



Oleander Business Park

MOBILE SOURCE HEALTH RISK ASSESSMENT

COUNTY OF RIVERSIDE

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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
MATES	Multiple Air Toxics Exposure Study
MEIR	Maximally Exposed Individual Receptor
MEISC	Maximally Exposed Individual School Child
MEIW	Maximally Exposed Individual Worker
MHD	Medium Heavy-Duty
NAD	North American Datum
OEHHA	Office of Environmental Health Hazard Assessment
PCE	Passenger Car Equivalent
PM10	Particulate Matter 10 microns in diameter or less
Project	Oleander Business Park
REL	Reference Exposure Level
RM	Recommended Measures
SCAQMD	South Coast Air Quality Management District
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
TIA	Traffic Impact Analysis
URF	Unit Risk Factor
UTM	Universal Transverse Mercator
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

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

The results of the health risk assessment of lifetime cancer risk from Project-generated DPM emissions are provided in Table ES-1.

OPERATIONAL IMPACTS

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to Project DPM source emissions is located at the existing homes at the southwest corner of Oleander Avenue and Harvill Avenue. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project DPM source emissions is estimated at 1.03 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 0.0004, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent residences. Because all other modeled residential receptors are located at a greater distance than the scenario analyze herein, all other residential receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified herein.

Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is located approximately 393 feet east of the proposed Building B at an existing industrial building. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact at this location is 0.28 in one million which is less than the threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.001, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent workers. Because all other modeled worker receptors are located at a greater distance than the scenario analyze herein, 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.

School Child Exposure Scenario:

There are no schools located within a $\frac{1}{4}$ mile of the Project site. As such, there would be no significant impacts that would occur to any schools in the vicinity of the Project. Proximity to sources of toxics is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an

80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center (1). As such, the Project will not cause a significant human health or cancer risk to nearby school children.

TABLE ES-1: SUMMARY OF 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	1.03	10	NO
25 Year Exposure	Maximum Exposed Worker Receptor	0.28	10	NO
Time Period	Location	Maximum Hazard Index	Significance Threshold	Exceeds Significance Threshold
Annual Average	Maximum Exposed Sensitive Receptor	0.0004	1.0	NO
Annual Average	Maximum Exposed Worker Receptor	0.001	1.0	NO

1 INTRODUCTION

The purpose of this Health Risk Assessment (HRA) is to evaluate Project-related impacts to sensitive receptors (residential, schools) and adjacent workers as a result of heavy-duty diesel trucks accessing the site.

The South Coast Air Quality Management District (SCAQMD) identifies that if a Project is expected to generate/attract heavy-duty diesel trucks, which emit diesel particulate matter (DPM), preparation of a mobile source HRA is recommended. This document serves to meet the SCAQMD's request for preparation of a HRA. The mobile source 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 (2) and is comprised of all relevant and appropriate procedures presented by the U.S. EPA, California Environmental Protection Agency 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 DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative 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* (3). In this report the AQMD clearly 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). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less-than-significant.

1.1 SITE LOCATION

The proposed Oleander Business Park site is located on the northwest corner of Decker Road and Oleander Avenue in unincorporated County of Riverside, as shown on Exhibit 1-A.

The Project site is currently vacant. Existing land uses near the site include residential homes located west and south of the Project site, and industrial warehouses located east of the Project site. Adjacent properties located northerly, westerly, and southerly of the Project site are vacant. March Air Reserve Base/Inland Port Airport (MARB/IPA) is located roughly 1-mile northeast of the Project site.

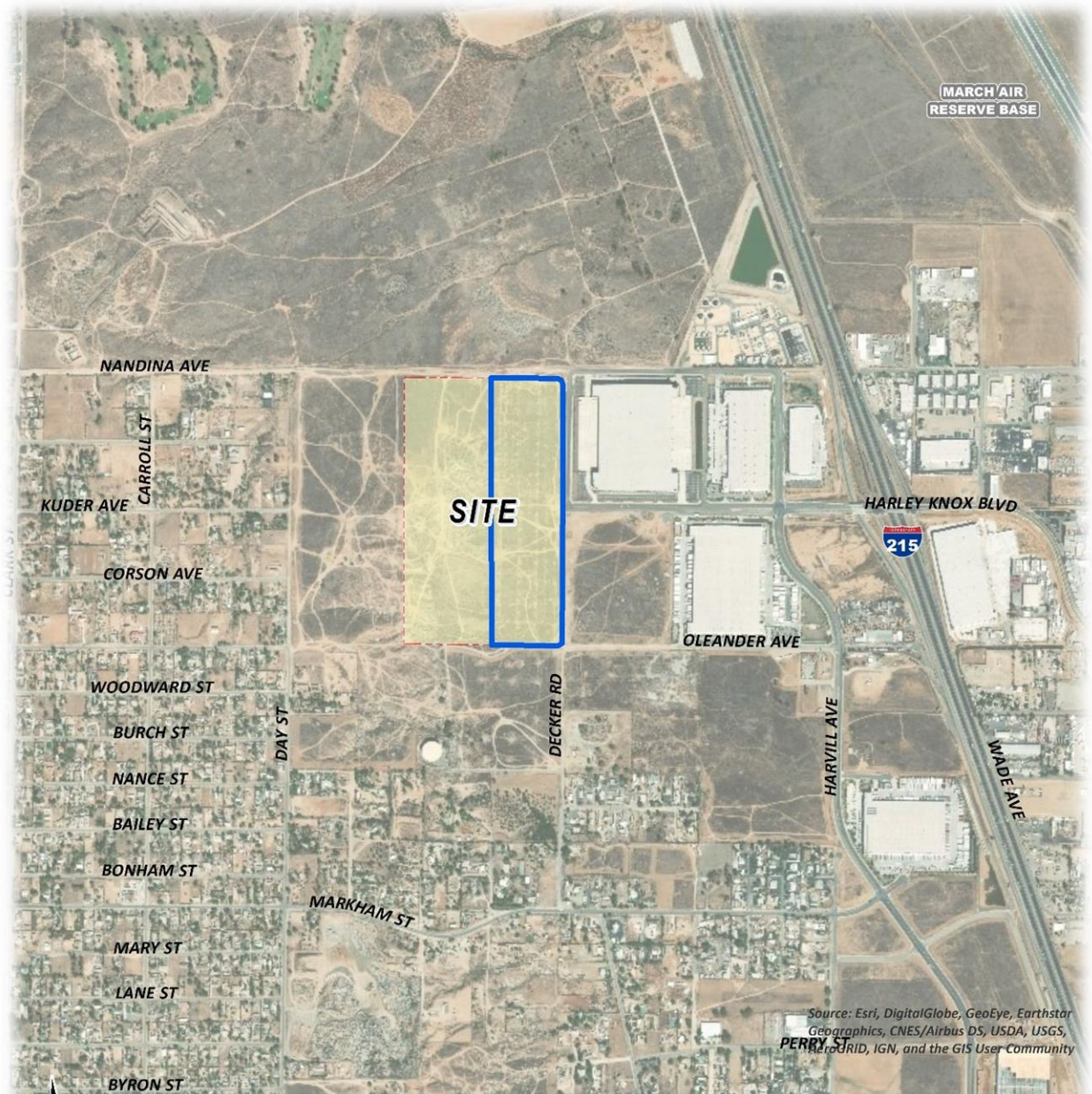
1.2 PROJECT DESCRIPTION

The Project is proposed to consist of a of up to approximately 710,736 square feet (sf) of high-cube warehouse and manufacturing uses divided over two buildings, as shown on Exhibit 1-B. Building A located in Parcel 1 will be developed with approximately 363,367 sf and Building B located in Parcel 2 will be developed with approximately 347,369 sf. The remainder of the Project site would not be developed. Up to 20 percent of the Project building areas are assumed to accommodate manufacturing occupancies. The Project is anticipated to be constructed and occupied by 2021.

At the time this HRA study was prepared, the future tenants of the Project were unknown. This HRA study is intended to describe health risk impacts associated with the expected typical 24-hour, seven day per week operational activities at the Project site.

Per the *Oleander Business Park Traffic Impact Analysis* (TIA) prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 1,366 two-way vehicular trips per day (683 inbound and 683 outbound) which includes 376 two-way truck trips per day (188 inbound and 188 outbound) (4). This HRA study evaluates the potential impacts resulting from diesel exhaust from the 376 two-way truck trips generated by the Project.

EXHIBIT 1-A: LOCATION MAP

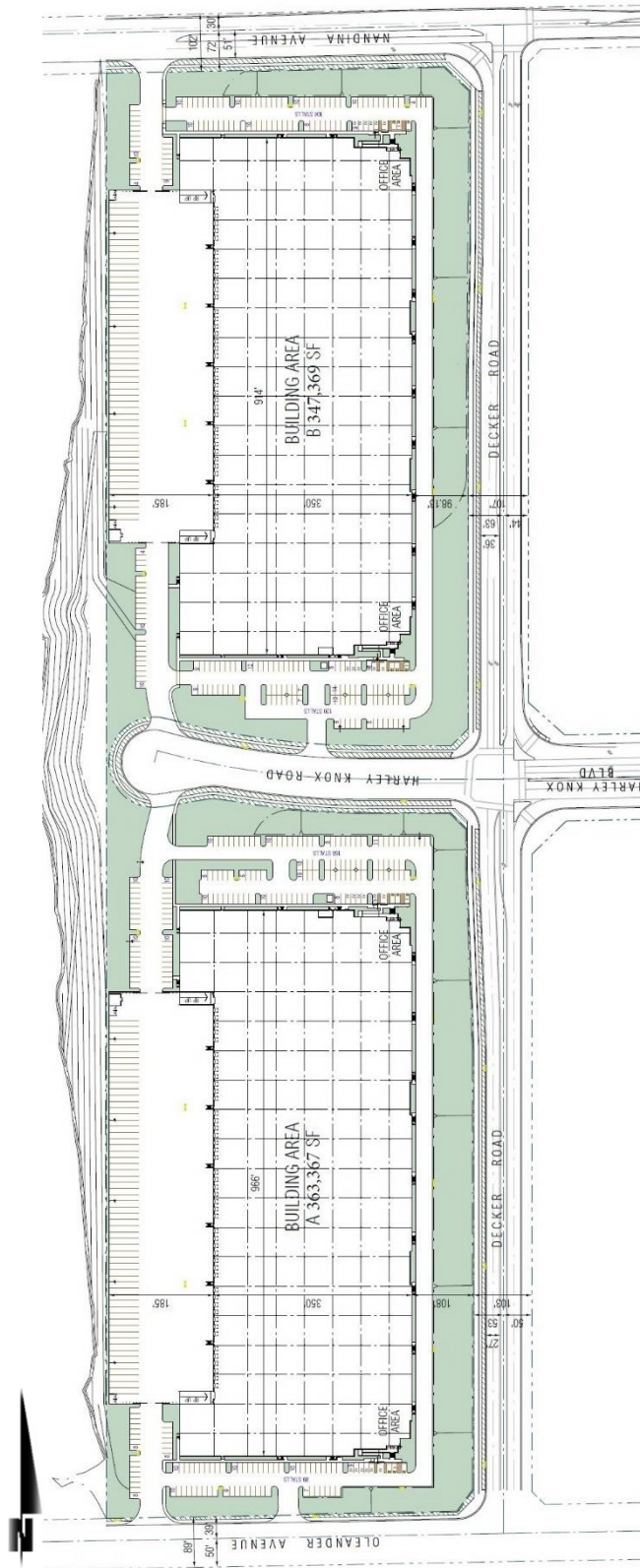


LEGEND:

- Project Site Boundary
- Building Envelope

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

EXHIBIT 1-B: PROJECT DEVELOPMENT CONCEPT



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2 BACKGROUND

2.1 BACKGROUND ON RECOMMENDED METHODOLOGY

As noted above, this HRA is based on SCAQMD guidelines to produce conservative estimates of 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.
- The emissions derived assume that every truck accessing the project site will idle for 15 minutes under the unmitigated scenario, this is an overestimation of actual idling times and thus conservative.¹ It should be noted that ARB'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 EMISSIONS ESTIMATION

2.2.1 ON-SITE AND OFF-SITE TRUCK ACTIVITY

Vehicle DPM emissions were estimated using emission factors for particulate matter less than $10\mu\text{m}$ in diameter (PM_{10}) generated with the 2017 version of the Emission FACtor model (EMFAC) developed by the ARB. EMFAC 2017 is a mathematical model that was 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 2017, 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 2017. Emission factors calculated using EMFAC 2017 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 PM_{10} emission factors were generated by running EMFAC 2017 in EMFAC Mode for vehicles in the SCAQMD 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

¹ 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.

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.

Calculated emission factors are shown at Table 2-1. As a conservative measure, a 2021 EMFAC 2017 run was conducted and a static 2021 emissions factor data set was used for the entire duration of analysis herein (e.g., 30 years). Use of 2021 emission factors would overstate potential impacts since this approach assumes that emission factors remain “static” and do not change over time due to improved vehicle efficiencies resulting from fleet turnover and implementation of cleaner technology with lower emissions. Based on EMFAC 2017, Light-Heavy-Duty Trucks comprise of 47.72% diesel, Medium-Heavy-Duty Trucks comprise of 82.28% diesel, and Heavy-Heavy-Duty Trucks comprise of 96.13% diesel trucks and have been accounted for accordingly in the emissions factor generation.

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 (5):

$$\text{Emissions}_{\text{speedA}} \text{ (g/s)} = \text{EF}_{\text{RunExhaust}} \text{ (g/VMT)} * \text{Distance (VMT/trip)} * \text{Number of Trips (trips/day)} / \text{seconds per day}$$

Where:

$\text{Emissions}_{\text{speedA}}$ (g/s): Vehicle emissions at a given speed A;

$\text{EF}_{\text{RunExhaust}}$ (g/VMT): EMFAC running exhaust PM₁₀ emission factor at speed A;

Distance (VMT/trip): Total distance traveled per trip.

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 idle time (15 minutes). The following equation was used to estimate the on-site vehicle idling emissions for each of the different vehicle classes (5):

$$\text{Emissions}_{\text{idle}} \text{ (g/s)} = \text{EF}_{\text{idle}} \text{ (g/hr)} * \text{Number of Trips (trips/day)} * \text{Idling Time (min/trip)} * \frac{60 \text{ minutes}}{\text{per hour}} / \text{seconds per day}$$

Where:

$\text{Emissions}_{\text{idle}}$ (g/s): Vehicle emissions during idling;

EF_{idle} (g/s): EMFAC idle exhaust PM_{10} emission factor.

TABLE 2-1: 2021 WEIGHTED AVERAGE DPM EMISSIONS FACTORS

Speed	Weighted Average
0 (idling)	0.12198 (g/idle-hr)
5	0.09854 (g/s)
25	0.04030 (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 “2.1”. 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 2-2. The modeled emission sources are illustrated on Exhibit 2-A. The modeled truck travel routes included in the HRA are based on the truck trip distributions (inbound and outbound) available from the Project’s Traffic Impact Analysis (TIA) (4). The modeled truck route is consistent with the trip distribution patterns identified in the Project’s traffic study, is supported by substantial evidence, and was modeled to determine the potential impacts to sensitive receptors along the primary truck routes. The modeling domain is limited to the Project’s primary truck route and includes off-site sources in the study area for more than 1 mile. This modeling domain is more conservative than using only a ¼ mile modeling domain which is supported by substantial evidence since several studies have shown that the greatest potential risks occur within a ¼ mile of the primary source of emissions (1) (in the case of the Project this is the on-site idling, travel, and on-site equipment).

On-site truck idling was estimated to occur as trucks enter and travel through the facility. Although the Project is required to comply with CARB’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 (6), 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. As such, this analysis estimated truck idling at 15 minutes, consistent with SCAQMD’s recommendation.

Per the *Oleander Business Park Traffic Impact Analysis* (TIA) prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 1,366 two-way vehicular trips per day (683 inbound and 683 outbound) which includes 376 two-way truck trips per day (188 inbound and 188 outbound) (4).

EXHIBIT 2-A: MODELED EMISSION SOURCES

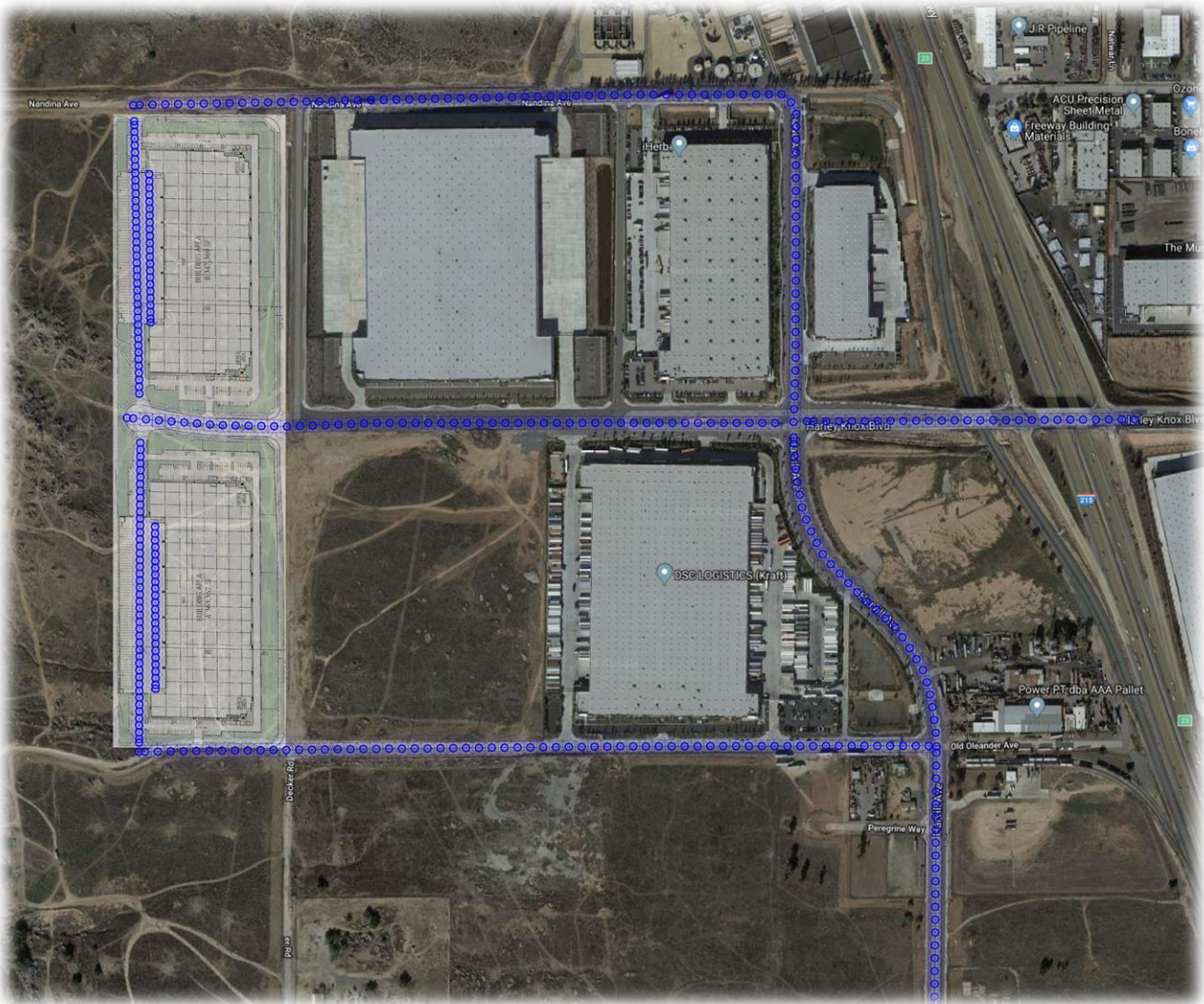


TABLE 2-2: DPM EMISSIONS FROM PROJECT TRUCKS (2021 ANALYSIS YEAR)

Truck Emission Rates						
Source	Trucks Per Day	VM ^a	Truck Emission Rate ^b	Truck Emission Rate ^b	Daily Truck Emissions ^c	Modeled Emission Rates
		(miles/day)	(grams/mile)	(grams/idle-hour)	(grams/day)	(g/second)
On-Site Idling Building A	95			0.1220	2.90	3.353E-05
On-Site Idling Building B	93			0.1220	2.84	3.283E-05
On-Site Travel Building A	190	44.93	0.0985		4.43	5.125E-05
On-Site Travel Building B	186	39.79	0.0985		3.92	4.538E-05
Off-Site Travel 10% Dwy 1 Inbound/Outbound	38	28.65	0.0403		1.15	1.336E-05
Off-Site Travel 10% Dwy 2 Inbound/Outbound	38	23.29	0.0403		0.94	1.086E-05
Off-site Travel 5% s/o Harvill Av.	19	4.39	0.0403		0.18	2.049E-06
Off-Site Travel 5% b/w Harley Knox & Oleander	19	5.00	0.0403		0.20	2.333E-06
Off-Site Travel 80% to/from Harvill Av.	301	153.40	0.0403		6.18	7.154E-05
Off-Site Travel 95% to/from I-215 Freeway	357	91.22	0.0403		3.68	4.255E-05
^a Vehicle miles traveled are for modeled truck route only.						
^b Emission rates determined using EMFAC 2017. 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.						

2.3 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 (2). SCAQMD recommends using the Environmental Protection Agency's (U.S. EPA's) AERMOD model. For purposes of this analysis, the Lakes AERMOD View (Version 9.8.3) 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 19191 (7).

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 U.S. 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.

SCAQMD required model parameters are presented in Table 2-3 (8). The model requires additional input parameters including emission data and local meteorology. Meteorological data from the SCAQMD's Perris monitoring station (SRA 24) was used to represent local weather conditions and prevailing winds (9). A wind rose exhibit of the Perris monitoring station is provided at Exhibit 2-B.

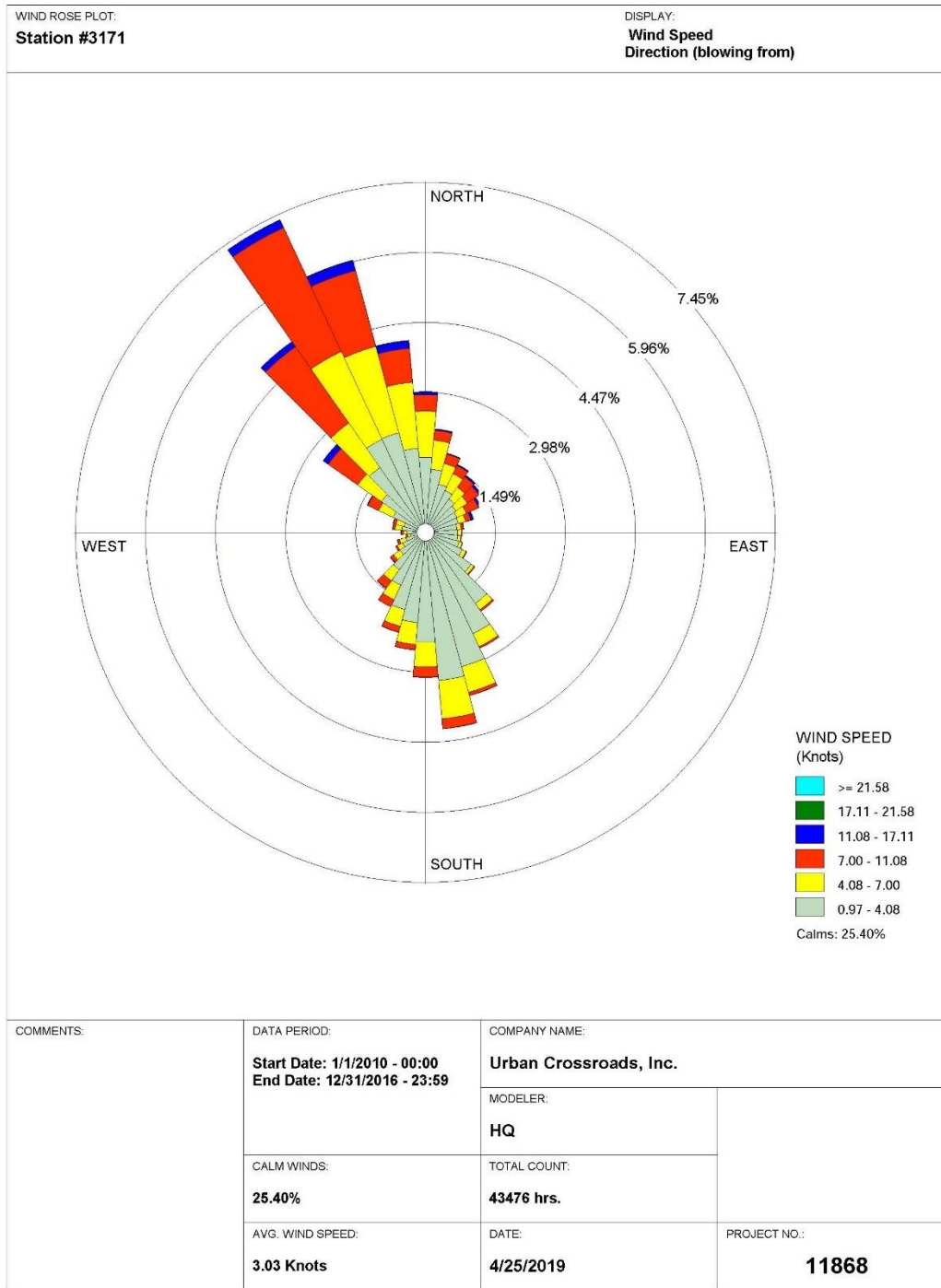
TABLE 2-3: AERMOD MODEL PARAMETERS

Dispersion Coefficient	Urban
Population	2,189,641
Terrain	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 boundaries, each volume source location, and receptor locations in the project vicinity. The AERMOD dispersion model summary output files for the proposed facility are presented in Appendix "2.1". Modeled sensitive receptors were placed at residential and non-residential locations.

Consistent with SCAQMD modeling guidance, all receptors were set to the elevation so that only ground-level concentrations are analyzed (8). 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.

EXHIBIT 2-B: WIND ROSE (SRA 24)



Receptors may be placed at applicable structure locations for residential and worker property and not necessarily the boundaries of these uses. 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 residential and worker over a period of 30 or 25 years of exposure, respectively. As such, even though it is unlikely to occur in practical terms (because the amount of time spent indoors), this study assumes that a resident or worker would be exposed over a long-period of time for 12 or 24-hours per day at the structure where they reside or work.

Furthermore, worker receptors immediately adjacent to the Project site have been evaluated in the HRA. Any impacts to workers located further away from the Project site than the modeled worker receptors would have a lesser impact than what has already been disclosed in the HRA at the MEIW.

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the 2015 OEHHA Guidelines. Tables 2-4 and 2-5 summarize the Exposure Parameters for Residents and Offsite Workers based on 2015 OEHHA Guidelines. Appendix 2.2 includes the detailed risk calculation.

2.4 CARCINOGENIC CHEMICAL RISK

Based on the South Coast AQMD Air Quality Significance Thresholds (10) (April 2019), emissions of toxic air contaminants (TACs) are considered significant if a HRA shows an increased risk of greater than 10 in one million. Based on guidance from the SCAQMD in the document Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (2), for purposes of this analysis, 10 in one million is used as the cancer risk threshold for the Project.

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. As an example, the risk of dying from accidental drowning is 1,000 in a million which is 100 times more than the SCAQMD's threshold of 10 in one million, the nearest comparison to 10 in one million is the 7 in one million lifetime chance that an individual would be struck and killed by lightning (11).

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

TABLE 2-4: 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	1090	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 2-5: 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

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.

$$DOSE_{air} = (C_{air} \times [BR/BW] \times A \times EF) \times (1 \times 10^{-6})$$

Where:

$DOSE_{air}$ = chronic daily intake (mg/kg/day)

C_{air} = concentration of contaminant in air (ug/m³)

$[BR/BW]$ = 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 (ug to mg, L to m³)

$$RISK_{air} = DOSE_{air} \times CPF \times ED/AT$$

Where:

$DOSE_{air}$ = chronic daily intake (mg/kg/day)

CPF = cancer potency factor

ED = number of years within particular age group

AT = averaging time

2.5 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 $5 \mu\text{g}/\text{m}^3$ (OEHHA Toxicity Criteria Database, <http://www.oehha.org/risk/chemicaldb/index.asp>).

The non-cancer hazard index was calculated (consistent with SCAQMD methodology) as follows: The relationship for the non-cancer health effects of DPM is given by the following equation:

$$\text{HI}_{\text{DPM}} = \text{C}_{\text{DPM}} / \text{REL}_{\text{DPM}}$$

Where:

HI_{DPM} = Hazard Index; an expression of the potential for non-cancer health effects.

C_{DPM} = Annual average DPM concentration ($\mu\text{g}/\text{m}^3$).

REL_{DPM} = Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated.

For purposes of this analysis the hazard index for the respiratory endpoint totaled less than one for all receptors in the project vicinity, and thus is less than significant.

2.6 POTENTIAL PROJECT-RELATED DPM SOURCE CANCER AND NON-CANCER RISKS²

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to Project DPM source emissions is located at the existing homes at the southwest corner of Oleander Avenue and Harvill Avenue. At the MEIR, the maximum incremental cancer risk attributable to Project DPM source emissions is estimated at 1.03 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 0.0004, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent residences. Because all other modeled residential receptors are located at a greater distance than the scenario analyze herein, all other residential receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR

² 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.

identified herein. The nearest modeled receptors for operational activity are illustrated on Exhibit 2-C.

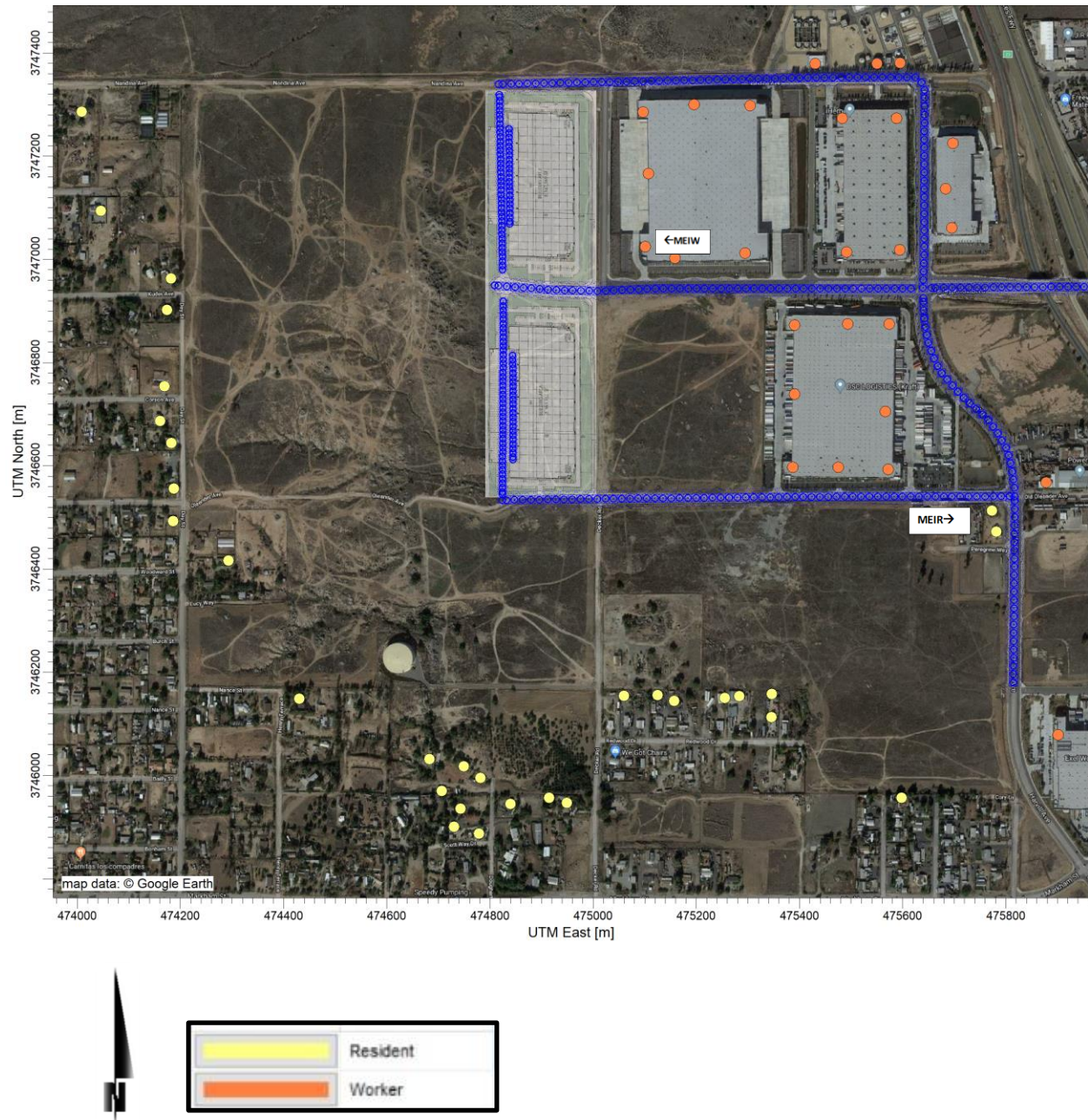
Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is located approximately 393 feet east of the proposed Building B at an existing industrial building. At the MEIW, the maximum incremental cancer risk impact at this location is 0.28 in one million which is less than the threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.001, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent workers. Because all other modeled worker receptors are located at a greater distance than the scenario analyze herein, 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. The nearest modeled receptors for operational activity are illustrated on Exhibit 2-C.

School Child Exposure Scenario:

There are no schools located within a $\frac{1}{4}$ mile of the Project site. As such, there would be no significant impacts that would occur to any schools in the vicinity of the Project. Proximity to sources of toxics is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an 80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center (1). As such, the Project will not cause a significant human health or cancer risk to nearby school children.

EXHIBIT 2-C: MODELED RECEPTORS



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3 REFERENCES

1. **Air Resources Board.** *Air Quality and Land Use Handbook: A Community Health Perspective.* 2005.
2. **South Coast Air Quality Management District.** Mobile Source Toxics Analysis. [Online] 2003.
http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html.
3. **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>.
4. **Urban Crossroads, Inc.** *Oleander Business Park Traffic Impact Analysis.* May 2019.
5. **California Air Resources Board.** EMFAC 2017. [Online] <https://www.arb.ca.gov/emfac/2017/>.
6. **Wong, Jillian.** *Planning, Rule Development & Area Sources.* December 22, 2016.
7. **Environmental Protection Agency.** User's Guide for the AMS/EPA Regulatory Model (AERMOD). [Online] 2019. https://www3.epa.gov/ttn/scram/models/aermod/aermod_userguide.pdf.
8. **South Coast Air Quality Management District.** South Coast AQMD Modeling Guidance for AERMOD. [Online] [Cited: September 18, 2019.] <http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance>.
9. —. Data for AERMOD. [Online] [Cited: June 10, 2019.] <https://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod>.
10. —. South Coast AQMD Air Quality Significance Thresholds. [Online] April 2019. [Cited: June 6, 2019.] <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.
11. **National Safety Council.** Injury Fact Chart. [Online] [Cited: September 18, 2019.] <https://www.nsc.org/work-safety/tools-resources/injury-facts/chart>.

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4 CERTIFICATION

The contents of this health risk assessment represent an accurate depiction of the impacts to sensitive receptors associated with the proposed Oleander Business Park 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 directly at (949) 336-5987.

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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 Planners
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

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APPENDIX 2.1:

AERMOD MODEL INPUT/OUTPUT

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```
** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 9.8.3
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 12/13/2019
** FILE: C:\LAKES\AERMOD VIEW\10719 HRA - (12-13-19)\10719 HRA.ADI
**
*****
**
**
*****
** AERMOD CONTROL PATHWAY
*****
**
**
CO STARTING
  TITLEONE C:\LAKES\AERMOD VIEW\10719 HRA\10719 HRA.ISC
  MODELOPT DFAULT CONC
  AVERTIME ANNUAL
  URBANOPT 2189641
  POLLUTID DPM
  RUNORNOT RUN
  ERRORFIL "10719 HRA.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 ON-SITE IDLING BUILDING A
** PREFIX
** LENGTH OF SIDE = 8.59
** CONFIGURATION = ADJACENT
** EMISSION RATE = 0.00003353
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 474844.623, 3746612.459, 494.57, 3.49, 4.00
```

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** 474843.994, 3746820.625, 497.55, 3.49, 4.00

** -----

LOCATION	L0000491	VOLUME	474844.610	3746616.754	494.86
LOCATION	L0000492	VOLUME	474844.584	3746625.344	495.14
LOCATION	L0000493	VOLUME	474844.558	3746633.934	495.01
LOCATION	L0000494	VOLUME	474844.532	3746642.524	494.82
LOCATION	L0000495	VOLUME	474844.506	3746651.114	494.64
LOCATION	L0000496	VOLUME	474844.480	3746659.704	494.65
LOCATION	L0000497	VOLUME	474844.454	3746668.294	494.94
LOCATION	L0000498	VOLUME	474844.428	3746676.884	495.22
LOCATION	L0000499	VOLUME	474844.402	3746685.474	495.51
LOCATION	L0000500	VOLUME	474844.376	3746694.064	495.80
LOCATION	L0000501	VOLUME	474844.350	3746702.654	496.09
LOCATION	L0000502	VOLUME	474844.324	3746711.244	496.38
LOCATION	L0000503	VOLUME	474844.298	3746719.834	496.67
LOCATION	L0000504	VOLUME	474844.272	3746728.424	496.96
LOCATION	L0000505	VOLUME	474844.246	3746737.014	497.25
LOCATION	L0000506	VOLUME	474844.220	3746745.604	497.54
LOCATION	L0000507	VOLUME	474844.195	3746754.194	497.56
LOCATION	L0000508	VOLUME	474844.169	3746762.784	497.56
LOCATION	L0000509	VOLUME	474844.143	3746771.373	497.56
LOCATION	L0000510	VOLUME	474844.117	3746779.963	497.57
LOCATION	L0000511	VOLUME	474844.091	3746788.553	497.57
LOCATION	L0000512	VOLUME	474844.065	3746797.143	497.57
LOCATION	L0000513	VOLUME	474844.039	3746805.733	497.57
LOCATION	L0000514	VOLUME	474844.013	3746814.323	497.80

** END OF LINE VOLUME SOURCE ID = SLINE1

** -----

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE2

** DESCRSRC ON-SITE IDLING BUILDING B

** PREFIX

** LENGTH OF SIDE = 8.59

** CONFIGURATION = ADJACENT

** EMISSION RATE = 0.00003283

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 2

** 474838.349, 3747068.947, 494.75, 3.49, 4.00

** 474836.694, 3747254.462, 488.87, 3.49, 4.00

** -----

LOCATION	L0000515	VOLUME	474838.311	3747073.241	494.19
LOCATION	L0000516	VOLUME	474838.234	3747081.831	493.97
LOCATION	L0000517	VOLUME	474838.158	3747090.421	493.69
LOCATION	L0000518	VOLUME	474838.081	3747099.010	493.41
LOCATION	L0000519	VOLUME	474838.004	3747107.600	493.12
LOCATION	L0000520	VOLUME	474837.928	3747116.190	492.72
LOCATION	L0000521	VOLUME	474837.851	3747124.779	492.33

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LOCATION L0000522	VOLUME	474837.774	3747133.369	491.94
LOCATION L0000523	VOLUME	474837.698	3747141.959	491.69
LOCATION L0000524	VOLUME	474837.621	3747150.548	491.53
LOCATION L0000525	VOLUME	474837.544	3747159.138	491.36
LOCATION L0000526	VOLUME	474837.468	3747167.728	491.20
LOCATION L0000527	VOLUME	474837.391	3747176.317	491.04
LOCATION L0000528	VOLUME	474837.314	3747184.907	490.88
LOCATION L0000529	VOLUME	474837.238	3747193.497	490.73
LOCATION L0000530	VOLUME	474837.161	3747202.086	490.60
LOCATION L0000531	VOLUME	474837.084	3747210.676	490.49
LOCATION L0000532	VOLUME	474837.008	3747219.266	490.38
LOCATION L0000533	VOLUME	474836.931	3747227.855	490.19
LOCATION L0000534	VOLUME	474836.855	3747236.445	489.66
LOCATION L0000535	VOLUME	474836.778	3747245.035	489.13
LOCATION L0000536	VOLUME	474836.701	3747253.624	488.60

** END OF LINE VOLUME SOURCE ID = SLINE2

** -----

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE3

** DESCRSRC ON-SITE TRAVEL BUILDING A

** PREFIX

** LENGTH OF SIDE = 8.59

** CONFIGURATION = ADJACENT

** EMISSION RATE = 0.00005125

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 2

** 474824.108, 3746545.169, 494.93, 3.49, 4.00

** 474825.741, 3746925.786, 499.01, 3.49, 4.00

** -----

LOCATION L0000537	VOLUME	474824.126	3746549.463	494.41
LOCATION L0000538	VOLUME	474824.163	3746558.053	494.13
LOCATION L0000539	VOLUME	474824.200	3746566.643	493.87
LOCATION L0000540	VOLUME	474824.237	3746575.233	494.15
LOCATION L0000541	VOLUME	474824.274	3746583.823	494.44
LOCATION L0000542	VOLUME	474824.311	3746592.413	494.72
LOCATION L0000543	VOLUME	474824.347	3746601.003	495.01
LOCATION L0000544	VOLUME	474824.384	3746609.593	495.29
LOCATION L0000545	VOLUME	474824.421	3746618.183	495.58
LOCATION L0000546	VOLUME	474824.458	3746626.773	495.86
LOCATION L0000547	VOLUME	474824.495	3746635.363	496.05
LOCATION L0000548	VOLUME	474824.532	3746643.953	496.25
LOCATION L0000549	VOLUME	474824.569	3746652.543	496.44
LOCATION L0000550	VOLUME	474824.606	3746661.132	496.68
LOCATION L0000551	VOLUME	474824.642	3746669.722	496.96
LOCATION L0000552	VOLUME	474824.679	3746678.312	497.25
LOCATION L0000553	VOLUME	474824.716	3746686.902	497.53
LOCATION L0000554	VOLUME	474824.753	3746695.492	497.81

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LOCATION L0000555	VOLUME	474824.790	3746704.082	498.09
LOCATION L0000556	VOLUME	474824.827	3746712.672	498.38
LOCATION L0000557	VOLUME	474824.864	3746721.262	498.66
LOCATION L0000558	VOLUME	474824.900	3746729.852	498.94
LOCATION L0000559	VOLUME	474824.937	3746738.442	499.23
LOCATION L0000560	VOLUME	474824.974	3746747.032	499.48
LOCATION L0000561	VOLUME	474825.011	3746755.622	499.48
LOCATION L0000562	VOLUME	474825.048	3746764.211	499.47
LOCATION L0000563	VOLUME	474825.085	3746772.801	499.47
LOCATION L0000564	VOLUME	474825.122	3746781.391	499.47
LOCATION L0000565	VOLUME	474825.159	3746789.981	499.46
LOCATION L0000566	VOLUME	474825.195	3746798.571	499.46
LOCATION L0000567	VOLUME	474825.232	3746807.161	499.46
LOCATION L0000568	VOLUME	474825.269	3746815.751	499.51
LOCATION L0000569	VOLUME	474825.306	3746824.341	499.56
LOCATION L0000570	VOLUME	474825.343	3746832.931	499.61
LOCATION L0000571	VOLUME	474825.380	3746841.521	499.63
LOCATION L0000572	VOLUME	474825.417	3746850.111	499.62
LOCATION L0000573	VOLUME	474825.453	3746858.701	499.62
LOCATION L0000574	VOLUME	474825.490	3746867.291	499.61
LOCATION L0000575	VOLUME	474825.527	3746875.880	499.56
LOCATION L0000576	VOLUME	474825.564	3746884.470	499.50
LOCATION L0000577	VOLUME	474825.601	3746893.060	499.44
LOCATION L0000578	VOLUME	474825.638	3746901.650	499.27
LOCATION L0000579	VOLUME	474825.675	3746910.240	499.04
LOCATION L0000580	VOLUME	474825.712	3746918.830	498.80

** END OF LINE VOLUME SOURCE ID = SLINE3

**

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE4

** DESCRSRC ON-SITE TRAVEL BUILDING B

** PREFIX

** LENGTH OF SIDE = 8.59

** CONFIGURATION = ADJACENT

** EMISSION RATE = 0.00004538

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 2

** 474818.124, 3747319.313, 487.01, 3.49, 4.00

** 474824.383, 3746975.055, 498.87, 3.49, 4.00

**

LOCATION L0000581	VOLUME	474818.202	3747315.019	487.10
LOCATION L0000582	VOLUME	474818.358	3747306.431	487.39
LOCATION L0000583	VOLUME	474818.514	3747297.842	487.68
LOCATION L0000584	VOLUME	474818.670	3747289.253	487.97
LOCATION L0000585	VOLUME	474818.826	3747280.665	488.25
LOCATION L0000586	VOLUME	474818.982	3747272.076	488.53
LOCATION L0000587	VOLUME	474819.139	3747263.488	488.80

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LOCATION L0000588	VOLUME	474819.295	3747254.899	489.17
LOCATION L0000589	VOLUME	474819.451	3747246.311	490.01
LOCATION L0000590	VOLUME	474819.607	3747237.722	490.86
LOCATION L0000591	VOLUME	474819.763	3747229.133	491.71
LOCATION L0000592	VOLUME	474819.919	3747220.545	492.18
LOCATION L0000593	VOLUME	474820.075	3747211.956	492.44
LOCATION L0000594	VOLUME	474820.232	3747203.368	492.71
LOCATION L0000595	VOLUME	474820.388	3747194.779	492.92
LOCATION L0000596	VOLUME	474820.544	3747186.190	492.91
LOCATION L0000597	VOLUME	474820.700	3747177.602	492.90
LOCATION L0000598	VOLUME	474820.856	3747169.013	492.89
LOCATION L0000599	VOLUME	474821.012	3747160.425	492.89
LOCATION L0000600	VOLUME	474821.169	3747151.836	492.88
LOCATION L0000601	VOLUME	474821.325	3747143.248	492.89
LOCATION L0000602	VOLUME	474821.481	3747134.659	492.99
LOCATION L0000603	VOLUME	474821.637	3747126.070	493.53
LOCATION L0000604	VOLUME	474821.793	3747117.482	494.08
LOCATION L0000605	VOLUME	474821.949	3747108.893	494.61
LOCATION L0000606	VOLUME	474822.105	3747100.305	494.97
LOCATION L0000607	VOLUME	474822.262	3747091.716	495.24
LOCATION L0000608	VOLUME	474822.418	3747083.128	495.51
LOCATION L0000609	VOLUME	474822.574	3747074.539	495.77
LOCATION L0000610	VOLUME	474822.730	3747065.950	496.02
LOCATION L0000611	VOLUME	474822.886	3747057.362	496.25
LOCATION L0000612	VOLUME	474823.042	3747048.773	496.49
LOCATION L0000613	VOLUME	474823.199	3747040.185	496.57
LOCATION L0000614	VOLUME	474823.355	3747031.596	496.58
LOCATION L0000615	VOLUME	474823.511	3747023.007	496.60
LOCATION L0000616	VOLUME	474823.667	3747014.419	496.73
LOCATION L0000617	VOLUME	474823.823	3747005.830	497.29
LOCATION L0000618	VOLUME	474823.979	3746997.242	497.85
LOCATION L0000619	VOLUME	474824.136	3746988.653	498.40
LOCATION L0000620	VOLUME	474824.292	3746980.065	498.55

** END OF LINE VOLUME SOURCE ID = SLINE4

**

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE5

** DESCRSRC OFF-SITE TRAVEL 10% DWY 1 INBOUND/OUTBOUND

** PREFIX

** LENGTH OF SIDE = 16.00

** CONFIGURATION = ADJACENT

** EMISSION RATE = 0.00001336

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 7

** 474816.585, 3747339.682, 487.03, 3.49, 7.44

** 475430.379, 3747352.496, 467.79, 3.49, 7.44

** 475626.434, 3747353.137, 464.08, 3.49, 7.44

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** 475635.404, 3747344.808, 464.07, 3.49, 7.44
 ** 475642.452, 3747330.712, 464.48, 3.49, 7.44
 ** 475641.811, 3747014.205, 466.75, 3.49, 7.44
 ** 475639.248, 3746942.446, 466.07, 3.49, 7.44

** -----
 LOCATION L0000621 VOLUME 474824.584 3747339.849 486.84
 LOCATION L0000622 VOLUME 474840.580 3747340.183 486.31
 LOCATION L0000623 VOLUME 474856.577 3747340.517 485.59
 LOCATION L0000624 VOLUME 474872.573 3747340.851 484.62
 LOCATION L0000625 VOLUME 474888.570 3747341.185 483.88
 LOCATION L0000626 VOLUME 474904.566 3747341.519 483.33
 LOCATION L0000627 VOLUME 474920.563 3747341.853 482.73
 LOCATION L0000628 VOLUME 474936.559 3747342.187 482.12
 LOCATION L0000629 VOLUME 474952.556 3747342.521 481.20
 LOCATION L0000630 VOLUME 474968.552 3747342.855 480.19
 LOCATION L0000631 VOLUME 474984.549 3747343.189 479.61
 LOCATION L0000632 VOLUME 475000.545 3747343.523 479.02
 LOCATION L0000633 VOLUME 475016.542 3747343.857 477.40
 LOCATION L0000634 VOLUME 475032.538 3747344.191 475.98
 LOCATION L0000635 VOLUME 475048.535 3747344.525 475.43
 LOCATION L0000636 VOLUME 475064.531 3747344.859 475.05
 LOCATION L0000637 VOLUME 475080.528 3747345.193 475.04
 LOCATION L0000638 VOLUME 475096.524 3747345.526 474.80
 LOCATION L0000639 VOLUME 475112.521 3747345.860 474.26
 LOCATION L0000640 VOLUME 475128.517 3747346.194 473.71
 LOCATION L0000641 VOLUME 475144.514 3747346.528 473.17
 LOCATION L0000642 VOLUME 475160.510 3747346.862 472.63
 LOCATION L0000643 VOLUME 475176.507 3747347.196 472.11
 LOCATION L0000644 VOLUME 475192.503 3747347.530 471.58
 LOCATION L0000645 VOLUME 475208.500 3747347.864 471.04
 LOCATION L0000646 VOLUME 475224.496 3747348.198 470.51
 LOCATION L0000647 VOLUME 475240.493 3747348.532 469.98
 LOCATION L0000648 VOLUME 475256.490 3747348.866 469.44
 LOCATION L0000649 VOLUME 475272.486 3747349.200 469.00
 LOCATION L0000650 VOLUME 475288.483 3747349.534 469.00
 LOCATION L0000651 VOLUME 475304.479 3747349.868 469.00
 LOCATION L0000652 VOLUME 475320.476 3747350.202 469.00
 LOCATION L0000653 VOLUME 475336.472 3747350.536 468.81
 LOCATION L0000654 VOLUME 475352.469 3747350.870 468.36
 LOCATION L0000655 VOLUME 475368.465 3747351.204 468.12
 LOCATION L0000656 VOLUME 475384.462 3747351.538 468.03
 LOCATION L0000657 VOLUME 475400.458 3747351.872 467.93
 LOCATION L0000658 VOLUME 475416.455 3747352.206 467.82
 LOCATION L0000659 VOLUME 475432.452 3747352.503 467.46
 LOCATION L0000660 VOLUME 475448.452 3747352.555 467.04
 LOCATION L0000661 VOLUME 475464.451 3747352.608 466.90
 LOCATION L0000662 VOLUME 475480.451 3747352.660 466.77
 LOCATION L0000663 VOLUME 475496.451 3747352.712 466.35

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LOCATION L0000664	VOLUME	475512.451	3747352.765	465.98
LOCATION L0000665	VOLUME	475528.451	3747352.817	465.86
LOCATION L0000666	VOLUME	475544.451	3747352.869	465.66
LOCATION L0000667	VOLUME	475560.451	3747352.921	465.24
LOCATION L0000668	VOLUME	475576.451	3747352.974	465.00
LOCATION L0000669	VOLUME	475592.451	3747353.026	465.00
LOCATION L0000670	VOLUME	475608.451	3747353.078	464.71
LOCATION L0000671	VOLUME	475624.451	3747353.131	464.18
LOCATION L0000672	VOLUME	475636.198	3747343.220	464.08
LOCATION L0000673	VOLUME	475642.448	3747328.696	464.34
LOCATION L0000674	VOLUME	475642.415	3747312.696	464.58
LOCATION L0000675	VOLUME	475642.383	3747296.696	464.58
LOCATION L0000676	VOLUME	475642.351	3747280.696	464.66
LOCATION L0000677	VOLUME	475642.318	3747264.696	464.88
LOCATION L0000678	VOLUME	475642.286	3747248.696	465.00
LOCATION L0000679	VOLUME	475642.253	3747232.696	465.00
LOCATION L0000680	VOLUME	475642.221	3747216.696	465.19
LOCATION L0000681	VOLUME	475642.189	3747200.696	465.50
LOCATION L0000682	VOLUME	475642.156	3747184.696	465.59
LOCATION L0000683	VOLUME	475642.124	3747168.696	465.59
LOCATION L0000684	VOLUME	475642.092	3747152.696	465.78
LOCATION L0000685	VOLUME	475642.059	3747136.696	465.99
LOCATION L0000686	VOLUME	475642.027	3747120.696	466.00
LOCATION L0000687	VOLUME	475641.994	3747104.696	466.00
LOCATION L0000688	VOLUME	475641.962	3747088.696	466.00
LOCATION L0000689	VOLUME	475641.930	3747072.696	466.07
LOCATION L0000690	VOLUME	475641.897	3747056.697	466.39
LOCATION L0000691	VOLUME	475641.865	3747040.697	466.60
LOCATION L0000692	VOLUME	475641.832	3747024.697	466.60
LOCATION L0000693	VOLUME	475641.615	3747008.700	466.61
LOCATION L0000694	VOLUME	475641.043	3746992.710	466.63
LOCATION L0000695	VOLUME	475640.472	3746976.720	466.44
LOCATION L0000696	VOLUME	475639.901	3746960.731	466.10
LOCATION L0000697	VOLUME	475639.330	3746944.741	466.00

** END OF LINE VOLUME SOURCE ID = SLINE5

**

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE6

** DESCRSRC OFF-SITE TRAVEL 10% DWY 2

** PREFIX

** LENGTH OF SIDE = 16.00

** CONFIGURATION = ADJACENT

** EMISSION RATE = 0.00001086

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 4

** 474823.520, 3746533.781, 494.95, 3.49, 7.44

** 475056.871, 3746536.559, 485.04, 3.49, 7.44

10719 HRA

** 475419.862, 3746540.263, 473.99, 3.49, 7.44

** 475820.355, 3746541.189, 465.80, 3.49, 7.44

**

LOCATION	L0000698	VOLUME	474831.519	3746533.876	494.56
LOCATION	L0000699	VOLUME	474847.518	3746534.067	494.07
LOCATION	L0000700	VOLUME	474863.517	3746534.257	493.51
LOCATION	L0000701	VOLUME	474879.516	3746534.448	492.95
LOCATION	L0000702	VOLUME	474895.515	3746534.638	491.93
LOCATION	L0000703	VOLUME	474911.514	3746534.829	490.94
LOCATION	L0000704	VOLUME	474927.513	3746535.019	490.41
LOCATION	L0000705	VOLUME	474943.512	3746535.210	489.88
LOCATION	L0000706	VOLUME	474959.510	3746535.400	489.34
LOCATION	L0000707	VOLUME	474975.509	3746535.590	488.81
LOCATION	L0000708	VOLUME	474991.508	3746535.781	488.28
LOCATION	L0000709	VOLUME	475007.507	3746535.971	487.74
LOCATION	L0000710	VOLUME	475023.506	3746536.162	487.21
LOCATION	L0000711	VOLUME	475039.505	3746536.352	486.35
LOCATION	L0000712	VOLUME	475055.504	3746536.543	485.29
LOCATION	L0000713	VOLUME	475071.503	3746536.708	484.61
LOCATION	L0000714	VOLUME	475087.502	3746536.872	484.08
LOCATION	L0000715	VOLUME	475103.501	3746537.035	483.54
LOCATION	L0000716	VOLUME	475119.500	3746537.198	483.01
LOCATION	L0000717	VOLUME	475135.499	3746537.361	482.48
LOCATION	L0000718	VOLUME	475151.499	3746537.525	481.94
LOCATION	L0000719	VOLUME	475167.498	3746537.688	481.41
LOCATION	L0000720	VOLUME	475183.497	3746537.851	480.87
LOCATION	L0000721	VOLUME	475199.496	3746538.014	480.30
LOCATION	L0000722	VOLUME	475215.495	3746538.178	479.57
LOCATION	L0000723	VOLUME	475231.494	3746538.341	478.53
LOCATION	L0000724	VOLUME	475247.494	3746538.504	477.49
LOCATION	L0000725	VOLUME	475263.493	3746538.667	476.42
LOCATION	L0000726	VOLUME	475279.492	3746538.831	475.97
LOCATION	L0000727	VOLUME	475295.491	3746538.994	475.92
LOCATION	L0000728	VOLUME	475311.490	3746539.157	475.90
LOCATION	L0000729	VOLUME	475327.489	3746539.320	475.90
LOCATION	L0000730	VOLUME	475343.489	3746539.484	475.48
LOCATION	L0000731	VOLUME	475359.488	3746539.647	475.01
LOCATION	L0000732	VOLUME	475375.487	3746539.810	474.48
LOCATION	L0000733	VOLUME	475391.486	3746539.974	473.99
LOCATION	L0000734	VOLUME	475407.485	3746540.137	473.92
LOCATION	L0000735	VOLUME	475423.485	3746540.271	473.76
LOCATION	L0000736	VOLUME	475439.485	3746540.308	473.30
LOCATION	L0000737	VOLUME	475455.485	3746540.345	472.81
LOCATION	L0000738	VOLUME	475471.484	3746540.382	472.28
LOCATION	L0000739	VOLUME	475487.484	3746540.419	471.96
LOCATION	L0000740	VOLUME	475503.484	3746540.456	471.89
LOCATION	L0000741	VOLUME	475519.484	3746540.493	471.54
LOCATION	L0000742	VOLUME	475535.484	3746540.530	471.00

10719 HRA

LOCATION L0000743	VOLUME	475551.484	3746540.567	470.52
LOCATION L0000744	VOLUME	475567.484	3746540.604	470.07
LOCATION L0000745	VOLUME	475583.484	3746540.641	469.54
LOCATION L0000746	VOLUME	475599.484	3746540.678	469.01
LOCATION L0000747	VOLUME	475615.484	3746540.715	469.00
LOCATION L0000748	VOLUME	475631.484	3746540.752	468.99
LOCATION L0000749	VOLUME	475647.484	3746540.789	468.91
LOCATION L0000750	VOLUME	475663.484	3746540.826	468.74
LOCATION L0000751	VOLUME	475679.484	3746540.863	468.29
LOCATION L0000752	VOLUME	475695.484	3746540.900	467.81
LOCATION L0000753	VOLUME	475711.484	3746540.937	467.28
LOCATION L0000754	VOLUME	475727.484	3746540.974	467.00
LOCATION L0000755	VOLUME	475743.484	3746541.011	467.00
LOCATION L0000756	VOLUME	475759.484	3746541.048	466.68
LOCATION L0000757	VOLUME	475775.484	3746541.085	466.14
LOCATION L0000758	VOLUME	475791.484	3746541.122	466.00
LOCATION L0000759	VOLUME	475807.484	3746541.159	466.00

** END OF LINE VOLUME SOURCE ID = SLINE6

**

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE7

** DESCRSRC OFF-SITE TRAVEL 5% S/O HARVILL AV.

** PREFIX

** LENGTH OF SIDE = 16.00

** CONFIGURATION = ADJACENT

** EMISSION RATE = 2.049E-06

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 2

** 475817.207, 3746540.417, 465.91, 3.49, 7.44

** 475814.350, 3746164.451, 466.57, 3.49, 7.44

**

LOCATION L0000760	VOLUME	475817.146	3746532.418	465.76
LOCATION L0000761	VOLUME	475817.024	3746516.418	465.76
LOCATION L0000762	VOLUME	475816.903	3746500.419	465.76
LOCATION L0000763	VOLUME	475816.781	3746484.419	465.77
LOCATION L0000764	VOLUME	475816.660	3746468.419	465.77
LOCATION L0000765	VOLUME	475816.538	3746452.420	465.78
LOCATION L0000766	VOLUME	475816.416	3746436.420	465.85
LOCATION L0000767	VOLUME	475816.295	3746420.421	465.97
LOCATION L0000768	VOLUME	475816.173	3746404.421	466.00
LOCATION L0000769	VOLUME	475816.052	3746388.422	466.00
LOCATION L0000770	VOLUME	475815.930	3746372.422	466.00
LOCATION L0000771	VOLUME	475815.809	3746356.423	466.00
LOCATION L0000772	VOLUME	475815.687	3746340.423	466.42
LOCATION L0000773	VOLUME	475815.566	3746324.424	466.81
LOCATION L0000774	VOLUME	475815.444	3746308.424	466.81
LOCATION L0000775	VOLUME	475815.323	3746292.425	466.84

10719 HRA

LOCATION L0000776	VOLUME	475815.201	3746276.425	466.94
LOCATION L0000777	VOLUME	475815.079	3746260.425	467.00
LOCATION L0000778	VOLUME	475814.958	3746244.426	467.00
LOCATION L0000779	VOLUME	475814.836	3746228.426	467.00
LOCATION L0000780	VOLUME	475814.715	3746212.427	467.00
LOCATION L0000781	VOLUME	475814.593	3746196.427	466.95
LOCATION L0000782	VOLUME	475814.472	3746180.428	466.87

** END OF LINE VOLUME SOURCE ID = SLINE7

**

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE8

** DESCRSRC OFF-SITE TRAVEL 5% B/W HARLEY KNOX & OLEANDER

** PREFIX

** LENGTH OF SIDE = 16.00

** CONFIGURATION = ADJACENT

** EMISSION RATE = 2.333E-06

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 13

** 475639.747,	3746925.485,	466.08,	3.49,	7.44
** 475640.651,	3746894.772,	467.14,	3.49,	7.44
** 475645.167,	3746862.252,	467.77,	3.49,	7.44
** 475650.587,	3746835.152,	468.12,	3.49,	7.44
** 475657.814,	3746815.279,	468.02,	3.49,	7.44
** 475674.074,	3746781.856,	467.62,	3.49,	7.44
** 475691.237,	3746761.079,	467.07,	3.49,	7.44
** 475723.757,	3746726.753,	466.11,	3.49,	7.44
** 475766.213,	3746688.813,	465.63,	3.49,	7.44
** 475784.280,	3746662.617,	465.98,	3.49,	7.44
** 475802.346,	3746631.903,	465.96,	3.49,	7.44
** 475811.380,	3746595.770,	465.99,	3.49,	7.44
** 475816.800,	3746553.314,	465.86,	3.49,	7.44

**

LOCATION L0000783	VOLUME	475639.983	3746917.489	466.29
LOCATION L0000784	VOLUME	475640.453	3746901.496	466.82
LOCATION L0000785	VOLUME	475641.926	3746885.587	467.21
LOCATION L0000786	VOLUME	475644.127	3746869.739	467.46
LOCATION L0000787	VOLUME	475646.823	3746853.975	467.84
LOCATION L0000788	VOLUME	475649.961	3746838.285	468.26
LOCATION L0000789	VOLUME	475654.963	3746823.118	468.16
LOCATION L0000790	VOLUME	475661.164	3746808.392	467.95
LOCATION L0000791	VOLUME	475668.164	3746794.004	467.72
LOCATION L0000792	VOLUME	475675.660	3746779.936	467.47
LOCATION L0000793	VOLUME	475685.850	3746767.601	467.13
LOCATION L0000794	VOLUME	475696.424	3746755.605	467.00
LOCATION L0000795	VOLUME	475707.427	3746743.989	466.96
LOCATION L0000796	VOLUME	475718.431	3746732.374	466.56
LOCATION L0000797	VOLUME	475729.913	3746721.251	466.11

10719 HRA

LOCATION L0000798	VOLUME	475741.844	3746710.590	466.05
LOCATION L0000799	VOLUME	475753.774	3746699.929	465.87
LOCATION L0000800	VOLUME	475765.705	3746689.267	465.47
LOCATION L0000801	VOLUME	475774.910	3746676.203	465.50
LOCATION L0000802	VOLUME	475783.994	3746663.032	465.67
LOCATION L0000803	VOLUME	475792.137	3746649.260	465.68
LOCATION L0000804	VOLUME	475800.249	3746635.469	465.79
LOCATION L0000805	VOLUME	475805.224	3746620.394	466.00
LOCATION L0000806	VOLUME	475809.104	3746604.872	466.00
LOCATION L0000807	VOLUME	475812.218	3746589.206	465.92
LOCATION L0000808	VOLUME	475814.244	3746573.334	465.85
LOCATION L0000809	VOLUME	475816.270	3746557.463	465.78

** END OF LINE VOLUME SOURCE ID = SLINE8

**

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE9

** DESCRSRC OFF-SITE TRAVEL 80% TO HARVILL

** PREFIX

** LENGTH OF SIDE = 16.00

** CONFIGURATION = ADJACENT

** EMISSION RATE = 0.00007154

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 5

** 474808.685, 3746949.875, 500.49, 3.49, 7.44

** 474919.795, 3746940.842, 491.62, 3.49, 7.44

** 475008.321, 3746939.035, 485.94, 3.49, 7.44

** 475123.947, 3746943.552, 480.96, 3.49, 7.44

** 475628.907, 3746943.552, 466.09, 3.49, 7.44

**

LOCATION L0000810	VOLUME	474816.659	3746949.227	499.31
LOCATION L0000811	VOLUME	474832.606	3746947.930	497.84
LOCATION L0000812	VOLUME	474848.554	3746946.634	496.43
LOCATION L0000813	VOLUME	474864.501	3746945.337	495.20
LOCATION L0000814	VOLUME	474880.448	3746944.041	493.96
LOCATION L0000815	VOLUME	474896.396	3746942.744	492.89
LOCATION L0000816	VOLUME	474912.343	3746941.448	491.74
LOCATION L0000817	VOLUME	474928.317	3746940.668	490.15
LOCATION L0000818	VOLUME	474944.313	3746940.341	488.70
LOCATION L0000819	VOLUME	474960.310	3746940.015	487.63
LOCATION L0000820	VOLUME	474976.307	3746939.688	486.78
LOCATION L0000821	VOLUME	474992.304	3746939.362	486.25
LOCATION L0000822	VOLUME	475008.300	3746939.035	485.72
LOCATION L0000823	VOLUME	475024.288	3746939.659	485.18
LOCATION L0000824	VOLUME	475040.276	3746940.283	484.30
LOCATION L0000825	VOLUME	475056.264	3746940.908	483.24
LOCATION L0000826	VOLUME	475072.251	3746941.532	482.58
LOCATION L0000827	VOLUME	475088.239	3746942.157	482.05

10719 HRA

LOCATION L0000828	VOLUME	475104.227	3746942.781	481.52
LOCATION L0000829	VOLUME	475120.215	3746943.406	480.99
LOCATION L0000830	VOLUME	475136.212	3746943.552	480.45
LOCATION L0000831	VOLUME	475152.212	3746943.552	479.84
LOCATION L0000832	VOLUME	475168.212	3746943.552	478.77
LOCATION L0000833	VOLUME	475184.212	3746943.552	477.77
LOCATION L0000834	VOLUME	475200.212	3746943.552	476.93
LOCATION L0000835	VOLUME	475216.212	3746943.552	476.21
LOCATION L0000836	VOLUME	475232.212	3746943.552	475.68
LOCATION L0000837	VOLUME	475248.212	3746943.552	475.58
LOCATION L0000838	VOLUME	475264.212	3746943.552	475.89
LOCATION L0000839	VOLUME	475280.212	3746943.552	475.65
LOCATION L0000840	VOLUME	475296.212	3746943.552	475.12
LOCATION L0000841	VOLUME	475312.212	3746943.552	474.76
LOCATION L0000842	VOLUME	475328.212	3746943.552	474.45
LOCATION L0000843	VOLUME	475344.212	3746943.552	474.22
LOCATION L0000844	VOLUME	475360.212	3746943.552	473.99
LOCATION L0000845	VOLUME	475376.212	3746943.552	473.45
LOCATION L0000846	VOLUME	475392.212	3746943.552	472.92
LOCATION L0000847	VOLUME	475408.212	3746943.552	472.39
LOCATION L0000848	VOLUME	475424.212	3746943.552	471.85
LOCATION L0000849	VOLUME	475440.212	3746943.552	471.32
LOCATION L0000850	VOLUME	475456.212	3746943.552	470.79
LOCATION L0000851	VOLUME	475472.212	3746943.552	470.25
LOCATION L0000852	VOLUME	475488.212	3746943.552	469.72
LOCATION L0000853	VOLUME	475504.212	3746943.552	469.19
LOCATION L0000854	VOLUME	475520.212	3746943.552	468.85
LOCATION L0000855	VOLUME	475536.212	3746943.552	468.63
LOCATION L0000856	VOLUME	475552.212	3746943.552	468.34
LOCATION L0000857	VOLUME	475568.212	3746943.552	468.03
LOCATION L0000858	VOLUME	475584.212	3746943.552	467.32
LOCATION L0000859	VOLUME	475600.212	3746943.552	466.57
LOCATION L0000860	VOLUME	475616.212	3746943.552	466.26

** END OF LINE VOLUME SOURCE ID = SLINE9

**

** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES

** LINE VOLUME SOURCE ID = SLINE10

** DESCRSRC OFF-SITE TRAVEL 95% TO/FROM I-215 FREEWAY

** PREFIX

** LENGTH OF SIDE = 16.00

** CONFIGURATION = ADJACENT

** EMISSION RATE = 0.00004255

** VERTICAL DIMENSION = 6.99

** SZINIT = 3.25

** NODES = 2

** 475656.007, 3746945.358, 466.00, 3.49, 7.44

** 476067.022, 3746948.068, 459.55, 3.49, 7.44

**

10719 HRA

LOCATION	L0000861	VOLUME	475664.007	3746945.411	466.00
LOCATION	L0000862	VOLUME	475680.007	3746945.517	466.00
LOCATION	L0000863	VOLUME	475696.006	3746945.622	465.66
LOCATION	L0000864	VOLUME	475712.006	3746945.728	464.78
LOCATION	L0000865	VOLUME	475728.006	3746945.833	464.07
LOCATION	L0000866	VOLUME	475744.005	3746945.939	463.54
LOCATION	L0000867	VOLUME	475760.005	3746946.044	463.34
LOCATION	L0000868	VOLUME	475776.005	3746946.150	463.34
LOCATION	L0000869	VOLUME	475792.004	3746946.255	463.20
LOCATION	L0000870	VOLUME	475808.004	3746946.361	463.02
LOCATION	L0000871	VOLUME	475824.004	3746946.466	463.00
LOCATION	L0000872	VOLUME	475840.003	3746946.572	463.00
LOCATION	L0000873	VOLUME	475856.003	3746946.677	462.63
LOCATION	L0000874	VOLUME	475872.003	3746946.783	462.29
LOCATION	L0000875	VOLUME	475888.002	3746946.888	462.12
LOCATION	L0000876	VOLUME	475904.002	3746946.994	462.00
LOCATION	L0000877	VOLUME	475920.001	3746947.099	462.00
LOCATION	L0000878	VOLUME	475936.001	3746947.204	461.79
LOCATION	L0000879	VOLUME	475952.001	3746947.310	461.26
LOCATION	L0000880	VOLUME	475968.000	3746947.415	461.00
LOCATION	L0000881	VOLUME	475984.000	3746947.521	461.00
LOCATION	L0000882	VOLUME	476000.000	3746947.626	460.66
LOCATION	L0000883	VOLUME	476015.999	3746947.732	460.13
LOCATION	L0000884	VOLUME	476031.999	3746947.837	460.00
LOCATION	L0000885	VOLUME	476047.999	3746947.943	460.00
LOCATION	L0000886	VOLUME	476063.998	3746948.048	459.53

** END OF LINE VOLUME SOURCE ID = SLINE10

** SOURCE PARAMETERS **

** LINE VOLUME SOURCE ID = SLINE1

SRCPARAM	L0000491	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000492	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000493	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000494	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000495	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000496	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000497	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000498	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000499	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000500	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000501	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000502	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000503	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000504	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000505	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000506	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000507	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000508	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000509	0.000001397	3.49	4.00	3.25

10719 HRA

SRCPARAM	L0000510	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000511	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000512	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000513	0.000001397	3.49	4.00	3.25
SRCPARAM	L0000514	0.000001397	3.49	4.00	3.25

**

** LINE VOLUME SOURCE ID = SLINE2

SRCPARAM	L0000515	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000516	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000517	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000518	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000519	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000520	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000521	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000522	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000523	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000524	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000525	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000526	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000527	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000528	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000529	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000530	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000531	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000532	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000533	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000534	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000535	0.000001492	3.49	4.00	3.25
SRCPARAM	L0000536	0.000001492	3.49	4.00	3.25

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** LINE VOLUME SOURCE ID = SLINE3

SRCPARAM	L0000537	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000538	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000539	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000540	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000541	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000542	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000543	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000544	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000545	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000546	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000547	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000548	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000549	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000550	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000551	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000552	0.000001165	3.49	4.00	3.25
SRCPARAM	L0000553	0.000001165	3.49	4.00	3.25

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SRCPARAM L0000554	0.000001165	3.49	4.00	3.25
SRCPARAM L0000555	0.000001165	3.49	4.00	3.25
SRCPARAM L0000556	0.000001165	3.49	4.00	3.25
SRCPARAM L0000557	0.000001165	3.49	4.00	3.25
SRCPARAM L0000558	0.000001165	3.49	4.00	3.25
SRCPARAM L0000559	0.000001165	3.49	4.00	3.25
SRCPARAM L0000560	0.000001165	3.49	4.00	3.25
SRCPARAM L0000561	0.000001165	3.49	4.00	3.25
SRCPARAM L0000562	0.000001165	3.49	4.00	3.25
SRCPARAM L0000563	0.000001165	3.49	4.00	3.25
SRCPARAM L0000564	0.000001165	3.49	4.00	3.25
SRCPARAM L0000565	0.000001165	3.49	4.00	3.25
SRCPARAM L0000566	0.000001165	3.49	4.00	3.25
SRCPARAM L0000567	0.000001165	3.49	4.00	3.25
SRCPARAM L0000568	0.000001165	3.49	4.00	3.25
SRCPARAM L0000569	0.000001165	3.49	4.00	3.25
SRCPARAM L0000570	0.000001165	3.49	4.00	3.25
SRCPARAM L0000571	0.000001165	3.49	4.00	3.25
SRCPARAM L0000572	0.000001165	3.49	4.00	3.25
SRCPARAM L0000573	0.000001165	3.49	4.00	3.25
SRCPARAM L0000574	0.000001165	3.49	4.00	3.25
SRCPARAM L0000575	0.000001165	3.49	4.00	3.25
SRCPARAM L0000576	0.000001165	3.49	4.00	3.25
SRCPARAM L0000577	0.000001165	3.49	4.00	3.25
SRCPARAM L0000578	0.000001165	3.49	4.00	3.25
SRCPARAM L0000579	0.000001165	3.49	4.00	3.25
SRCPARAM L0000580	0.000001165	3.49	4.00	3.25

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** LINE VOLUME SOURCE ID = SLINE4

SRCPARAM L0000581	0.000001134	3.49	4.00	3.25
SRCPARAM L0000582	0.000001134	3.49	4.00	3.25
SRCPARAM L0000583	0.000001134	3.49	4.00	3.25
SRCPARAM L0000584	0.000001134	3.49	4.00	3.25
SRCPARAM L0000585	0.000001134	3.49	4.00	3.25
SRCPARAM L0000586	0.000001134	3.49	4.00	3.25
SRCPARAM L0000587	0.000001134	3.49	4.00	3.25
SRCPARAM L0000588	0.000001134	3.49	4.00	3.25
SRCPARAM L0000589	0.000001134	3.49	4.00	3.25
SRCPARAM L0000590	0.000001134	3.49	4.00	3.25
SRCPARAM L0000591	0.000001134	3.49	4.00	3.25
SRCPARAM L0000592	0.000001134	3.49	4.00	3.25
SRCPARAM L0000593	0.000001134	3.49	4.00	3.25
SRCPARAM L0000594	0.000001134	3.49	4.00	3.25
SRCPARAM L0000595	0.000001134	3.49	4.00	3.25
SRCPARAM L0000596	0.000001134	3.49	4.00	3.25
SRCPARAM L0000597	0.000001134	3.49	4.00	3.25
SRCPARAM L0000598	0.000001134	3.49	4.00	3.25
SRCPARAM L0000599	0.000001134	3.49	4.00	3.25

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SRCPARAM L0000600	0.000001134	3.49	4.00	3.25
SRCPARAM L0000601	0.000001134	3.49	4.00	3.25
SRCPARAM L0000602	0.000001134	3.49	4.00	3.25
SRCPARAM L0000603	0.000001134	3.49	4.00	3.25
SRCPARAM L0000604	0.000001134	3.49	4.00	3.25
SRCPARAM L0000605	0.000001134	3.49	4.00	3.25
SRCPARAM L0000606	0.000001134	3.49	4.00	3.25
SRCPARAM L0000607	0.000001134	3.49	4.00	3.25
SRCPARAM L0000608	0.000001134	3.49	4.00	3.25
SRCPARAM L0000609	0.000001134	3.49	4.00	3.25
SRCPARAM L0000610	0.000001134	3.49	4.00	3.25
SRCPARAM L0000611	0.000001134	3.49	4.00	3.25
SRCPARAM L0000612	0.000001134	3.49	4.00	3.25
SRCPARAM L0000613	0.000001134	3.49	4.00	3.25
SRCPARAM L0000614	0.000001134	3.49	4.00	3.25
SRCPARAM L0000615	0.000001134	3.49	4.00	3.25
SRCPARAM L0000616	0.000001134	3.49	4.00	3.25
SRCPARAM L0000617	0.000001134	3.49	4.00	3.25
SRCPARAM L0000618	0.000001134	3.49	4.00	3.25
SRCPARAM L0000619	0.000001134	3.49	4.00	3.25
SRCPARAM L0000620	0.000001134	3.49	4.00	3.25

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** LINE VOLUME SOURCE ID = SLINE5

SRCPARAM L0000621	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000622	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000623	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000624	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000625	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000626	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000627	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000628	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000629	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000630	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000631	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000632	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000633	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000634	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000635	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000636	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000637	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000638	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000639	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000640	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000641	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000642	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000643	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000644	0.0000001735	3.49	7.44	3.25
SRCPARAM L0000645	0.0000001735	3.49	7.44	3.25

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SRCPARAM	L0000694	0.0000001735	3.49	7.44	3.25
SRCPARAM	L0000695	0.0000001735	3.49	7.44	3.25
SRCPARAM	L0000696	0.0000001735	3.49	7.44	3.25
SRCPARAM	L0000697	0.0000001735	3.49	7.44	3.25

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** LINE VOLUME SOURCE ID = SLINE6

SRCPARAM	L0000698	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000699	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000700	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000701	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000702	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000703	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000704	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000705	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000706	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000707	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000708	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000709	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000710	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000711	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000712	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000713	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000714	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000715	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000716	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000717	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000718	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000719	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000720	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000721	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000722	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000723	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000724	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000725	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000726	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000727	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000728	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000729	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000730	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000731	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000732	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000733	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000734	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000735	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000736	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000737	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000738	0.0000001752	3.49	7.44	3.25
SRCPARAM	L0000739	0.0000001752	3.49	7.44	3.25

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SRCPARAM L0000740	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000741	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000742	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000743	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000744	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000745	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000746	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000747	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000748	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000749	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000750	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000751	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000752	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000753	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000754	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000755	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000756	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000757	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000758	0.0000001752	3.49	7.44	3.25
SRCPARAM L0000759	0.0000001752	3.49	7.44	3.25

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** LINE VOLUME SOURCE ID = SLINE7

SRCPARAM L0000760	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000761	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000762	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000763	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000764	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000765	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000766	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000767	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000768	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000769	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000770	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000771	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000772	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000773	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000774	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000775	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000776	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000777	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000778	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000779	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000780	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000781	0.00000008909	3.49	7.44	3.25
SRCPARAM L0000782	0.00000008909	3.49	7.44	3.25

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** LINE VOLUME SOURCE ID = SLINE8

SRCPARAM L0000783	0.00000008641	3.49	7.44	3.25
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SRCPARAM L0000784	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000785	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000786	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000787	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000788	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000789	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000790	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000791	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000792	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000793	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000794	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000795	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000796	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000797	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000798	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000799	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000800	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000801	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000802	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000803	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000804	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000805	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000806	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000807	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000808	0.00000008641	3.49	7.44	3.25
SRCPARAM L0000809	0.00000008641	3.49	7.44	3.25

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** LINE VOLUME SOURCE ID = SLINE9

SRCPARAM L0000810	0.000001403	3.49	7.44	3.25
SRCPARAM L0000811	0.000001403	3.49	7.44	3.25
SRCPARAM L0000812	0.000001403	3.49	7.44	3.25
SRCPARAM L0000813	0.000001403	3.49	7.44	3.25
SRCPARAM L0000814	0.000001403	3.49	7.44	3.25
SRCPARAM L0000815	0.000001403	3.49	7.44	3.25
SRCPARAM L0000816	0.000001403	3.49	7.44	3.25
SRCPARAM L0000817	0.000001403	3.49	7.44	3.25
SRCPARAM L0000818	0.000001403	3.49	7.44	3.25
SRCPARAM L0000819	0.000001403	3.49	7.44	3.25
SRCPARAM L0000820	0.000001403	3.49	7.44	3.25
SRCPARAM L0000821	0.000001403	3.49	7.44	3.25
SRCPARAM L0000822	0.000001403	3.49	7.44	3.25
SRCPARAM L0000823	0.000001403	3.49	7.44	3.25
SRCPARAM L0000824	0.000001403	3.49	7.44	3.25
SRCPARAM L0000825	0.000001403	3.49	7.44	3.25
SRCPARAM L0000826	0.000001403	3.49	7.44	3.25
SRCPARAM L0000827	0.000001403	3.49	7.44	3.25
SRCPARAM L0000828	0.000001403	3.49	7.44	3.25
SRCPARAM L0000829	0.000001403	3.49	7.44	3.25

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SRCPARAM L0000830	0.000001403	3.49	7.44	3.25
SRCPARAM L0000831	0.000001403	3.49	7.44	3.25
SRCPARAM L0000832	0.000001403	3.49	7.44	3.25
SRCPARAM L0000833	0.000001403	3.49	7.44	3.25
SRCPARAM L0000834	0.000001403	3.49	7.44	3.25
SRCPARAM L0000835	0.000001403	3.49	7.44	3.25
SRCPARAM L0000836	0.000001403	3.49	7.44	3.25
SRCPARAM L0000837	0.000001403	3.49	7.44	3.25
SRCPARAM L0000838	0.000001403	3.49	7.44	3.25
SRCPARAM L0000839	0.000001403	3.49	7.44	3.25
SRCPARAM L0000840	0.000001403	3.49	7.44	3.25
SRCPARAM L0000841	0.000001403	3.49	7.44	3.25
SRCPARAM L0000842	0.000001403	3.49	7.44	3.25
SRCPARAM L0000843	0.000001403	3.49	7.44	3.25
SRCPARAM L0000844	0.000001403	3.49	7.44	3.25
SRCPARAM L0000845	0.000001403	3.49	7.44	3.25
SRCPARAM L0000846	0.000001403	3.49	7.44	3.25
SRCPARAM L0000847	0.000001403	3.49	7.44	3.25
SRCPARAM L0000848	0.000001403	3.49	7.44	3.25
SRCPARAM L0000849	0.000001403	3.49	7.44	3.25
SRCPARAM L0000850	0.000001403	3.49	7.44	3.25
SRCPARAM L0000851	0.000001403	3.49	7.44	3.25
SRCPARAM L0000852	0.000001403	3.49	7.44	3.25
SRCPARAM L0000853	0.000001403	3.49	7.44	3.25
SRCPARAM L0000854	0.000001403	3.49	7.44	3.25
SRCPARAM L0000855	0.000001403	3.49	7.44	3.25
SRCPARAM L0000856	0.000001403	3.49	7.44	3.25
SRCPARAM L0000857	0.000001403	3.49	7.44	3.25
SRCPARAM L0000858	0.000001403	3.49	7.44	3.25
SRCPARAM L0000859	0.000001403	3.49	7.44	3.25
SRCPARAM L0000860	0.000001403	3.49	7.44	3.25

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** LINE VOLUME SOURCE ID = SLINE10

SRCPARAM L0000861	0.000001637	3.49	7.44	3.25
SRCPARAM L0000862	0.000001637	3.49	7.44	3.25
SRCPARAM L0000863	0.000001637	3.49	7.44	3.25
SRCPARAM L0000864	0.000001637	3.49	7.44	3.25
SRCPARAM L0000865	0.000001637	3.49	7.44	3.25
SRCPARAM L0000866	0.000001637	3.49	7.44	3.25
SRCPARAM L0000867	0.000001637	3.49	7.44	3.25
SRCPARAM L0000868	0.000001637	3.49	7.44	3.25
SRCPARAM L0000869	0.000001637	3.49	7.44	3.25
SRCPARAM L0000870	0.000001637	3.49	7.44	3.25
SRCPARAM L0000871	0.000001637	3.49	7.44	3.25
SRCPARAM L0000872	0.000001637	3.49	7.44	3.25
SRCPARAM L0000873	0.000001637	3.49	7.44	3.25
SRCPARAM L0000874	0.000001637	3.49	7.44	3.25
SRCPARAM L0000875	0.000001637	3.49	7.44	3.25

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                                10719 HRA
SRCPARAM L0000876      0.000001637      3.49      7.44      3.25
SRCPARAM L0000877      0.000001637      3.49      7.44      3.25
SRCPARAM L0000878      0.000001637      3.49      7.44      3.25
SRCPARAM L0000879      0.000001637      3.49      7.44      3.25
SRCPARAM L0000880      0.000001637      3.49      7.44      3.25
SRCPARAM L0000881      0.000001637      3.49      7.44      3.25
SRCPARAM L0000882      0.000001637      3.49      7.44      3.25
SRCPARAM L0000883      0.000001637      3.49      7.44      3.25
SRCPARAM L0000884      0.000001637      3.49      7.44      3.25
SRCPARAM L0000885      0.000001637      3.49      7.44      3.25
SRCPARAM L0000886      0.000001637      3.49      7.44      3.25
** -----
  URBANSRC ALL
  SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD RECEPTOR PATHWAY
*****
**
**
RE STARTING
  INCLUDED "10719 HRA.ROU"
RE FINISHED
**
*****
** AERMOD METEOROLOGY PATHWAY
*****
**
**
ME STARTING
  SURFFILE PERRISADJU\PERI_V9_ADJU\PERI_V9.SFC
  PROFFILE PERRISADJU\PERI_V9_ADJU\PERI_V9.PFL
  SURFDATA 3171 2010
  UAIRDATA 3190 2010
  SITEDATA 99999 2010
  PROFBASE 442.0 METERS
ME FINISHED
**
*****
** AERMOD OUTPUT PATHWAY
*****
**
**
OU STARTING
** AUTO-GENERATED PLOTFILES
  PLOTFILE ANNUAL ALL "10719 HRA.AD\AN00GALL.PLT" 31
  SUMMFILE "10719 HRA.SUM"

```

10719 HRA

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 1045 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
 0.50
ME W187 1045 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
HRA.ISC *** 12/13/19
*** AERMET - VERSION 16216 *** ***
 *** 11:50:01

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 396 Source(s),

10719 HRA

for Total of 1 Urban Area(s):

Urban Population = 2189641.0 ; Urban Roughness Length = 1.000 m

****Model Uses Regulatory DEFAULT Options:**

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

****Other Options Specified:**

ADJ_U* - Use ADJ_U* option for SBL in AERMET

CCVR_Sub - Meteorological data includes CCVR substitutions

TEMP_Sub - Meteorological data includes TEMP substitutions

****Model Assumes No FLAGPOLE Receptor Heights.**

****The User Specified a Pollutant Type of: DPM**

****Model Calculates ANNUAL Averages Only**

****This Run Includes: 396 Source(s); 1 Source Group(s); and 103 Receptor(s)**

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 396 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 0 line(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 ANNUAL 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
m for Missing**

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Hours

b for Both Calm

and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 442.00 ; 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 = 3.7 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 10719 HRA.ERR

**File for Summary of Results: 10719 HRA.SUM

▲ *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

L0000491	0	0.13970E-05	474844.6	3746616.8	494.9	3.49	4.00
3.25 YES							
L0000492	0	0.13970E-05	474844.6	3746625.3	495.1	3.49	4.00
3.25 YES							
L0000493	0	0.13970E-05	474844.6	3746633.9	495.0	3.49	4.00
3.25 YES							
L0000494	0	0.13970E-05	474844.5	3746642.5	494.8	3.49	4.00

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3.25	YES							
L0000495		0	0.13970E-05	474844.5	3746651.1	494.6	3.49	4.00
3.25	YES							
L0000496		0	0.13970E-05	474844.5	3746659.7	494.7	3.49	4.00
3.25	YES							
L0000497		0	0.13970E-05	474844.5	3746668.3	494.9	3.49	4.00
3.25	YES							
L0000498		0	0.13970E-05	474844.4	3746676.9	495.2	3.49	4.00
3.25	YES							
L0000499		0	0.13970E-05	474844.4	3746685.5	495.5	3.49	4.00
3.25	YES							
L0000500		0	0.13970E-05	474844.4	3746694.1	495.8	3.49	4.00
3.25	YES							
L0000501		0	0.13970E-05	474844.3	3746702.7	496.1	3.49	4.00
3.25	YES							
L0000502		0	0.13970E-05	474844.3	3746711.2	496.4	3.49	4.00
3.25	YES							
L0000503		0	0.13970E-05	474844.3	3746719.8	496.7	3.49	4.00
3.25	YES							
L0000504		0	0.13970E-05	474844.3	3746728.4	497.0	3.49	4.00
3.25	YES							
L0000505		0	0.13970E-05	474844.2	3746737.0	497.2	3.49	4.00
3.25	YES							
L0000506		0	0.13970E-05	474844.2	3746745.6	497.5	3.49	4.00
3.25	YES							
L0000507		0	0.13970E-05	474844.2	3746754.2	497.6	3.49	4.00
3.25	YES							
L0000508		0	0.13970E-05	474844.2	3746762.8	497.6	3.49	4.00
3.25	YES							
L0000509		0	0.13970E-05	474844.1	3746771.4	497.6	3.49	4.00
3.25	YES							
L0000510		0	0.13970E-05	474844.1	3746780.0	497.6	3.49	4.00
3.25	YES							
L0000511		0	0.13970E-05	474844.1	3746788.6	497.6	3.49	4.00
3.25	YES							
L0000512		0	0.13970E-05	474844.1	3746797.1	497.6	3.49	4.00
3.25	YES							
L0000513		0	0.13970E-05	474844.0	3746805.7	497.6	3.49	4.00
3.25	YES							
L0000514		0	0.13970E-05	474844.0	3746814.3	497.8	3.49	4.00
3.25	YES							
L0000515		0	0.14920E-05	474838.3	3747073.2	494.2	3.49	4.00
3.25	YES							
L0000516		0	0.14920E-05	474838.2	3747081.8	494.0	3.49	4.00
3.25	YES							
L0000517		0	0.14920E-05	474838.2	3747090.4	493.7	3.49	4.00
3.25	YES							
L0000518		0	0.14920E-05	474838.1	3747099.0	493.4	3.49	4.00

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3.25	YES							
L0000519		0	0.14920E-05	474838.0	3747107.6	493.1	3.49	4.00
3.25	YES							
L0000520		0	0.14920E-05	474837.9	3747116.2	492.7	3.49	4.00
3.25	YES							
L0000521		0	0.14920E-05	474837.9	3747124.8	492.3	3.49	4.00
3.25	YES							
L0000522		0	0.14920E-05	474837.8	3747133.4	491.9	3.49	4.00
3.25	YES							
L0000523		0	0.14920E-05	474837.7	3747142.0	491.7	3.49	4.00
3.25	YES							
L0000524		0	0.14920E-05	474837.6	3747150.5	491.5	3.49	4.00
3.25	YES							
L0000525		0	0.14920E-05	474837.5	3747159.1	491.4	3.49	4.00
3.25	YES							
L0000526		0	0.14920E-05	474837.5	3747167.7	491.2	3.49	4.00
3.25	YES							
L0000527		0	0.14920E-05	474837.4	3747176.3	491.0	3.49	4.00
3.25	YES							
L0000528		0	0.14920E-05	474837.3	3747184.9	490.9	3.49	4.00
3.25	YES							
L0000529		0	0.14920E-05	474837.2	3747193.5	490.7	3.49	4.00
3.25	YES							
L0000530		0	0.14920E-05	474837.2	3747202.1	490.6	3.49	4.00

3.25 YES
 *** AERMOD - VERSION 19191 *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
 HRA.ISC *** 12/13/19
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*** 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
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0000531		0	0.14920E-05	474837.1	3747210.7	490.5	3.49	4.00
3.25	YES							
L0000532		0	0.14920E-05	474837.0	3747219.3	490.4	3.49	4.00

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3.25	YES							
L0000533		0	0.14920E-05	474836.9	3747227.9	490.2	3.49	4.00
3.25	YES							
L0000534		0	0.14920E-05	474836.9	3747236.4	489.7	3.49	4.00
3.25	YES							
L0000535		0	0.14920E-05	474836.8	3747245.0	489.1	3.49	4.00
3.25	YES							
L0000536		0	0.14920E-05	474836.7	3747253.6	488.6	3.49	4.00
3.25	YES							
L0000537		0	0.11650E-05	474824.1	3746549.5	494.4	3.49	4.00
3.25	YES							
L0000538		0	0.11650E-05	474824.2	3746558.1	494.1	3.49	4.00
3.25	YES							
L0000539		0	0.11650E-05	474824.2	3746566.6	493.9	3.49	4.00
3.25	YES							
L0000540		0	0.11650E-05	474824.2	3746575.2	494.2	3.49	4.00
3.25	YES							
L0000541		0	0.11650E-05	474824.3	3746583.8	494.4	3.49	4.00
3.25	YES							
L0000542		0	0.11650E-05	474824.3	3746592.4	494.7	3.49	4.00
3.25	YES							
L0000543		0	0.11650E-05	474824.3	3746601.0	495.0	3.49	4.00
3.25	YES							
L0000544		0	0.11650E-05	474824.4	3746609.6	495.3	3.49	4.00
3.25	YES							
L0000545		0	0.11650E-05	474824.4	3746618.2	495.6	3.49	4.00
3.25	YES							
L0000546		0	0.11650E-05	474824.5	3746626.8	495.9	3.49	4.00
3.25	YES							
L0000547		0	0.11650E-05	474824.5	3746635.4	496.1	3.49	4.00
3.25	YES							
L0000548		0	0.11650E-05	474824.5	3746644.0	496.2	3.49	4.00
3.25	YES							
L0000549		0	0.11650E-05	474824.6	3746652.5	496.4	3.49	4.00
3.25	YES							
L0000550		0	0.11650E-05	474824.6	3746661.1	496.7	3.49	4.00
3.25	YES							
L0000551		0	0.11650E-05	474824.6	3746669.7	497.0	3.49	4.00
3.25	YES							
L0000552		0	0.11650E-05	474824.7	3746678.3	497.2	3.49	4.00
3.25	YES							
L0000553		0	0.11650E-05	474824.7	3746686.9	497.5	3.49	4.00
3.25	YES							
L0000554		0	0.11650E-05	474824.8	3746695.5	497.8	3.49	4.00
3.25	YES							
L0000555		0	0.11650E-05	474824.8	3746704.1	498.1	3.49	4.00
3.25	YES							
L0000556		0	0.11650E-05	474824.8	3746712.7	498.4	3.49	4.00

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3.25	YES							
L0000557		0	0.11650E-05	474824.9	3746721.3	498.7	3.49	4.00
3.25	YES							
L0000558		0	0.11650E-05	474824.9	3746729.9	498.9	3.49	4.00
3.25	YES							
L0000559		0	0.11650E-05	474824.9	3746738.4	499.2	3.49	4.00
3.25	YES							
L0000560		0	0.11650E-05	474825.0	3746747.0	499.5	3.49	4.00
3.25	YES							
L0000561		0	0.11650E-05	474825.0	3746755.6	499.5	3.49	4.00
3.25	YES							
L0000562		0	0.11650E-05	474825.0	3746764.2	499.5	3.49	4.00
3.25	YES							
L0000563		0	0.11650E-05	474825.1	3746772.8	499.5	3.49	4.00
3.25	YES							
L0000564		0	0.11650E-05	474825.1	3746781.4	499.5	3.49	4.00
3.25	YES							
L0000565		0	0.11650E-05	474825.2	3746790.0	499.5	3.49	4.00
3.25	YES							
L0000566		0	0.11650E-05	474825.2	3746798.6	499.5	3.49	4.00
3.25	YES							
L0000567		0	0.11650E-05	474825.2	3746807.2	499.5	3.49	4.00
3.25	YES							
L0000568		0	0.11650E-05	474825.3	3746815.8	499.5	3.49	4.00
3.25	YES							
L0000569		0	0.11650E-05	474825.3	3746824.3	499.6	3.49	4.00
3.25	YES							
L0000570		0	0.11650E-05	474825.3	3746832.9	499.6	3.49	4.00

3.25 YES
 *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
 HRA.ISC *** 12/13/19
 *** AERMET - VERSION 16216 *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

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L0000571	0	0.11650E-05	474825.4	3746841.5	499.6	3.49	4.00
3.25 YES							
L0000572	0	0.11650E-05	474825.4	3746850.1	499.6	3.49	4.00
3.25 YES							
L0000573	0	0.11650E-05	474825.5	3746858.7	499.6	3.49	4.00
3.25 YES							
L0000574	0	0.11650E-05	474825.5	3746867.3	499.6	3.49	4.00
3.25 YES							
L0000575	0	0.11650E-05	474825.5	3746875.9	499.6	3.49	4.00
3.25 YES							
L0000576	0	0.11650E-05	474825.6	3746884.5	499.5	3.49	4.00
3.25 YES							
L0000577	0	0.11650E-05	474825.6	3746893.1	499.4	3.49	4.00
3.25 YES							
L0000578	0	0.11650E-05	474825.6	3746901.6	499.3	3.49	4.00
3.25 YES							
L0000579	0	0.11650E-05	474825.7	3746910.2	499.0	3.49	4.00
3.25 YES							
L0000580	0	0.11650E-05	474825.7	3746918.8	498.8	3.49	4.00
3.25 YES							
L0000581	0	0.11340E-05	474818.2	3747315.0	487.1	3.49	4.00
3.25 YES							
L0000582	0	0.11340E-05	474818.4	3747306.4	487.4	3.49	4.00
3.25 YES							
L0000583	0	0.11340E-05	474818.5	3747297.8	487.7	3.49	4.00
3.25 YES							
L0000584	0	0.11340E-05	474818.7	3747289.3	488.0	3.49	4.00
3.25 YES							
L0000585	0	0.11340E-05	474818.8	3747280.7	488.2	3.49	4.00
3.25 YES							
L0000586	0	0.11340E-05	474819.0	3747272.1	488.5	3.49	4.00
3.25 YES							
L0000587	0	0.11340E-05	474819.1	3747263.5	488.8	3.49	4.00
3.25 YES							
L0000588	0	0.11340E-05	474819.3	3747254.9	489.2	3.49	4.00
3.25 YES							
L0000589	0	0.11340E-05	474819.5	3747246.3	490.0	3.49	4.00
3.25 YES							
L0000590	0	0.11340E-05	474819.6	3747237.7	490.9	3.49	4.00
3.25 YES							
L0000591	0	0.11340E-05	474819.8	3747229.1	491.7	3.49	4.00
3.25 YES							
L0000592	0	0.11340E-05	474819.9	3747220.5	492.2	3.49	4.00
3.25 YES							
L0000593	0	0.11340E-05	474820.1	3747212.0	492.4	3.49	4.00
3.25 YES							
L0000594	0	0.11340E-05	474820.2	3747203.4	492.7	3.49	4.00

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3.25	YES							
L0000595		0	0.11340E-05	474820.4	3747194.8	492.9	3.49	4.00
3.25	YES							
L0000596		0	0.11340E-05	474820.5	3747186.2	492.9	3.49	4.00
3.25	YES							
L0000597		0	0.11340E-05	474820.7	3747177.6	492.9	3.49	4.00
3.25	YES							
L0000598		0	0.11340E-05	474820.9	3747169.0	492.9	3.49	4.00
3.25	YES							
L0000599		0	0.11340E-05	474821.0	3747160.4	492.9	3.49	4.00
3.25	YES							
L0000600		0	0.11340E-05	474821.2	3747151.8	492.9	3.49	4.00
3.25	YES							
L0000601		0	0.11340E-05	474821.3	3747143.2	492.9	3.49	4.00
3.25	YES							
L0000602		0	0.11340E-05	474821.5	3747134.7	493.0	3.49	4.00
3.25	YES							
L0000603		0	0.11340E-05	474821.6	3747126.1	493.5	3.49	4.00
3.25	YES							
L0000604		0	0.11340E-05	474821.8	3747117.5	494.1	3.49	4.00
3.25	YES							
L0000605		0	0.11340E-05	474821.9	3747108.9	494.6	3.49	4.00
3.25	YES							
L0000606		0	0.11340E-05	474822.1	3747100.3	495.0	3.49	4.00
3.25	YES							
L0000607		0	0.11340E-05	474822.3	3747091.7	495.2	3.49	4.00
3.25	YES							
L0000608		0	0.11340E-05	474822.4	3747083.1	495.5	3.49	4.00
3.25	YES							
L0000609		0	0.11340E-05	474822.6	3747074.5	495.8	3.49	4.00
3.25	YES							
L0000610		0	0.11340E-05	474822.7	3747065.9	496.0	3.49	4.00

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*** 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	SY
		SCALAR VARY			

ID (METERS)	CATS.	BY	10719 HRA (METERS) (METERS) (METERS) (METERS) (METERS)				
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L0000611	0	0.11340E-05	474822.9	3747057.4	496.2	3.49	4.00
3.25 YES							
L0000612	0	0.11340E-05	474823.0	3747048.8	496.5	3.49	4.00
3.25 YES							
L0000613	0	0.11340E-05	474823.2	3747040.2	496.6	3.49	4.00
3.25 YES							
L0000614	0	0.11340E-05	474823.4	3747031.6	496.6	3.49	4.00
3.25 YES							
L0000615	0	0.11340E-05	474823.5	3747023.0	496.6	3.49	4.00
3.25 YES							
L0000616	0	0.11340E-05	474823.7	3747014.4	496.7	3.49	4.00
3.25 YES							
L0000617	0	0.11340E-05	474823.8	3747005.8	497.3	3.49	4.00
3.25 YES							
L0000618	0	0.11340E-05	474824.0	3746997.2	497.9	3.49	4.00
3.25 YES							
L0000619	0	0.11340E-05	474824.1	3746988.7	498.4	3.49	4.00
3.25 YES							
L0000620	0	0.11340E-05	474824.3	3746980.1	498.6	3.49	4.00
3.25 YES							
L0000621	0	0.17350E-06	474824.6	3747339.8	486.8	3.49	7.44
3.25 YES							
L0000622	0	0.17350E-06	474840.6	3747340.2	486.3	3.49	7.44
3.25 YES							
L0000623	0	0.17350E-06	474856.6	3747340.5	485.6	3.49	7.44
3.25 YES							
L0000624	0	0.17350E-06	474872.6	3747340.9	484.6	3.49	7.44
3.25 YES							
L0000625	0	0.17350E-06	474888.6	3747341.2	483.9	3.49	7.44
3.25 YES							
L0000626	0	0.17350E-06	474904.6	3747341.5	483.3	3.49	7.44
3.25 YES							
L0000627	0	0.17350E-06	474920.6	3747341.9	482.7	3.49	7.44
3.25 YES							
L0000628	0	0.17350E-06	474936.6	3747342.2	482.1	3.49	7.44
3.25 YES							
L0000629	0	0.17350E-06	474952.6	3747342.5	481.2	3.49	7.44
3.25 YES							
L0000630	0	0.17350E-06	474968.6	3747342.9	480.2	3.49	7.44
3.25 YES							
L0000631	0	0.17350E-06	474984.5	3747343.2	479.6	3.49	7.44
3.25 YES							
L0000632	0	0.17350E-06	475000.5	3747343.5	479.0	3.49	7.44

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3.25	YES						
L0000633		0	0.17350E-06	475016.5	3747343.9	477.4	7.44
3.25	YES						
L0000634		0	0.17350E-06	475032.5	3747344.2	476.0	7.44
3.25	YES						
L0000635		0	0.17350E-06	475048.5	3747344.5	475.4	7.44
3.25	YES						
L0000636		0	0.17350E-06	475064.5	3747344.9	475.1	7.44
3.25	YES						
L0000637		0	0.17350E-06	475080.5	3747345.2	475.0	7.44
3.25	YES						
L0000638		0	0.17350E-06	475096.5	3747345.5	474.8	7.44
3.25	YES						
L0000639		0	0.17350E-06	475112.5	3747345.9	474.3	7.44
3.25	YES						
L0000640		0	0.17350E-06	475128.5	3747346.2	473.7	7.44
3.25	YES						
L0000641		0	0.17350E-06	475144.5	3747346.5	473.2	7.44
3.25	YES						
L0000642		0	0.17350E-06	475160.5	3747346.9	472.6	7.44
3.25	YES						
L0000643		0	0.17350E-06	475176.5	3747347.2	472.1	7.44
3.25	YES						
L0000644		0	0.17350E-06	475192.5	3747347.5	471.6	7.44
3.25	YES						
L0000645		0	0.17350E-06	475208.5	3747347.9	471.0	7.44
3.25	YES						
L0000646		0	0.17350E-06	475224.5	3747348.2	470.5	7.44
3.25	YES						
L0000647		0	0.17350E-06	475240.5	3747348.5	470.0	7.44
3.25	YES						
L0000648		0	0.17350E-06	475256.5	3747348.9	469.4	7.44
3.25	YES						
L0000649		0	0.17350E-06	475272.5	3747349.2	469.0	7.44
3.25	YES						
L0000650		0	0.17350E-06	475288.5	3747349.5	469.0	7.44

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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INIT.	URBAN	NUMBER	EMISSION	RATE		BASE	RELEASE	INIT.
SOURCE		EMISSION	RATE					
SZ	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
ID		SCALAR	VARY					
(METERS)		CATS.	BY	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
L0000651		0	0.17350E-06	475304.5	3747349.9	469.0	3.49	7.44
3.25	YES							
L0000652		0	0.17350E-06	475320.5	3747350.2	469.0	3.49	7.44
3.25	YES							
L0000653		0	0.17350E-06	475336.5	3747350.5	468.8	3.49	7.44
3.25	YES							
L0000654		0	0.17350E-06	475352.5	3747350.9	468.4	3.49	7.44
3.25	YES							
L0000655		0	0.17350E-06	475368.5	3747351.2	468.1	3.49	7.44
3.25	YES							
L0000656		0	0.17350E-06	475384.5	3747351.5	468.0	3.49	7.44
3.25	YES							
L0000657		0	0.17350E-06	475400.5	3747351.9	467.9	3.49	7.44
3.25	YES							
L0000658		0	0.17350E-06	475416.5	3747352.2	467.8	3.49	7.44
3.25	YES							
L0000659		0	0.17350E-06	475432.5	3747352.5	467.5	3.49	7.44
3.25	YES							
L0000660		0	0.17350E-06	475448.5	3747352.6	467.0	3.49	7.44
3.25	YES							
L0000661		0	0.17350E-06	475464.5	3747352.6	466.9	3.49	7.44
3.25	YES							
L0000662		0	0.17350E-06	475480.5	3747352.7	466.8	3.49	7.44
3.25	YES							
L0000663		0	0.17350E-06	475496.5	3747352.7	466.4	3.49	7.44
3.25	YES							
L0000664		0	0.17350E-06	475512.5	3747352.8	466.0	3.49	7.44
3.25	YES							
L0000665		0	0.17350E-06	475528.5	3747352.8	465.9	3.49	7.44
3.25	YES							
L0000666		0	0.17350E-06	475544.5	3747352.9	465.7	3.49	7.44
3.25	YES							
L0000667		0	0.17350E-06	475560.5	3747352.9	465.2	3.49	7.44
3.25	YES							
L0000668		0	0.17350E-06	475576.5	3747353.0	465.0	3.49	7.44
3.25	YES							
L0000669		0	0.17350E-06	475592.5	3747353.0	465.0	3.49	7.44
3.25	YES							
L0000670		0	0.17350E-06	475608.5	3747353.1	464.7	3.49	7.44

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3.25	YES						
L0000671		0	0.17350E-06	475624.5	3747353.1	464.2	7.44
3.25	YES						
L0000672		0	0.17350E-06	475636.2	3747343.2	464.1	7.44
3.25	YES						
L0000673		0	0.17350E-06	475642.4	3747328.7	464.3	7.44
3.25	YES						
L0000674		0	0.17350E-06	475642.4	3747312.7	464.6	7.44
3.25	YES						
L0000675		0	0.17350E-06	475642.4	3747296.7	464.6	7.44
3.25	YES						
L0000676		0	0.17350E-06	475642.4	3747280.7	464.7	7.44
3.25	YES						
L0000677		0	0.17350E-06	475642.3	3747264.7	464.9	7.44
3.25	YES						
L0000678		0	0.17350E-06	475642.3	3747248.7	465.0	7.44
3.25	YES						
L0000679		0	0.17350E-06	475642.3	3747232.7	465.0	7.44
3.25	YES						
L0000680		0	0.17350E-06	475642.2	3747216.7	465.2	7.44
3.25	YES						
L0000681		0	0.17350E-06	475642.2	3747200.7	465.5	7.44
3.25	YES						
L0000682		0	0.17350E-06	475642.2	3747184.7	465.6	7.44
3.25	YES						
L0000683		0	0.17350E-06	475642.1	3747168.7	465.6	7.44
3.25	YES						
L0000684		0	0.17350E-06	475642.1	3747152.7	465.8	7.44
3.25	YES						
L0000685		0	0.17350E-06	475642.1	3747136.7	466.0	7.44
3.25	YES						
L0000686		0	0.17350E-06	475642.0	3747120.7	466.0	7.44
3.25	YES						
L0000687		0	0.17350E-06	475642.0	3747104.7	466.0	7.44
3.25	YES						
L0000688		0	0.17350E-06	475642.0	3747088.7	466.0	7.44
3.25	YES						
L0000689		0	0.17350E-06	475641.9	3747072.7	466.1	7.44
3.25	YES						
L0000690		0	0.17350E-06	475641.9	3747056.7	466.4	7.44

3.25 YES
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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*** VOLUME SOURCE DATA ***

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

L0000691		0	0.17350E-06	475641.9	3747040.7	466.6	3.49	7.44
3.25	YES							
L0000692		0	0.17350E-06	475641.8	3747024.7	466.6	3.49	7.44
3.25	YES							
L0000693		0	0.17350E-06	475641.6	3747008.7	466.6	3.49	7.44
3.25	YES							
L0000694		0	0.17350E-06	475641.0	3746992.7	466.6	3.49	7.44
3.25	YES							
L0000695		0	0.17350E-06	475640.5	3746976.7	466.4	3.49	7.44
3.25	YES							
L0000696		0	0.17350E-06	475639.9	3746960.7	466.1	3.49	7.44
3.25	YES							
L0000697		0	0.17350E-06	475639.3	3746944.7	466.0	3.49	7.44
3.25	YES							
L0000698		0	0.17520E-06	474831.5	3746533.9	494.6	3.49	7.44
3.25	YES							
L0000699		0	0.17520E-06	474847.5	3746534.1	494.1	3.49	7.44
3.25	YES							
L0000700		0	0.17520E-06	474863.5	3746534.3	493.5	3.49	7.44
3.25	YES							
L0000701		0	0.17520E-06	474879.5	3746534.4	492.9	3.49	7.44
3.25	YES							
L0000702		0	0.17520E-06	474895.5	3746534.6	491.9	3.49	7.44
3.25	YES							
L0000703		0	0.17520E-06	474911.5	3746534.8	490.9	3.49	7.44
3.25	YES							
L0000704		0	0.17520E-06	474927.5	3746535.0	490.4	3.49	7.44
3.25	YES							
L0000705		0	0.17520E-06	474943.5	3746535.2	489.9	3.49	7.44
3.25	YES							
L0000706		0	0.17520E-06	474959.5	3746535.4	489.3	3.49	7.44
3.25	YES							
L0000707		0	0.17520E-06	474975.5	3746535.6	488.8	3.49	7.44
3.25	YES							
L0000708		0	0.17520E-06	474991.5	3746535.8	488.3	3.49	7.44

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3.25	YES						
L0000709		0	0.17520E-06	475007.5	3746536.0	487.7	7.44
3.25	YES						
L0000710		0	0.17520E-06	475023.5	3746536.2	487.2	7.44
3.25	YES						
L0000711		0	0.17520E-06	475039.5	3746536.4	486.4	7.44
3.25	YES						
L0000712		0	0.17520E-06	475055.5	3746536.5	485.3	7.44
3.25	YES						
L0000713		0	0.17520E-06	475071.5	3746536.7	484.6	7.44
3.25	YES						
L0000714		0	0.17520E-06	475087.5	3746536.9	484.1	7.44
3.25	YES						
L0000715		0	0.17520E-06	475103.5	3746537.0	483.5	7.44
3.25	YES						
L0000716		0	0.17520E-06	475119.5	3746537.2	483.0	7.44
3.25	YES						
L0000717		0	0.17520E-06	475135.5	3746537.4	482.5	7.44
3.25	YES						
L0000718		0	0.17520E-06	475151.5	3746537.5	481.9	7.44
3.25	YES						
L0000719		0	0.17520E-06	475167.5	3746537.7	481.4	7.44
3.25	YES						
L0000720		0	0.17520E-06	475183.5	3746537.9	480.9	7.44
3.25	YES						
L0000721		0	0.17520E-06	475199.5	3746538.0	480.3	7.44
3.25	YES						
L0000722		0	0.17520E-06	475215.5	3746538.2	479.6	7.44
3.25	YES						
L0000723		0	0.17520E-06	475231.5	3746538.3	478.5	7.44
3.25	YES						
L0000724		0	0.17520E-06	475247.5	3746538.5	477.5	7.44
3.25	YES						
L0000725		0	0.17520E-06	475263.5	3746538.7	476.4	7.44
3.25	YES						
L0000726		0	0.17520E-06	475279.5	3746538.8	476.0	7.44
3.25	YES						
L0000727		0	0.17520E-06	475295.5	3746539.0	475.9	7.44
3.25	YES						
L0000728		0	0.17520E-06	475311.5	3746539.2	475.9	7.44
3.25	YES						
L0000729		0	0.17520E-06	475327.5	3746539.3	475.9	7.44
3.25	YES						
L0000730		0	0.17520E-06	475343.5	3746539.5	475.5	7.44

3.25 YES
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*** 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
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0000731		0	0.17520E-06	475359.5	3746539.6	475.0	3.49	7.44
3.25	YES							
L0000732		0	0.17520E-06	475375.5	3746539.8	474.5	3.49	7.44
3.25	YES							
L0000733		0	0.17520E-06	475391.5	3746540.0	474.0	3.49	7.44
3.25	YES							
L0000734		0	0.17520E-06	475407.5	3746540.1	473.9	3.49	7.44
3.25	YES							
L0000735		0	0.17520E-06	475423.5	3746540.3	473.8	3.49	7.44
3.25	YES							
L0000736		0	0.17520E-06	475439.5	3746540.3	473.3	3.49	7.44
3.25	YES							
L0000737		0	0.17520E-06	475455.5	3746540.3	472.8	3.49	7.44
3.25	YES							
L0000738		0	0.17520E-06	475471.5	3746540.4	472.3	3.49	7.44
3.25	YES							
L0000739		0	0.17520E-06	475487.5	3746540.4	472.0	3.49	7.44
3.25	YES							
L0000740		0	0.17520E-06	475503.5	3746540.5	471.9	3.49	7.44
3.25	YES							
L0000741		0	0.17520E-06	475519.5	3746540.5	471.5	3.49	7.44
3.25	YES							
L0000742		0	0.17520E-06	475535.5	3746540.5	471.0	3.49	7.44
3.25	YES							
L0000743		0	0.17520E-06	475551.5	3746540.6	470.5	3.49	7.44
3.25	YES							
L0000744		0	0.17520E-06	475567.5	3746540.6	470.1	3.49	7.44
3.25	YES							
L0000745		0	0.17520E-06	475583.5	3746540.6	469.5	3.49	7.44
3.25	YES							
L0000746		0	0.17520E-06	475599.5	3746540.7	469.0	3.49	7.44

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3.25	YES						
L0000747		0	0.17520E-06	475615.5	3746540.7	469.0	7.44
3.25	YES						
L0000748		0	0.17520E-06	475631.5	3746540.8	469.0	7.44
3.25	YES						
L0000749		0	0.17520E-06	475647.5	3746540.8	468.9	7.44
3.25	YES						
L0000750		0	0.17520E-06	475663.5	3746540.8	468.7	7.44
3.25	YES						
L0000751		0	0.17520E-06	475679.5	3746540.9	468.3	7.44
3.25	YES						
L0000752		0	0.17520E-06	475695.5	3746540.9	467.8	7.44
3.25	YES						
L0000753		0	0.17520E-06	475711.5	3746540.9	467.3	7.44
3.25	YES						
L0000754		0	0.17520E-06	475727.5	3746541.0	467.0	7.44
3.25	YES						
L0000755		0	0.17520E-06	475743.5	3746541.0	467.0	7.44
3.25	YES						
L0000756		0	0.17520E-06	475759.5	3746541.0	466.7	7.44
3.25	YES						
L0000757		0	0.17520E-06	475775.5	3746541.1	466.1	7.44
3.25	YES						
L0000758		0	0.17520E-06	475791.5	3746541.1	466.0	7.44
3.25	YES						
L0000759		0	0.17520E-06	475807.5	3746541.2	466.0	7.44
3.25	YES						
L0000760		0	0.89090E-07	475817.1	3746532.4	465.8	7.44
3.25	YES						
L0000761		0	0.89090E-07	475817.0	3746516.4	465.8	7.44
3.25	YES						
L0000762		0	0.89090E-07	475816.9	3746500.4	465.8	7.44
3.25	YES						
L0000763		0	0.89090E-07	475816.8	3746484.4	465.8	7.44
3.25	YES						
L0000764		0	0.89090E-07	475816.7	3746468.4	465.8	7.44
3.25	YES						
L0000765		0	0.89090E-07	475816.5	3746452.4	465.8	7.44
3.25	YES						
L0000766		0	0.89090E-07	475816.4	3746436.4	465.9	7.44
3.25	YES						
L0000767		0	0.89090E-07	475816.3	3746420.4	466.0	7.44
3.25	YES						
L0000768		0	0.89090E-07	475816.2	3746404.4	466.0	7.44
3.25	YES						
L0000769		0	0.89090E-07	475816.1	3746388.4	466.0	7.44
3.25	YES						
L0000770		0	0.89090E-07	475815.9	3746372.4	466.0	7.44

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3.25 YES

▲ *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
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*** 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
ID		SCALAR	VARY					
(METERS)		CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
		BY						
L0000771		0	0.89090E-07	475815.8	3746356.4	466.0	3.49	7.44
3.25	YES							
L0000772		0	0.89090E-07	475815.7	3746340.4	466.4	3.49	7.44
3.25	YES							
L0000773		0	0.89090E-07	475815.6	3746324.4	466.8	3.49	7.44
3.25	YES							
L0000774		0	0.89090E-07	475815.4	3746308.4	466.8	3.49	7.44
3.25	YES							
L0000775		0	0.89090E-07	475815.3	3746292.4	466.8	3.49	7.44
3.25	YES							
L0000776		0	0.89090E-07	475815.2	3746276.4	466.9	3.49	7.44
3.25	YES							
L0000777		0	0.89090E-07	475815.1	3746260.4	467.0	3.49	7.44
3.25	YES							
L0000778		0	0.89090E-07	475815.0	3746244.4	467.0	3.49	7.44
3.25	YES							
L0000779		0	0.89090E-07	475814.8	3746228.4	467.0	3.49	7.44
3.25	YES							
L0000780		0	0.89090E-07	475814.7	3746212.4	467.0	3.49	7.44
3.25	YES							
L0000781		0	0.89090E-07	475814.6	3746196.4	466.9	3.49	7.44
3.25	YES							
L0000782		0	0.89090E-07	475814.5	3746180.4	466.9	3.49	7.44
3.25	YES							
L0000783		0	0.86410E-07	475640.0	3746917.5	466.3	3.49	7.44
3.25	YES							
L0000784		0	0.86410E-07	475640.5	3746901.5	466.8	3.49	7.44

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3.25	YES						
L0000785		0	0.86410E-07	475641.9	3746885.6	467.2	3.49 7.44
3.25	YES						
L0000786		0	0.86410E-07	475644.1	3746869.7	467.5	3.49 7.44
3.25	YES						
L0000787		0	0.86410E-07	475646.8	3746854.0	467.8	3.49 7.44
3.25	YES						
L0000788		0	0.86410E-07	475650.0	3746838.3	468.3	3.49 7.44
3.25	YES						
L0000789		0	0.86410E-07	475655.0	3746823.1	468.2	3.49 7.44
3.25	YES						
L0000790		0	0.86410E-07	475661.2	3746808.4	467.9	3.49 7.44
3.25	YES						
L0000791		0	0.86410E-07	475668.2	3746794.0	467.7	3.49 7.44
3.25	YES						
L0000792		0	0.86410E-07	475675.7	3746779.9	467.5	3.49 7.44
3.25	YES						
L0000793		0	0.86410E-07	475685.8	3746767.6	467.1	3.49 7.44
3.25	YES						
L0000794		0	0.86410E-07	475696.4	3746755.6	467.0	3.49 7.44
3.25	YES						
L0000795		0	0.86410E-07	475707.4	3746744.0	467.0	3.49 7.44
3.25	YES						
L0000796		0	0.86410E-07	475718.4	3746732.4	466.6	3.49 7.44
3.25	YES						
L0000797		0	0.86410E-07	475729.9	3746721.3	466.1	3.49 7.44
3.25	YES						
L0000798		0	0.86410E-07	475741.8	3746710.6	466.1	3.49 7.44
3.25	YES						
L0000799		0	0.86410E-07	475753.8	3746699.9	465.9	3.49 7.44
3.25	YES						
L0000800		0	0.86410E-07	475765.7	3746689.3	465.5	3.49 7.44
3.25	YES						
L0000801		0	0.86410E-07	475774.9	3746676.2	465.5	3.49 7.44
3.25	YES						
L0000802		0	0.86410E-07	475784.0	3746663.0	465.7	3.49 7.44
3.25	YES						
L0000803		0	0.86410E-07	475792.1	3746649.3	465.7	3.49 7.44
3.25	YES						
L0000804		0	0.86410E-07	475800.2	3746635.5	465.8	3.49 7.44
3.25	YES						
L0000805		0	0.86410E-07	475805.2	3746620.4	466.0	3.49 7.44
3.25	YES						
L0000806		0	0.86410E-07	475809.1	3746604.9	466.0	3.49 7.44
3.25	YES						
L0000807		0	0.86410E-07	475812.2	3746589.2	465.9	3.49 7.44
3.25	YES						
L0000808		0	0.86410E-07	475814.2	3746573.3	465.9	3.49 7.44

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3.25 YES
L0000809 0 0.86410E-07 475816.3 3746557.5 465.8 3.49 7.44

3.25 YES
L0000810 0 0.14030E-05 474816.7 3746949.2 499.3 3.49 7.44

3.25 YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

L0000811 0 0.14030E-05 474832.6 3746947.9 497.8 3.49 7.44

3.25 YES

L0000812 0 0.14030E-05 474848.6 3746946.6 496.4 3.49 7.44

3.25 YES

L0000813 0 0.14030E-05 474864.5 3746945.3 495.2 3.49 7.44

3.25 YES

L0000814 0 0.14030E-05 474880.4 3746944.0 494.0 3.49 7.44

3.25 YES

L0000815 0 0.14030E-05 474896.4 3746942.7 492.9 3.49 7.44

3.25 YES

L0000816 0 0.14030E-05 474912.3 3746941.4 491.7 3.49 7.44

3.25 YES

L0000817 0 0.14030E-05 474928.3 3746940.7 490.2 3.49 7.44

3.25 YES

L0000818 0 0.14030E-05 474944.3 3746940.3 488.7 3.49 7.44

3.25 YES

L0000819 0 0.14030E-05 474960.3 3746940.0 487.6 3.49 7.44

3.25 YES

L0000820 0 0.14030E-05 474976.3 3746939.7 486.8 3.49 7.44

3.25 YES

L0000821 0 0.14030E-05 474992.3 3746939.4 486.2 3.49 7.44

3.25 YES

L0000822 0 0.14030E-05 475008.3 3746939.0 485.7 3.49 7.44

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3.25	YES						
L0000823		0	0.14030E-05	475024.3	3746939.7	485.2	7.44
3.25	YES						
L0000824		0	0.14030E-05	475040.3	3746940.3	484.3	7.44
3.25	YES						
L0000825		0	0.14030E-05	475056.3	3746940.9	483.2	7.44
3.25	YES						
L0000826		0	0.14030E-05	475072.3	3746941.5	482.6	7.44
3.25	YES						
L0000827		0	0.14030E-05	475088.2	3746942.2	482.1	7.44
3.25	YES						
L0000828		0	0.14030E-05	475104.2	3746942.8	481.5	7.44
3.25	YES						
L0000829		0	0.14030E-05	475120.2	3746943.4	481.0	7.44
3.25	YES						
L0000830		0	0.14030E-05	475136.2	3746943.6	480.4	7.44
3.25	YES						
L0000831		0	0.14030E-05	475152.2	3746943.6	479.8	7.44
3.25	YES						
L0000832		0	0.14030E-05	475168.2	3746943.6	478.8	7.44
3.25	YES						
L0000833		0	0.14030E-05	475184.2	3746943.6	477.8	7.44
3.25	YES						
L0000834		0	0.14030E-05	475200.2	3746943.6	476.9	7.44
3.25	YES						
L0000835		0	0.14030E-05	475216.2	3746943.6	476.2	7.44
3.25	YES						
L0000836		0	0.14030E-05	475232.2	3746943.6	475.7	7.44
3.25	YES						
L0000837		0	0.14030E-05	475248.2	3746943.6	475.6	7.44
3.25	YES						
L0000838		0	0.14030E-05	475264.2	3746943.6	475.9	7.44
3.25	YES						
L0000839		0	0.14030E-05	475280.2	3746943.6	475.7	7.44
3.25	YES						
L0000840		0	0.14030E-05	475296.2	3746943.6	475.1	7.44
3.25	YES						
L0000841		0	0.14030E-05	475312.2	3746943.6	474.8	7.44
3.25	YES						
L0000842		0	0.14030E-05	475328.2	3746943.6	474.4	7.44
3.25	YES						
L0000843		0	0.14030E-05	475344.2	3746943.6	474.2	7.44
3.25	YES						
L0000844		0	0.14030E-05	475360.2	3746943.6	474.0	7.44
3.25	YES						
L0000845		0	0.14030E-05	475376.2	3746943.6	473.4	7.44
3.25	YES						
L0000846		0	0.14030E-05	475392.2	3746943.6	472.9	7.44

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3.25	YES							
L0000847		0	0.14030E-05	475408.2	3746943.6	472.4	3.49	7.44
3.25	YES							
L0000848		0	0.14030E-05	475424.2	3746943.6	471.9	3.49	7.44
3.25	YES							
L0000849		0	0.14030E-05	475440.2	3746943.6	471.3	3.49	7.44
3.25	YES							
L0000850		0	0.14030E-05	475456.2	3746943.6	470.8	3.49	7.44

3.25 YES
 *** AERMOD - VERSION 19191 *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
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*** 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
ID		SCALAR	VARY					
(METERS)		CATS.	BY	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)

L0000851		0	0.14030E-05	475472.2	3746943.6	470.2	3.49	7.44
3.25	YES							
L0000852		0	0.14030E-05	475488.2	3746943.6	469.7	3.49	7.44
3.25	YES							
L0000853		0	0.14030E-05	475504.2	3746943.6	469.2	3.49	7.44
3.25	YES							
L0000854		0	0.14030E-05	475520.2	3746943.6	468.9	3.49	7.44
3.25	YES							
L0000855		0	0.14030E-05	475536.2	3746943.6	468.6	3.49	7.44
3.25	YES							
L0000856		0	0.14030E-05	475552.2	3746943.6	468.3	3.49	7.44
3.25	YES							
L0000857		0	0.14030E-05	475568.2	3746943.6	468.0	3.49	7.44
3.25	YES							
L0000858		0	0.14030E-05	475584.2	3746943.6	467.3	3.49	7.44
3.25	YES							
L0000859		0	0.14030E-05	475600.2	3746943.6	466.6	3.49	7.44
3.25	YES							
L0000860		0	0.14030E-05	475616.2	3746943.6	466.3	3.49	7.44

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3.25	YES							
L0000861		0	0.16370E-05	475664.0	3746945.4	466.0	3.49	7.44
3.25	YES							
L0000862		0	0.16370E-05	475680.0	3746945.5	466.0	3.49	7.44
3.25	YES							
L0000863		0	0.16370E-05	475696.0	3746945.6	465.7	3.49	7.44
3.25	YES							
L0000864		0	0.16370E-05	475712.0	3746945.7	464.8	3.49	7.44
3.25	YES							
L0000865		0	0.16370E-05	475728.0	3746945.8	464.1	3.49	7.44
3.25	YES							
L0000866		0	0.16370E-05	475744.0	3746945.9	463.5	3.49	7.44
3.25	YES							
L0000867		0	0.16370E-05	475760.0	3746946.0	463.3	3.49	7.44
3.25	YES							
L0000868		0	0.16370E-05	475776.0	3746946.1	463.3	3.49	7.44
3.25	YES							
L0000869		0	0.16370E-05	475792.0	3746946.3	463.2	3.49	7.44
3.25	YES							
L0000870		0	0.16370E-05	475808.0	3746946.4	463.0	3.49	7.44
3.25	YES							
L0000871		0	0.16370E-05	475824.0	3746946.5	463.0	3.49	7.44
3.25	YES							
L0000872		0	0.16370E-05	475840.0	3746946.6	463.0	3.49	7.44
3.25	YES							
L0000873		0	0.16370E-05	475856.0	3746946.7	462.6	3.49	7.44
3.25	YES							
L0000874		0	0.16370E-05	475872.0	3746946.8	462.3	3.49	7.44
3.25	YES							
L0000875		0	0.16370E-05	475888.0	3746946.9	462.1	3.49	7.44
3.25	YES							
L0000876		0	0.16370E-05	475904.0	3746947.0	462.0	3.49	7.44
3.25	YES							
L0000877		0	0.16370E-05	475920.0	3746947.1	462.0	3.49	7.44
3.25	YES							
L0000878		0	0.16370E-05	475936.0	3746947.2	461.8	3.49	7.44
3.25	YES							
L0000879		0	0.16370E-05	475952.0	3746947.3	461.3	3.49	7.44
3.25	YES							
L0000880		0	0.16370E-05	475968.0	3746947.4	461.0	3.49	7.44
3.25	YES							
L0000881		0	0.16370E-05	475984.0	3746947.5	461.0	3.49	7.44
3.25	YES							
L0000882		0	0.16370E-05	476000.0	3746947.6	460.7	3.49	7.44
3.25	YES							
L0000883		0	0.16370E-05	476016.0	3746947.7	460.1	3.49	7.44
3.25	YES							
L0000884		0	0.16370E-05	476032.0	3746947.8	460.0	3.49	7.44

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3.25 YES
L0000885 0 0.16370E-05 476048.0 3746947.9 460.0 3.49 7.44

3.25 YES
L0000886 0 0.16370E-05 476064.0 3746948.0 459.5 3.49 7.44

3.25 YES

▲ *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID	SOURCE IDs
-----	-----
ALL	L0000491 , L0000492 , L0000493 , L0000494 , L0000495 ,
L0000496	, L0000497 , L0000498 ,
	L0000499 , L0000500 , L0000501 , L0000502 , L0000503 ,
L0000504	, L0000505 , L0000506 ,
	L0000507 , L0000508 , L0000509 , L0000510 , L0000511 ,
L0000512	, L0000513 , L0000514 ,
	L0000515 , L0000516 , L0000517 , L0000518 , L0000519 ,
L0000520	, L0000521 , L0000522 ,
	L0000523 , L0000524 , L0000525 , L0000526 , L0000527 ,
L0000528	, L0000529 , L0000530 ,
	L0000531 , L0000532 , L0000533 , L0000534 , L0000535 ,
L0000536	, L0000537 , L0000538 ,
	L0000539 , L0000540 , L0000541 , L0000542 , L0000543 ,
L0000544	, L0000545 , L0000546 ,
	L0000547 , L0000548 , L0000549 , L0000550 , L0000551 ,
L0000552	, L0000553 , L0000554 ,
	L0000555 , L0000556 , L0000557 , L0000558 , L0000559 ,
L0000560	, L0000561 , L0000562 ,

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L0000568	L0000563 , L0000569	L0000564 , L0000570	L0000565 ,	L0000566 ,	L0000567 ,
L0000576	L0000571 , L0000577	L0000572 , L0000578	L0000573 ,	L0000574 ,	L0000575 ,
L0000584	L0000579 , L0000585	L0000580 , L0000586	L0000581 ,	L0000582 ,	L0000583 ,
L0000592	L0000587 , L0000593	L0000588 , L0000594	L0000589 ,	L0000590 ,	L0000591 ,
L0000600	L0000595 , L0000601	L0000596 , L0000602	L0000597 ,	L0000598 ,	L0000599 ,
L0000608	L0000603 , L0000609	L0000604 , L0000610	L0000605 ,	L0000606 ,	L0000607 ,
L0000616	L0000611 , L0000617	L0000612 , L0000618	L0000613 ,	L0000614 ,	L0000615 ,
L0000624	L0000619 , L0000625	L0000620 , L0000626	L0000621 ,	L0000622 ,	L0000623 ,
L0000632	L0000627 , L0000633	L0000628 , L0000634	L0000629 ,	L0000630 ,	L0000631 ,
L0000640	L0000635 , L0000641	L0000636 , L0000642	L0000637 ,	L0000638 ,	L0000639 ,
L0000648	L0000643 , L0000649	L0000644 , L0000650	L0000645 ,	L0000646 ,	L0000647 ,

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID

SOURCE IDs

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L0000656	L0000651 , L0000657	, L0000652 , L0000658	, L0000653 ,	, L0000654	, L0000655	,
L0000664	L0000659 , L0000665	, L0000660 , L0000666	, L0000661 ,	, L0000662	, L0000663	,
L0000672	L0000667 , L0000673	, L0000668 , L0000674	, L0000669 ,	, L0000670	, L0000671	,
L0000680	L0000675 , L0000681	, L0000676 , L0000682	, L0000677 ,	, L0000678	, L0000679	,
L0000688	L0000683 , L0000689	, L0000684 , L0000690	, L0000685 ,	, L0000686	, L0000687	,
L0000696	L0000691 , L0000697	, L0000692 , L0000698	, L0000693 ,	, L0000694	, L0000695	,
L0000704	L0000699 , L0000705	, L0000700 , L0000706	, L0000701 ,	, L0000702	, L0000703	,
L0000712	L0000707 , L0000713	, L0000708 , L0000714	, L0000709 ,	, L0000710	, L0000711	,
L0000720	L0000715 , L0000721	, L0000716 , L0000722	, L0000717 ,	, L0000718	, L0000719	,
L0000728	L0000723 , L0000729	, L0000724 , L0000730	, L0000725 ,	, L0000726	, L0000727	,
L0000736	L0000731 , L0000737	, L0000732 , L0000738	, L0000733 ,	, L0000734	, L0000735	,
L0000744	L0000739 , L0000745	, L0000740 , L0000746	, L0000741 ,	, L0000742	, L0000743	,
L0000752	L0000747 , L0000753	, L0000748 , L0000754	, L0000749 ,	, L0000750	, L0000751	,
L0000760	L0000755 , L0000761	, L0000756 , L0000762	, L0000757 ,	, L0000758	, L0000759	,
L0000768	L0000763 , L0000769	, L0000764 , L0000770	, L0000765 ,	, L0000766	, L0000767	,
L0000776	L0000771 , L0000777	, L0000772 , L0000778	, L0000773 ,	, L0000774	, L0000775	,

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L0000784	L0000779 , L0000780 , L0000781 , L0000782 , L0000783 ,
	, L0000785 , L0000786 ,
L0000792	L0000787 , L0000788 , L0000789 , L0000790 , L0000791 ,
	, L0000793 , L0000794 ,
L0000800	L0000795 , L0000796 , L0000797 , L0000798 , L0000799 ,
	, L0000801 , L0000802 ,
L0000808	L0000803 , L0000804 , L0000805 , L0000806 , L0000807 ,
	, L0000809 , L0000810 ,

*** AERMOD - VERSION 19191 *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
 HRA.ISC *** 12/13/19
 *** AERMET - VERSION 16216 ***
 *** 11:50:01

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS

SRCGROUP ID	SOURCE IDs
-----	-----
L0000816	L0000811 , L0000812 , L0000813 , L0000814 , L0000815 ,
	, L0000817 , L0000818 ,
L0000824	L0000819 , L0000820 , L0000821 , L0000822 , L0000823 ,
	, L0000825 , L0000826 ,
L0000832	L0000827 , L0000828 , L0000829 , L0000830 , L0000831 ,
	, L0000833 , L0000834 ,
L0000840	L0000835 , L0000836 , L0000837 , L0000838 , L0000839 ,
	, L0000841 , L0000842 ,
L0000848	L0000843 , L0000844 , L0000845 , L0000846 , L0000847 ,
	, L0000849 , L0000850 ,
L0000856	L0000851 , L0000852 , L0000853 , L0000854 , L0000855 ,
	, L0000857 , L0000858 ,
L0000864	L0000859 , L0000860 , L0000861 , L0000862 , L0000863 ,
	, L0000865 , L0000866 ,

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L0000867 , L0000868 , L0000869 , L0000870 , L0000871 ,
 L0000872 , L0000873 , L0000874 ,

L0000875 , L0000876 , L0000877 , L0000878 , L0000879 ,
 L0000880 , L0000881 , L0000882 ,

L0000883 , L0000884 , L0000885 , L0000886 ,
 *** AERMOD - VERSION 19191 *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
 HRA.ISC *** 12/13/19
 *** AERMET - VERSION 16216 ***
 *** 11:50:01

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000495	2189641.	L0000491 , L0000492 , L0000493 , L0000494 ,
L0000498	, L0000496	, L0000497 ,
L0000504	, L0000499	, L0000500 , L0000501 , L0000502 , L0000503 ,
L0000512	, L0000505	, L0000506 ,
L0000512	L0000507 , L0000508 , L0000509 , L0000510 , L0000511 ,	
L0000520	, L0000513	, L0000514 ,
L0000520	L0000515 , L0000516 , L0000517 , L0000518 , L0000519 ,	
L0000528	, L0000521	, L0000522 ,
L0000528	L0000523 , L0000524 , L0000525 , L0000526 , L0000527 ,	
L0000536	, L0000529	, L0000530 ,
L0000536	L0000531 , L0000532 , L0000533 , L0000534 , L0000535 ,	
L0000544	, L0000537	, L0000538 ,
L0000544	L0000539 , L0000540 , L0000541 , L0000542 , L0000543 ,	
L0000552	, L0000545	, L0000546 ,
L0000552	L0000547 , L0000548 , L0000549 , L0000550 , L0000551 ,	
L0000552	, L0000553	, L0000554 ,

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L0000560	L0000555 , L0000561	L0000556 , L0000562	L0000557 ,	L0000558	L0000559	
L0000568	L0000563 , L0000569	L0000564 , L0000570	L0000565 ,	L0000566	L0000567	
L0000576	L0000571 , L0000577	L0000572 , L0000578	L0000573 ,	L0000574	L0000575	
L0000584	L0000579 , L0000585	L0000580 , L0000586	L0000581 ,	L0000582	L0000583	
L0000592	L0000587 , L0000593	L0000588 , L0000594	L0000589 ,	L0000590	L0000591	
L0000600	L0000595 , L0000601	L0000596 , L0000602	L0000597 ,	L0000598	L0000599	
L0000608	L0000603 , L0000609	L0000604 , L0000610	L0000605 ,	L0000606	L0000607	
L0000616	L0000611 , L0000617	L0000612 , L0000618	L0000613 ,	L0000614	L0000615	
L0000624	L0000619 , L0000625	L0000620 , L0000626	L0000621 ,	L0000622	L0000623	
L0000632	L0000627 , L0000633	L0000628 , L0000634	L0000629 ,	L0000630	L0000631	
L0000640	L0000635 , L0000641	L0000636 , L0000642	L0000637 ,	L0000638	L0000639	
L0000648	L0000643 , L0000649	L0000644 , L0000650	L0000645 ,	L0000646	L0000647	

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID URBAN POP

SOURCE IDs

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L0000656	L0000651 , L0000657	, L0000652 , L0000658	, L0000653 ,	, L0000654	, L0000655	,
L0000664	L0000659 , L0000665	, L0000660 , L0000666	, L0000661 ,	, L0000662	, L0000663	,
L0000672	L0000667 , L0000673	, L0000668 , L0000674	, L0000669 ,	, L0000670	, L0000671	,
L0000680	L0000675 , L0000681	, L0000676 , L0000682	, L0000677 ,	, L0000678	, L0000679	,
L0000688	L0000683 , L0000689	, L0000684 , L0000690	, L0000685 ,	, L0000686	, L0000687	,
L0000696	L0000691 , L0000697	, L0000692 , L0000698	, L0000693 ,	, L0000694	, L0000695	,
L0000704	L0000699 , L0000705	, L0000700 , L0000706	, L0000701 ,	, L0000702	, L0000703	,
L0000712	L0000707 , L0000713	, L0000708 , L0000714	, L0000709 ,	, L0000710	, L0000711	,
L0000720	L0000715 , L0000721	, L0000716 , L0000722	, L0000717 ,	, L0000718	, L0000719	,
L0000728	L0000723 , L0000729	, L0000724 , L0000730	, L0000725 ,	, L0000726	, L0000727	,
L0000736	L0000731 , L0000737	, L0000732 , L0000738	, L0000733 ,	, L0000734	, L0000735	,
L0000744	L0000739 , L0000745	, L0000740 , L0000746	, L0000741 ,	, L0000742	, L0000743	,
L0000752	L0000747 , L0000753	, L0000748 , L0000754	, L0000749 ,	, L0000750	, L0000751	,
L0000760	L0000755 , L0000761	, L0000756 , L0000762	, L0000757 ,	, L0000758	, L0000759	,
L0000768	L0000763 , L0000769	, L0000764 , L0000770	, L0000765 ,	, L0000766	, L0000767	,

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L0000776	L0000771 , L0000772 , L0000773 , L0000774 , L0000775 ,
	, L0000777 , L0000778 ,
L0000784	L0000779 , L0000780 , L0000781 , L0000782 , L0000783 ,
	, L0000785 , L0000786 ,
L0000792	L0000787 , L0000788 , L0000789 , L0000790 , L0000791 ,
	, L0000793 , L0000794 ,
L0000800	L0000795 , L0000796 , L0000797 , L0000798 , L0000799 ,
	, L0000801 , L0000802 ,
L0000808	L0000803 , L0000804 , L0000805 , L0000806 , L0000807 ,
	, L0000809 , L0000810 ,

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0000816	L0000811 , L0000812 , L0000813 , L0000814 , L0000815 ,	
	, L0000817 , L0000818 ,	
L0000824	L0000819 , L0000820 , L0000821 , L0000822 , L0000823 ,	
	, L0000825 , L0000826 ,	
L0000832	L0000827 , L0000828 , L0000829 , L0000830 , L0000831 ,	
	, L0000833 , L0000834 ,	
L0000840	L0000835 , L0000836 , L0000837 , L0000838 , L0000839 ,	
	, L0000841 , L0000842 ,	
L0000848	L0000843 , L0000844 , L0000845 , L0000846 , L0000847 ,	
	, L0000849 , L0000850 ,	
L0000856	L0000851 , L0000852 , L0000853 , L0000854 , L0000855 ,	
	, L0000857 , L0000858 ,	

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L0000864 L0000859 , L0000860 , L0000861 , L0000862 , L0000863 ,
 , L0000865 , L0000866 ,

L0000872 L0000867 , L0000868 , L0000869 , L0000870 , L0000871 ,
 , L0000873 , L0000874 ,

L0000880 L0000875 , L0000876 , L0000877 , L0000878 , L0000879 ,
 , L0000881 , L0000882 ,

 L0000883 , L0000884 , L0000885 , L0000886 ,
 ▲ *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

(474008.2, 3747286.4, 506.2, 509.0, 0.0); (474181.5,
 3746963.4, 514.3, 514.3, 0.0);
 (474186.8, 3746556.4, 522.0, 522.0, 0.0); (474292.6,
 3746416.9, 523.0, 523.0, 0.0);
 (474430.5, 3746148.7, 525.8, 525.8, 0.0); (475059.6,
 3746154.3, 486.5, 486.5, 0.0);
 (475124.5, 3746156.3, 485.6, 485.6, 0.0); (475157.3,
 3746144.9, 482.8, 482.8, 0.0);
 (475346.2, 3746158.1, 477.1, 477.1, 0.0); (475345.8,
 3746113.5, 476.6, 476.6, 0.0);
 (475772.7, 3746513.4, 466.2, 466.2, 0.0); (475781.4,
 3746473.0, 466.1, 466.1, 0.0);
 (475597.6, 3745956.7, 469.5, 469.5, 0.0); (475255.0,
 3746150.2, 479.6, 479.6, 0.0);
 (475283.1, 3746153.9, 478.8, 478.8, 0.0); (474045.3,
 3747094.3, 508.2, 519.0, 0.0);
 (474173.7, 3746902.2, 517.0, 517.0, 0.0); (474168.9,
 3746754.6, 519.7, 519.7, 0.0);
 (474160.5, 3746687.4, 520.0, 520.0, 0.0); (474182.1,
 3746644.2, 521.5, 521.5, 0.0);
 (474185.8, 3746493.1, 522.2, 522.2, 0.0); (475096.8,
 3747286.0, 476.8, 476.8, 0.0);
 (475107.0, 3747166.7, 478.4, 478.4, 0.0); (475100.9,
 3747024.9, 482.1, 482.1, 0.0);
 (475390.7, 3746872.8, 473.0, 473.0, 0.0); (475390.7,
 3746739.2, 473.2, 473.2, 0.0);

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(475386.6, 3746597.3, 473.1, 473.1,	0.0);	(475573.6,
3746874.8, 469.6, 469.6, 0.0);		
(475493.5, 3746874.8, 469.2, 469.2,	0.0);	(475475.0,
3746597.3, 472.0, 472.0, 0.0);		
(475571.6, 3746593.2, 469.1, 469.1,	0.0);	(475491.4,
3747014.6, 469.6, 469.6, 0.0);		
(475594.2, 3747018.7, 467.2, 467.2,	0.0);	(475483.2,
3747273.6, 466.9, 466.9, 0.0);		
(475588.0, 3747273.6, 465.4, 465.4,	0.0);	(475195.4,
3747300.4, 472.0, 472.0, 0.0);		
(475304.4, 3747298.3, 469.5, 469.5,	0.0);	(475158.4,
3747002.3, 478.4, 478.4, 0.0);		
(475294.1, 3747012.6, 473.3, 473.3,	0.0);	(475683.2,
3747137.2, 465.2, 465.2, 0.0);		
(475697.6, 3747225.6, 464.0, 464.0,	0.0);	(475695.5,
3747061.2, 465.0, 465.0, 0.0);		
(475878.5, 3746567.8, 464.0, 464.0,	0.0);	(475901.1,
3746078.5, 465.0, 465.0, 0.0);		
(475566.0, 3746705.5, 470.4, 470.4,	0.0);	(474008.2,
3747286.4, 506.2, 509.0, 0.0);		
(474181.5, 3746963.4, 514.3, 514.3,	0.0);	(474186.8,
3746556.4, 522.0, 522.0, 0.0);		
(474292.6, 3746416.9, 523.0, 523.0,	0.0);	(474430.5,
3746148.7, 525.8, 525.8, 0.0);		
(475059.6, 3746154.3, 486.5, 486.5,	0.0);	(475124.5,
3746156.3, 485.6, 485.6, 0.0);		
(475157.3, 3746144.9, 482.8, 482.8,	0.0);	(475346.2,
3746158.1, 477.1, 477.1, 0.0);		
(475345.8, 3746113.5, 476.6, 476.6,	0.0);	(475772.7,
3746513.4, 466.2, 466.2, 0.0);		
(475781.4, 3746473.0, 466.1, 466.1,	0.0);	(475597.6,
3745956.7, 469.5, 469.5, 0.0);		
(475255.0, 3746150.2, 479.6, 479.6,	0.0);	(475283.1,
3746153.9, 478.8, 478.8, 0.0);		
(474045.3, 3747094.3, 508.2, 519.0,	0.0);	(474173.7,
3746902.2, 517.0, 517.0, 0.0);		
(474168.9, 3746754.6, 519.7, 519.7,	0.0);	(474160.5,
3746687.4, 520.0, 520.0, 0.0);		
(474182.1, 3746644.2, 521.5, 521.5,	0.0);	(474185.8,
3746493.1, 522.2, 522.2, 0.0);		
(475096.8, 3747286.0, 476.8, 476.8,	0.0);	(475107.0,
3747166.7, 478.4, 478.4, 0.0);		
(475100.9, 3747024.9, 482.1, 482.1,	0.0);	(475390.7,
3746872.8, 473.0, 473.0, 0.0);		
(475390.7, 3746739.2, 473.2, 473.2,	0.0);	(475386.6,
3746597.3, 473.1, 473.1, 0.0);		
(475573.6, 3746874.8, 469.6, 469.6,	0.0);	(475493.5,
3746874.8, 469.2, 469.2, 0.0);		

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(475475.0, 3746597.3, 472.0, 472.0, 0.0);	(475571.6,
3746593.2, 469.1, 469.1, 0.0);	
(475491.4, 3747014.6, 469.6, 469.6, 0.0);	(475594.2,
3747018.7, 467.2, 467.2, 0.0);	
(475483.2, 3747273.6, 466.9, 466.9, 0.0);	(475588.0,
3747273.6, 465.4, 465.4, 0.0);	
(475195.4, 3747300.4, 472.0, 472.0, 0.0);	(475304.4,
3747298.3, 469.5, 469.5, 0.0);	
(475158.4, 3747002.3, 478.4, 478.4, 0.0);	(475294.1,
3747012.6, 473.3, 473.3, 0.0);	
(475683.2, 3747137.2, 465.2, 465.2, 0.0);	(475697.6,
3747225.6, 464.0, 464.0, 0.0);	
(475695.5, 3747061.2, 465.0, 465.0, 0.0);	(475878.5,
3746567.8, 464.0, 464.0, 0.0);	
(475901.1, 3746078.5, 465.0, 465.0, 0.0);	(475566.0,
3746705.5, 470.4, 470.4, 0.0);	

^ *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

(475430.3, 3747379.8, 467.0, 467.0, 0.0);	(475550.3,
3747379.8, 465.0, 465.0, 0.0);	
(475594.9, 3747381.0, 464.9, 464.9, 0.0);	(474781.5,
3745995.4, 503.6, 543.0, 0.0);	
(474748.9, 3746018.1, 504.3, 543.0, 0.0);	(474682.2,
3746031.9, 505.8, 543.0, 0.0);	
(474706.2, 3745970.2, 507.3, 543.0, 0.0);	(474742.7,
3745936.1, 507.4, 543.0, 0.0);	
(474730.5, 3745900.8, 510.3, 543.0, 0.0);	(474778.8,
3745887.4, 510.2, 543.0, 0.0);	
(474948.8, 3745946.9, 495.1, 495.1, 0.0);	(474839.7,
3745944.7, 502.1, 543.0, 0.0);	
(474914.2, 3745956.7, 497.0, 512.0, 0.0);	

^ *** AERMOD - VERSION 19191 *** *** C:\LAKES\AERMOD VIEW\10719 HRA\10719
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Surface format: FREE

Profile format: FREE

Surface station no.: 3171

Name: UNKNOWN

Year: 2010

Upper air station no.: 3190

Name: UNKNOWN

Year: 2010

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							
10	01	01	1	01	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	
1.00	1.30	335.			9.1	282.5	5.5							
10	01	01	1	02	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	
1.00	0.90	142.			9.1	280.9	5.5							
10	01	01	1	03	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	
1.00	0.90	324.			9.1	280.4	5.5							
10	01	01	1	04	-1.3	0.064	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	
1.00	0.40	294.			9.1	278.8	5.5							
10	01	01	1	05	-3.9	0.088	-9.000	-9.000	-999.	62.	15.0	0.19	0.61	
1.00	0.90	205.			9.1	278.1	5.5							
10	01	01	1	06	-1.3	0.065	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	
1.00	0.40	3.			9.1	277.0	5.5							
10	01	01	1	07	-8.0	0.125	-9.000	-9.000	-999.	106.	21.0	0.19	0.61	
1.00	1.30	99.			9.1	277.0	5.5							
10	01	01	1	08	-3.3	0.086	-9.000	-9.000	-999.	61.	16.8	0.19	0.61	
0.54	0.90	319.			9.1	278.8	5.5							
10	01	01	1	09	20.1	0.128	0.307	0.010	49.	110.	-9.0	0.19	0.61	
0.33	0.90	239.			9.1	284.2	5.5							
10	01	01	1	10	56.7	0.087	0.560	0.010	107.	62.	-1.0	0.19	0.61	
0.26	0.40	188.			9.1	289.2	5.5							
10	01	01	1	11	81.5	0.323	0.867	0.008	277.	441.	-35.9	0.19	0.61	
0.23	2.70	310.			9.1	290.9	5.5							
10	01	01	1	12	97.1	0.281	1.058	0.008	421.	357.	-19.7	0.19	0.61	
0.22	2.20	357.			9.1	293.1	5.5							
10	01	01	1	13	92.2	0.279	1.117	0.008	523.	354.	-20.4	0.19	0.61	
0.22	2.20	356.			9.1	293.8	5.5							
10	01	01	1	14	77.6	0.275	1.102	0.008	595.	347.	-23.2	0.19	0.61	
0.23	2.20	50.			9.1	294.2	5.5							
10	01	01	1	15	54.9	0.230	1.006	0.008	640.	266.	-19.2	0.19	0.61	
0.27	1.80	53.			9.1	293.8	5.5							
10	01	01	1	16	12.3	0.206	0.613	0.008	648.	225.	-61.5	0.19	0.61	
0.36	1.80	11.			9.1	292.5	5.5							
10	01	01	1	17	-3.6	0.087	-9.000	-9.000	-999.	71.	15.6	0.19	0.61	
0.64	0.90	351.			9.1	290.4	5.5							

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10	01	01	1	18	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61
1.00	0.90	186.	9.1	287.5	5.5								
10	01	01	1	19	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61
1.00	0.90	275.	9.1	285.9	5.5								
10	01	01	1	20	-1.2	0.064	-9.000	-9.000	-999.	39.	18.1	0.19	0.61
1.00	0.40	181.	9.1	285.4	5.5								
10	01	01	1	21	-7.8	0.125	-9.000	-9.000	-999.	106.	21.3	0.19	0.61
1.00	1.30	318.	9.1	284.9	5.5								
10	01	01	1	22	-3.8	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61
1.00	0.90	196.	9.1	283.1	5.5								
10	01	01	1	23	-3.8	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61
1.00	0.90	330.	9.1	281.4	5.5								
10	01	01	1	24	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61
1.00	1.30	332.	9.1	280.9	5.5								

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
10	01	01	01	5.5	0	-999.	-99.00	282.6	99.0	-99.00	-99.00
10	01	01	01	9.1	1	335.	1.30	-999.0	99.0	-99.00	-99.00

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

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 HRA.ISC *** 12/13/19
 *** AERMET - VERSION 16216 ***
 *** 11:50:01

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5
 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000491 , L0000492
 , L0000493 , L0000494 , L0000495 ,
 , L0000496 , L0000497 , L0000498 , L0000499 , L0000500
 , L0000501 , L0000502 , L0000503 ,
 , L0000504 , L0000505 , L0000506 , L0000507 , L0000508
 , L0000509 , L0000510 , L0000511 ,
 , L0000512 , L0000513 , L0000514 , L0000515 , L0000516
 , L0000517 , L0000518 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

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

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

10719 HRA

Y-COORD (M)	CONC		
474008.19	3747286.38	0.00036	474181.45
3746963.39	0.00048		
474186.84	3746556.43	0.00038	474292.57
3746416.92	0.00040		
474430.48	3746148.66	0.00035	475059.57
3746154.33	0.00084		
475124.54	3746156.27	0.00082	475157.31
3746144.87	0.00079		
475346.19	3746158.15	0.00073	475345.82
3746113.52	0.00068		
475772.67	3746513.45	0.00182	475781.37
3746473.05	0.00140		
475597.63	3745956.69	0.00048	475255.01
3746150.23	0.00076		
475283.10	3746153.91	0.00075	474045.31
3747094.29	0.00039		
474173.74	3746902.24	0.00045	474168.94
3746754.61	0.00042		
474160.54	3746687.39	0.00040	474182.15
3746644.18	0.00040		
474185.84	3746493.12	0.00036	475096.75
3747285.97	0.00225		
475107.03	3747166.74	0.00250	475100.86
3747024.90	0.00421		
475390.70	3746872.79	0.00409	475390.70
3746739.17	0.00204		
475386.59	3746597.34	0.00176	475573.65
3746874.84	0.00398		
475493.48	3746874.84	0.00406	475474.98
3746597.34	0.00169		
475571.60	3746593.22	0.00165	475491.43
3747014.63	0.00374		
475594.21	3747018.74	0.00372	475483.21
3747273.64	0.00157		
475588.04	3747273.64	0.00170	475195.42
3747300.36	0.00200		
475304.37	3747298.30	0.00180	475158.42
3747002.29	0.00482		
475294.09	3747012.57	0.00401	475683.17
3747137.23	0.00222		
475697.56	3747225.62	0.00165	475695.50
3747061.17	0.00285		
475878.46	3746567.80	0.00118	475901.07
3746078.55	0.00049		
475566.00	3746705.53	0.00175	474008.19

10719 HRA

3747286.38	0.00036		
474181.45	3746963.39	0.00048	474186.84
3746556.43	0.00038		
474292.57	3746416.92	0.00040	474430.48
3746148.66	0.00035		
475059.57	3746154.33	0.00084	475124.54
3746156.27	0.00082		
475157.31	3746144.87	0.00079	475346.19
3746158.15	0.00073		
475345.82	3746113.52	0.00068	475772.67
3746513.45	0.00182		
475781.37	3746473.05	0.00140	475597.63
3745956.69	0.00048		
475255.01	3746150.23	0.00076	475283.10
3746153.91	0.00075		
474045.31	3747094.29	0.00039	474173.74
3746902.24	0.00045		
474168.94	3746754.61	0.00042	474160.54
3746687.39	0.00040		
474182.15	3746644.18	0.00040	474185.84
3746493.12	0.00036		
475096.75	3747285.97	0.00225	475107.03
3747166.74	0.00250		
475100.86	3747024.90	0.00421	475390.70
3746872.79	0.00409		
475390.70	3746739.17	0.00204	475386.59
3746597.34	0.00176		
475573.65	3746874.84	0.00398	475493.48
3746874.84	0.00406		
475474.98	3746597.34	0.00169	475571.60
3746593.22	0.00165		
475491.43	3747014.63	0.00374	475594.21
3747018.74	0.00372		
475483.21	3747273.64	0.00157	475588.04
3747273.64	0.00170		

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5
 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000491 , L0000492
 , L0000493 , L0000494 , L0000495 ,
 L0000496 , L0000497 , L0000498 , L0000499 , L0000500

10719 HRA

, L0000501 , L0000502 , L0000503 ,
 , L0000509 , L0000510 , L0000511 ,
 , L0000517 , L0000518 , . . . ,
 , L0000504 , L0000505 , L0000506 , L0000507 , L0000508
 , L0000512 , L0000513 , L0000514 , L0000515 , L0000516

*** DISCRETE CARTESIAN RECEPTOR POINTS

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

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
475195.42	3747300.36	0.00200	475304.37
3747298.30	0.00180		
475158.42	3747002.29	0.00482	475294.09
3747012.57	0.00401		
475683.17	3747137.23	0.00222	475697.56
3747225.62	0.00165		
475695.50	3747061.17	0.00285	475878.46
3746567.80	0.00118		
475901.07	3746078.55	0.00049	475566.00
3746705.53	0.00175		
475430.35	3747379.78	0.00178	475550.30
3747379.78	0.00172		
475594.90	3747380.98	0.00166	474781.52
3745995.36	0.00054		
474748.94	3746018.12	0.00054	474682.22
3746031.86	0.00051		
474706.16	3745970.24	0.00047	474742.66
3745936.10	0.00046		
474730.50	3745900.77	0.00042	474778.77
3745887.43	0.00044		
474948.76	3745946.92	0.00054	474839.73
3745944.67	0.00051		
474914.17	3745956.70	0.00054	

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

10719 HRA
 *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS

AVERAGED OVER 5 YEARS ***

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

GROUP ID		NETWORK		RECEPTOR (XR, YR,	
ZELEV, ZHILL, ZFLAG)		AVERAGE CONC		GRID-ID	
		OF TYPE			
-----		-----		-----	
ALL	1ST HIGHEST VALUE IS	0.00482	AT (	475158.42,	3747002.29,
478.43,	478.43, 0.00) DC	0.00482	AT (	475158.42,	3747002.29,
478.43,	478.43, 0.00) DC	0.00421	AT (	475100.86,	3747024.90,
482.08,	482.08, 0.00) DC	0.00421	AT (	475100.86,	3747024.90,
482.08,	482.08, 0.00) DC	0.00409	AT (	475390.70,	3746872.79,
473.00,	473.00, 0.00) DC	0.00409	AT (	475390.70,	3746872.79,
473.00,	473.00, 0.00) DC	0.00406	AT (	475493.48,	3746874.84,
469.16,	469.16, 0.00) DC	0.00406	AT (	475493.48,	3746874.84,
469.16,	469.16, 0.00) DC	0.00401	AT (	475294.09,	3747012.57,
473.31,	473.31, 0.00) DC	0.00401	AT (	475294.09,	3747012.57,
473.31,	473.31, 0.00) DC				

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

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 HRA.ISC *** 12/13/19
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

10719 HRA

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

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

A Total of 0 Fatal Error Message(s)
A Total of 4 Warning Message(s)
A Total of 2028 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 978 Calm Hours Identified

A Total of 1050 Missing Hours Identified (2.40 Percent)

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

***** WARNING MESSAGES *****
ME W186 1045 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
 0.50
ME W187 1045 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at:
 14010101
MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at:
2 year gap

*** AERMOD Finishes Successfully ***

**AVERAGE EMISSION FACTOR
RIVERSIDE 2021**

Speed	LHD1	MHD	HHD
0	0.376403	0.215051	0.02138
5	0.03923	0.180749	0.08736
25	0.013853	0.069122	0.03792

Speed	Weighted Average Emissions
0	0.12198
5	0.09854
25	0.04030

Emission Rates - 2021 Emission Factors

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 Building A	95			0.1220	2.90	3.353E-05
On-Site Idling Building B	93			0.1220	2.84	3.283E-05
On-Site Travel Building A	190	44.93	0.0985		4.43	5.125E-05
On-Site Travel Building B	186	39.79	0.0985		3.92	4.538E-05
Off-Site Travel 10% Dwy 1 Inbound/Outbound	38	28.65	0.0403		1.15	1.336E-05
Off-Site Travel 10% Dwy 2 Inbound/Outbound	38	23.29	0.0403		0.94	1.086E-05
Off-site Travel 5% s/o Harvill Av.	19	4.39	0.0403		0.18	2.049E-06
Off-Site Travel 5% b/w Harley Knox & Oleander	19	5.00	0.0403		0.20	2.333E-06
Off-Site Travel 80% to/from Harvill Av.	301	153.40	0.0403		6.18	7.154E-05
Off-Site Travel 95% to/from I-215 Freeway	357	91.22	0.0403		3.68	4.255E-05

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

^b Emission rates determined using EMFAC 2017. 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_	season_m	sub_area	vehicle_class	fuel	temperatu	relative_h	process	speed_tim	pollutant	emission_rate
2021	Annual	Riverside (	HHDT	Dsl	60	70	RUNEX	5	PM10	0.090872
2021	Annual	Riverside (	HHDT	Dsl	60	70	RUNEX	25	PM10	0.039446
2021	Annual	Riverside (	LHDT1	Dsl	60	70	RUNEX	5	PM10	0.082192
2021	Annual	Riverside (	LHDT1	Dsl	60	70	RUNEX	25	PM10	0.029025
2021	Annual	Riverside (	MHDT	Dsl	60	70	RUNEX	5	PM10	0.204727
2021	Annual	Riverside (	MHDT	Dsl	60	70	RUNEX	25	PM10	0.078292
2021	Annual	Riverside (	HHDT	Dsl			IDLEX		PM10	0.022237
2021	Annual	Riverside (	LHDT1	Dsl			IDLEX		PM10	0.788627
2021	Annual	Riverside (	MHDT	Dsl			IDLEX		PM10	0.243579

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: County

Region: RIVERSIDE

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population
RIVERSID	2021	HHDT	Aggregate	Aggregate	GAS	8.256088
RIVERSID	2021	HHDT	Aggregate	Aggregate	DSL	27250.49
RIVERSID	2021	HHDT	Aggregate	Aggregate	NG	278.9619
RIVERSID	2021	LHDT1	Aggregate	Aggregate	GAS	20885.97
RIVERSID	2021	LHDT1	Aggregate	Aggregate	DSL	19999.78
RIVERSID	2021	MHDT	Aggregate	Aggregate	GAS	1963.204
RIVERSID	2021	MHDT	Aggregate	Aggregate	DSL	15756.36

HHDT% GAS/NG	0.01043
HHDT% DSL	0.98957
LHDT1% GAS	0.510837
LHDT1% DSL	0.489163
MHDT% GAS	0.110793
MHDT% DSL	0.889207

APPENDIX 2.2:

RISK CALCULATIONS

Table 1
Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
-0.25 to 0 Age Bin Exposure Scenario

Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
	(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RfD (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)
	0.00182	1.82E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	6.3E-07	2.0E-08	5.0E+00	1.4E-03	3.6E-04							
TOTAL								2.0E-08			3.6E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

RESP Respiratory System
CNS/PNS Central/Peripheral Nervous System
CV/BL Cardiovascular/Blood System
IMMUN Immune System
KIDN Kidney
GI/LV Gastrointestinal System/Liver
REPRO Reproductive System (e.g. teratogenic and developmental effects)
EYES Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

exposure frequency (days/year) 350
exposure duration (years) 0.25
inhalation rate (L/kg-day) 361
inhalation absorption factor 1
averaging time (years) 70
fraction of time at home 0.85
age sensitivity factor (age third trimester) 10

Table 2
Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
0-2 Age Bin Exposure Scenario

Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
	(ug/m ³)	(mg/m ³)			URF (ug/m ³) ⁻¹	CPF (mg/kg/day) ⁻¹	DOSE (mg/kg-day)	RISK	REL (ug/m ³)	RfD (mg/kg/day)	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	GI/LV	REPRO	EYES
	(b)	(c)			(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)
	0.00182	1.82E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	1.9E-06	4.9E-07	5.0E+00	1.4E-03	3.6E-04							
TOTAL								4.9E-07			3.6E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

RESP Respiratory System
CNS/PNS Central/Peripheral Nervous System
CV/BL Cardiovascular/Blood System
IMMUN Immune System
KIDN Kidney
GI/LV Gastrointestinal System/Liver
REPRO Reproductive System (e.g. teratogenic and developmental effects)
EYES Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

exposure frequency (days/year) 350
exposure duration (years) 2
inhalation rate (L/kg-day) 1090
inhalation absorption factor 1
averaging time (years) 70
fraction of time at home 0.85
age sensitivity factor (0 to 2 years old) 10

Table 3
Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
2-16 Age Bin Exposure Scenario

Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
	(ug/m ³) (b)	(mg/m ³) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g)	DOSE (mg/kg-day) (h)	RISK (i)	REL (ug/m ³) (j)	RfD (mg/kg/day) (k)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)
	0.00182	1.82E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	1.0E-06	4.5E-07	5.0E+00	1.4E-03	3.6E-04							
TOTAL								4.5E-07			3.6E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

RESP Respiratory System
CNS/PNS Central/Peripheral Nervous System
CV/BL Cardiovascular/Blood System
IMMUN Immune System
KIDN Kidney
GI/LV Gastrointestinal System/Liver
REPRO Reproductive System (e.g. teratogenic and developmental effects)
EYES Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	350
exposure duration (years)	14
inhalation rate (L/kg-day)	572
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.72
age sensitivity factor (ages 2 to 16 years)	3

Table 4
Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
16-30 Age Bin Exposure Scenario

Source (a)	Mass GLC		Weight Fraction (d)	Contaminant (e)	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
	(ug/m ³)	(mg/m ³)			URF (ug/m ³) ⁻¹	CPF (mg/kg/day) ⁻¹	DOSE (mg/kg-day)	RISK	REL (ug/m ³)	RfD (mg/kg/day)	RESP (l)	CNS/PNS (m)	CV/BL (n)	IMMUN (o)	KIDN (p)	GI/LV (q)	REPRO (r)	EYES (s)
	(b)	(c)			(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)
	0.00182	1.82E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	4.6E-07	7.0E-08	5.0E+00	1.4E-03	3.6E-04							
TOTAL					7.0E-08				3.6E-04 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00									

0.07

** Key to Toxicological Endpoints

RESP Respiratory System
CNS/PNS Central/Peripheral Nervous System
CV/BL Cardiovascular/Blood System
IMMUN Immune System
KIDN Kidney
GI/LV Gastrointestinal System/Liver
REPRO Reproductive System (e.g. teratogenic and developmental effects)
EYES Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	350
exposure duration (years)	14
inhalation rate (L/kg-day))	261
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.73
age sensitivity factor (ages 16 to 30 years old)	1

Total Risk for All Age Bins (per million) 1.03

Table 5
Quantification of Carcinogenic Risks and Noncarcinogenic Risks
25-Year Worker Exposure Scenario

	Source	Mass GLC		Weight Fraction	Contaminant	Carcinogenic Risk				Noncarcinogenic Hazards/ Toxicological Endpoints**									
		(ug/m ³)	(mg/m ³)			URF	CPF	DOSE	RISK	REL	RfD	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	GI/LV	REPRO	EYES
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)
1	Diesel Particulates	4.82E-03	4.82E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	7.6E-07	2.8E-07	5.0E+00	1.4E-03	9.6E-04							
TOTAL									2.8E-07 0.28			9.6E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

** Key to Toxicological Endpoints

Note:

Exposure factors used to calculate contaminant intake

RESP	Respiratory System	exposure frequency (days/year)	250
CNS/PNS	Central/Peripheral Nervous System	exposure duration (years)	25
CV/BL	Cardiovascular/Blood System	inhalation rate (L/kg-day))	230
IMMUN	Immune System	inhalation absorption factor	1
KIDN	Kidney	averaging time (years)	70
GI/LV	Gastrointestinal System/Liver		
REPRO	Reproductive System (e.g. teratogenic and developmental effects)		
EYES	Eye irritation and/or other effects		