGHEST VALUE IS 351.00, 351.00, 0.00) DC	0.00195 AT (478859.20, 3769802.06,
	2ND HIGHEST VALUE IS 351.00, 351.00, 0.00) DC	0.00157 AT (478875.95, 3769931.43,
	3RD HIGHEST VALUE IS 353.00, 353.00, 0.00) DC	0.00132 AT (478877.62, 3769651.75,
	4TH HIGHEST VALUE IS 356.14, 356.14, 0.00) DC	0.00125 AT (479162.33, 3769658.44,
	5TH HIGHEST VALUE IS 355.00, 355.00, 0.00) DC	0.00115 AT (479179.08, 3769797.03,
	6TH HIGHEST VALUE IS 352.00, 352.00, 0.00) DC	0.00069 AT (479002.72, 3770069.16,
	7TH HIGHEST VALUE IS 354.00, 354.00, 0.00) DC	0.00047 AT (479180.66, 3770058.94,
	8TH HIGHEST VALUE IS 353.95, 353.95, 0.00) DC	0.00039 AT (479108.44, 3769448.08,
	9TH HIGHEST VALUE IS 356.22, 356.22, 0.00) DC	0.00030 AT (479197.02, 3769435.79,
	10TH HIGHEST VALUE IS 350.03, 350.03, 0.00) DC	0.00027 AT (478870.88, 3769413.45,

*** RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
↑ *** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\15517
1101 California\15517 Ops *** 10/05/23
*** AERMET - VERSION 16216 *** ***
*** 12:05:44

PAGE 12
*** MODELOPTs: RegDFAULT CONC ELEV 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 388 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 191 Calm Hours Identified

A Total of 197 Missing Hours Identified (0.45 Percent)

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

***** WARNING MESSAGES *****
ME W186 325 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 325 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** AERMOD Finishes Successfully ***

This page intentionally left blank

APPENDIX 2.4:

RISK CALCULATIONS

Receptor No.	Age Bin	DPM Conc. ($\mu\text{g}/\text{m}^3$)	Exposure Frequency (days)	Exposure Duration (years)	Inhalation Rate (L/kg-day)	Inhalation Absorption Factor	Averaging Time (years)	FAH	ASF	Cancer Risk				Non-Cancer Risk								
										URF	CPF	Dose	Risk (per million)	REL	RfD	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	REPRO	EYES
														Total								
1	16 to 41	0.02057	250	0.83	230	1	70	1.00	1	3.0E-04	1.1E+00	3.2E-06	0.04	5.0E+00	1.4E-03	4.1E-03						
										Total				0.04			4.1E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	0 to 2	0.00309	250	0.83	1090	1	70	1.00	10	3.0E-04	1.1E+00	2.3E-06	0.29	5.0E+00	1.4E-03	6.2E-04						
										Total				0.29			6.2E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
(MEIW)	16 to 41	0.03556	250	0.83	230	1	70	1.00	1	3.0E-04	1.1E+00	5.6E-06	0.07	5.0E+00	1.4E-03	7.1E-03						
										Total				0.07			7.1E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4	16 to 41	0.01017	250	0.83	230	1	70	1.00	1	3.0E-04	1.1E+00	1.6E-06	0.02	5.0E+00	1.4E-03	2.0E-03						
										Total				0.02			2.0E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
(MEIR)	0 to 2	0.00318	250	0.83	1090	1	70	1.00	10	3.0E-04	1.1E+00	2.4E-06	0.30	5.0E+00	1.4E-03	6.4E-04						
										Total				0.30			6.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
(MEISC)	4 to 13	0.00107	180	0.83	572	1	70	1.00	3	3.0E-04	1.1E+00	3.0E-07	0.01	5.0E+00	1.4E-03	2.1E-04						
										Total				0.01			2.1E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Operational Risk

Receptor No.	Age Bin	DPM Conc. ($\mu\text{g}/\text{m}^3$)	Exposure Frequency (days)	Exposure Duration (years)	Inhalation Rate (L/kg-day)	Inhalation Absorption Factor	Averaging Time (years)	FAH	ASF	Cancer Risk				Non-Cancer Risk								
										URF	CPF	Dose	Risk (per million)	REL	RfD	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	REPRO	EYES
1 (MEIW)	16 to 41	0.02057	250	0.83	230	1	70	1.00	1	3.0E-04	1.1E+00	3.2E-06	0.04	5.0E+00	1.4E-03	4.1E-03						
	16 to 41	0.00195	250	24.17	230	1	70	1.00	1	3.0E-04	1.1E+00	3.1E-07	0.11	5.0E+00	1.4E-03	3.9E-04						0.0E+00
2	0 to 2	0.00309	250	0.83	1090	1	70	1.00	10	3.0E-04	1.1E+00	2.3E-06	0.29	5.0E+00	1.4E-03	6.2E-04						
	0 to 2	0.00026	350	1.17	1090	1	70	0.85	10	3.0E-04	1.1E+00	2.7E-07	0.04	5.0E+00	1.4E-03	5.2E-05						
	2 to 16	0.00026	350	14	572	1	70	0.72	3	3.0E-04	1.1E+00	1.4E-07	0.06	5.0E+00	1.4E-03	5.2E-05						
	16 to 30	0.00026	350	14	261	1	70	0.73	1	3.0E-04	1.1E+00	6.5E-08	0.01	5.0E+00	1.4E-03	5.2E-05						0.0E+00
																	7.7E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3	16 to 41	0.03556	250	0.83	230	1	70	1.00	1	3.0E-04	1.1E+00	5.6E-06	0.07	5.0E+00	1.4E-03	7.1E-03						
	16 to 41	0.00125	250	24.17	230	1	70	1.00	1	3.0E-04	1.1E+00	2.0E-07	0.07	5.0E+00	1.4E-03	2.5E-04						0.0E+00
																	7.4E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4	16 to 41	0.01017	250	0.83	230	1	70	1.00	1	3.0E-04	1.1E+00	1.6E-06	0.02	5.0E+00	1.4E-03	2.0E-03						
	16 to 41	0.00069	250	24.17	230	1	70	1.00	1	3.0E-04	1.1E+00	1.1E-07	0.04	5.0E+00	1.4E-03	1.4E-04						0.0E+00
																	2.2E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
5 (MEIR)	0 to 2	0.00318	250	0.83	1090	1	70	1.00	10	3.0E-04	1.1E+00	2.4E-06	0.30	5.0E+00	1.4E-03	6.4E-04						
	0 to 2	0.00027	350	1.17	1090	1	70	0.85	10	3.0E-04	1.1E+00	2.8E-07	0.04	5.0E+00	1.4E-03	5.4E-05						
	2 to 16	0.00027	350	14	572	1	70	0.72	3	3.0E-04	1.1E+00	1.5E-07	0.07	5.0E+00	1.4E-03	5.4E-05						
	16 to 30	0.00027	350	14	261	1	70	0.73	1	3.0E-04	1.1E+00	6.8E-08	0.01	5.0E+00	1.4E-03	5.4E-05						0.0E+00
																	8.0E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6 (MEISC)	4 to 13	0.00107	180	0.83	572	1	70	1.00	3	3.0E-04	1.1E+00	3.0E-07	0.01	5.0E+00	1.4E-03	2.1E-04						
	4 to 13	0.00011	180	8.17	572	1	70	1.00	3	3.0E-04	1.1E+00	3.1E-08	0.01	5.0E+00	1.4E-03	2.2E-05						0.0E+00
																	2.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

This page intentionally left blank