



Slover and Cactus Warehouse

MOBILE SOURCE HEALTH RISK ASSESSMENT

COUNTY OF SAN BERNARDINO

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LIST OF ABBREVIATED TERMS

(1)	Reference
µg	Microgram
AERMOD	Atmospheric Dispersion Modeling System
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
PCE	Passenger Car Equivalent
PM10	Particulate Matter 10 microns in diameter or less
Project	Slover and Cactus Warehouse
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 evaluated the potential mobile source health risk impacts to sensitive receptors (residents and schools) and adjacent workers associated with the development of the proposed 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 below for the Project.

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to Project DPM source emissions is located immediately adjacent to the west of the Project site in the backyard of a home on Spruce Avenue. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project DPM source emissions is estimated at 1.29 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 0.0005, 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. The nearest modeled receptors are illustrated on Exhibit 2-B.

Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is located at the southeast corner of Slover Avenue and Cactus Avenue. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact at this location is 0.11 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 0.0003, 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. The nearest modeled receptors are illustrated on Exhibit 2-B.

School Child Exposure Scenario:

The school site with the greatest potential exposure to Project DPM source emissions is located at the Bloomington Junior High School and the Colton Joint Unified School located approximately 1,689 feet northwest of the Project site. At both locations the maximally exposed individual school child (MEISC) would be exposed to an incremental cancer risk impact of 0.03 in one million which is less than the threshold of 10 in one million. Maximum non-cancer risks at this same locations were estimated to be 0.00006 which would not exceed the applicable threshold of 1.0. Any other schools in the vicinity of the Project would be exposed to less emissions and consequently less impacts than what is disclosed for the MEISC. As such, the Project will not cause a significant human health or cancer risk to adjacent school children. The nearest modeled receptors are illustrated on Exhibit 2-B.

As such, the results of the analysis also indicate that the project will not result in a significant cumulative health risk.

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	1.29	10	NO
25 Year Exposure	Maximum Exposed Worker Receptor	0.11	10	NO
9 Year Exposure	Maximum Exposed School Child	0.03	10	NO
Time Period	Location	Maximum Hazard Index	Significance Threshold	Exceeds Significance Threshold
30 Year Exposure	Maximum Exposed Sensitive Receptor	0.0005	1.0	NO
25 Year Exposure	Maximum Exposed Worker Receptor	0.0003	1.0	NO
9 Year Exposure	Maximum Exposed School Child	0.00006	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) typically issues a comment letter on the Notice of Preparation of a CEQA Document. Per the SCAQMD's typical comment letter, if a proposed Project is expected to generate/attract diesel trucks, which emit diesel particulate matter (DPM), preparation of a HRA is necessary. 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 (1) 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* (2). 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 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 Slover and Cactus Warehouse Project is located on the southwest corner of Cactus Avenue and Slover Avenue in unincorporated County of San Bernardino, as shown on Exhibit 1-A. The Project site is located roughly 150 feet south of an existing Union Pacific (UP) railroad yard and approximately 1,800 feet south of Interstate 10 (I-10). The Project site is mostly vacant, with three existing residential homes located in the western and southeastern portions of the site.

1.2 PROJECT DESCRIPTION

It is our understanding that the Project is proposed to consist of up to 257,855 square feet (sf) of warehouse use, as shown on Exhibit 1-B. For the purposes of this analysis, the Project is anticipated to be developed in a single phase with an Opening Year of 2020.

Per the Slover and Cactus Warehouse Traffic Impact Analysis prepared by Urban Crossroads, Inc. the Project is expected to generate a net total of approximately 449 trip-ends per day (actual vehicles). (3) The net Project trip generation includes 90 truck trip-ends per day.

All on-site outdoor cargo-handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) and all on-site indoor forklifts will be powered by electricity or non-combustion engines.

EXHIBIT 1-A: LOCATION MAP

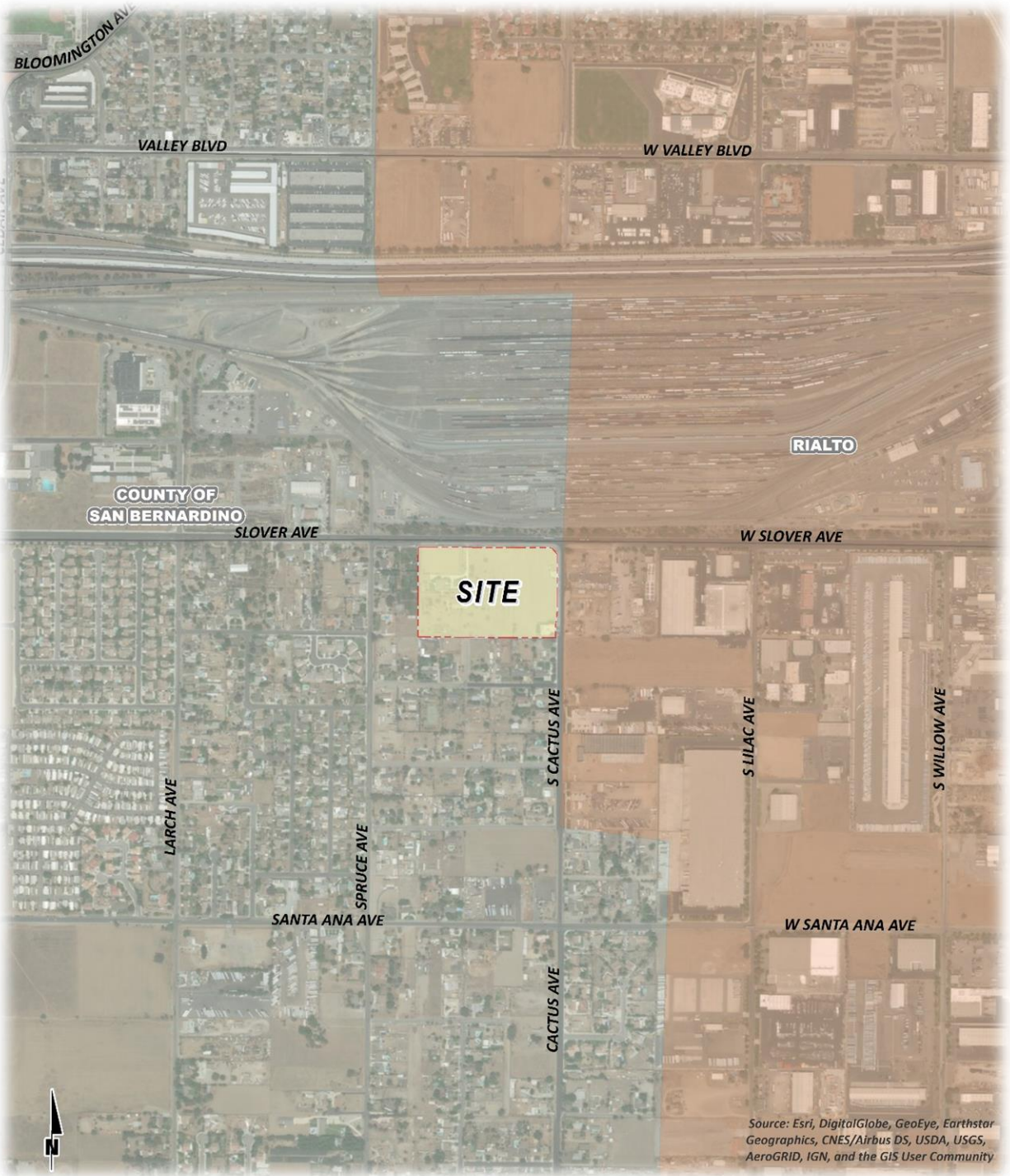
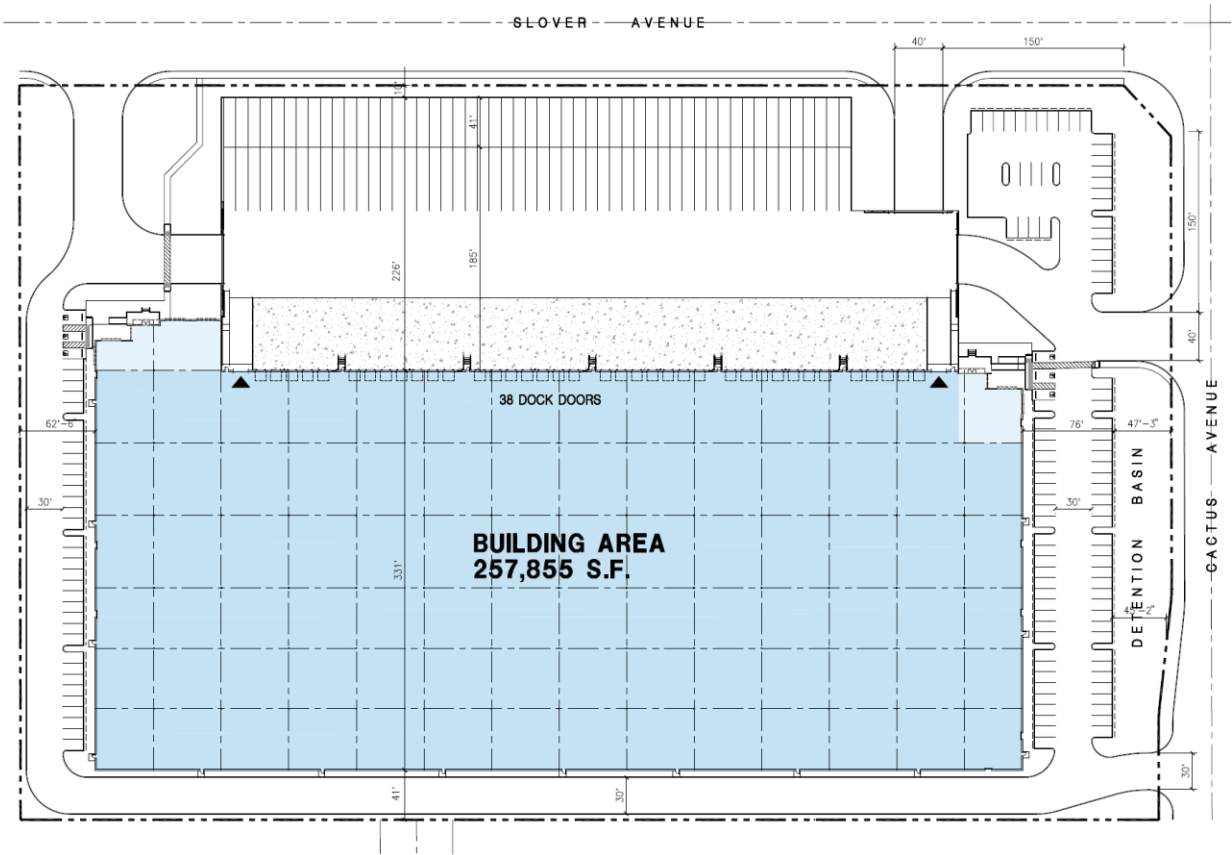


EXHIBIT 1-B: SITE PLAN



2 BACKGROUND

2.1 REGULATORY SETTING

ARB estimates that the average Californian is exposed to 1.2-1.8 $\mu\text{g}/\text{m}^3$ of DPM annually, this exposure results in an average cancer risk of 360-540 in one million for the average Californian exposed to DPM (4).

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 risk estimates assume sensitive receptors will be subject to DPM for 24 hours a day, 350 days a year.
- 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 μm in diameter (PM_{10}) generated with the 2014 version of the Emission FAcT model (EMFAC) developed by the ARB. EMFAC 2014 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 2014, 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 2014. Emission factors calculated using EMFAC 2014 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

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.

corresponding emission factor units associated with diesel particulate exhaust for this Project are presented below.

For this Project, annual average PM₁₀ emission factors were generated by running EMFAC 2014 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 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 2020 EMFAC 2014 run was conducted and a static 2020 emissions factor data set was used for the entire duration of analysis herein (e.g., 30 years). Use of 2020 emission factors would overstate potential impacts since this approach assumes that emission factors remain “static” and do not change over time due to fleet turnover or cleaner technology with lower emissions that would be incorporated after 2020. Additionally, based on EMFAC2014, Light-Heavy-Duty Trucks comprise of 43.15% diesel, Medium-Heavy-Duty Trucks comprise of 87.21% diesel, and Heavy-Heavy-Duty Trucks comprise of 99.15% 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:

Emissions_{SpeedA} (g/s): Vehicle emissions at a given speed A;

EF_{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):

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

60 minutes per hour / seconds per day

Where:

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

$\text{EF}_{\text{idle}} (\text{g/s})$: EMFAC idle exhaust PM_{10} emission factor.

TABLE 2-1: 2019 WEIGHTED AVERAGE DPM EMISSIONS FACTORS

Speed	Weighted Average
0 (idling)	0.0963 (g/idle-hr)
5	0.04575 (g/s)
25	0.02576 (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) (3). 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 approximately 0.97 mile to 1.22 miles. This modeling domain is consistent with and 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 (in the case of the Project this is the on-site idling and travel).

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.

EXHIBIT 2-A: MODELED EMISSION SOURCES



Per the Slover and Cactus Warehouse Traffic Impact Analysis prepared by Urban Crossroads, Inc. the Project is expected to generate a net total of approximately 449 trip-ends per day (actual vehicles). (3) The net Project trip generation includes 90 truck trip-ends per day.

The vehicle fleet mix, in terms of actual trucks, as derived from the traffic study for the Project is comprised of the following: 16.7% of Light-Heavy-Duty (LHD), 20.7% of Medium-Heavy-Duty (MHD), and 62.6% of Heavy-Heavy-Duty (HHD).

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 (1). SCAQMD recommends using the Environmental Protection Agency's (U.S. EPA's) AERMOD model. For purposes of this analysis, the model was used to calculate annual average particulate concentrations associated with site operations.

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 AERMOD View has been utilized to determine the release height parameters. Based on the US EPA methodology, the Project's modeled sources would result in a release height of 3.49 meters, and an initial lateral dimension of 4.0 meters, and an initial vertical dimension of 3.25 meters.

TABLE 2-2: DPM EMISSIONS FROM PROJECT TRUCKS (2020 ANALYSIS YEAR)

Source	Trucks Per Day	Truck Emission Rates			Daily Truck Emissions ^c (grams/day)	Modeled Emission Rates (g/second)
		VM ^a (miles/day)	Truck Emission Rate ^b (grams/mile)	Truck Emission Rate ^b (grams/idle-hour)		
On-Site Idling	45			0.0963	1.08	1.254E-05
On-Site Travel	90	22.47	0.0457		1.03	1.190E-05
Off-Site Travel 30% Driveway 1 to Cedar/I-10	27	26.45	0.0258		0.68	7.888E-06
Off-Site Travel 25% Driveway 2 to Cedar/I-10	23	24.98	0.0258		0.64	7.448E-06
Off-Site Travel 5% Driveway 3 to Cedar/I-10	5	5.42	0.0258		0.14	1.616E-06
Off-Site Travel 30% Driveway 2 to Riverside/I-10	27	32.81	0.0258		0.85	9.783E-06
Off-Site Travel 10% Driveway 3 to Riverside/I-10	9	10.99	0.0258		0.28	3.277E-06
^a	Vehicle miles traveled are for modeled truck route only.					
^b	Emission rates determined using EMFAC 2014. 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.					

SCAQMD required model parameters are presented in Table 2-3 (7). The model requires additional input parameters including emission data and local meteorology. Meteorological data from the SCAQMD's Fontana monitoring station (SRA 34) was used to represent local weather conditions and prevailing winds (8).

TABLE 2-3: AERMOD MODEL PARAMETERS

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

Universal Transverse Mercator (UTM) coordinates for World Geodetic System (WGS) 84 were used to locate the project 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. Based on recommendations from SCAMD staff, a receptor grids with a maximum of 100 meters spacing were placed at residential, worker, and school locations to ensure that the maximum impacts are properly analyzed.

Receptors may be placed at applicable structure locations for residential and worker property and not the 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 they reside or work.

Furthermore, worker receptors immediately adjacent to the Project site have been evaluated in the HRA. Any impacts to workers located at schools, or non-school 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 OEHHHA Guidelines. Tables 2-4, 2-5, and 2-6 summarize the Exposure Parameters for Residents, School, and Offsite Worker scenarios based on 2015 OEHHHA Guidelines. Appendix 2.2 includes the detailed risk calculation.

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	365	24
16 to 30	261	1	14	0.73	365	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

TABLE 2-6: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (9 YEAR SCHOOL CHILD)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Exposure Frequency (days/year) ^a	Exposure Time (hours/day)
4 to 13	572	3	9	180	12
^a To represent the unique characteristics of the school-based population, the assessment employed the U.S. Environmental Protection Agency's guidance to develop viable dose estimates based on reasonable maximum exposures (RME). RME's are defined as the "highest exposure that is reasonably expected to occur" for a given receptor population. As a result, lifetime risk values for the student population were adjusted to account for an exposure duration of 180 days per year for nine (9) years. The 9 year exposure duration is also consistent with OEHA Recommendations and consistent with the exposure duration utilized in school-based risk assessments for various schools within the Los Angeles County Unified School District (LAUSD) that have been accepted by the SCAQMD.					

2.4 CARCINOGENIC CHEMICAL RISK

The SCAQMD CEQA Air Quality Handbook (1993) states that 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 (1), for purposes of this analysis, 10 in one million is used as the cancer risk threshold for the proposed 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 by lightning.

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

$$\text{DOSEair} = (\text{Cair} \times [\text{BR}/\text{BW}] \times \text{A} \times \text{EF}) \times (1 \times 10^{-6})$$

Where:

DOSEair	=	chronic daily intake (mg/kg/day)
Cair	=	concentration of contaminant in air (ug/m ³)
[BR/BW] BW-day)	=	daily breathing rate normalized to body weight (L/kg)
A	=	inhalation absorption factor
EF	=	exposure frequency (days/365 days)
BW	=	body weight (kg)
1 x 10 ⁻⁶	=	conversion factors (ug to mg, L to m ³)

$$\text{RISKair} = \text{DOSEair} \times \text{CPF} \times \text{ED}/\text{AT}$$

Where:

DOSEair	=	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:

$$HI_{\text{DPM}} = C_{\text{DPM}} / \text{REL}_{\text{DPM}}$$

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 immediately adjacent to the west of the Project site in the backyard of a home on Spruce Avenue. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project DPM source emissions is estimated at 1.29 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 0.0005, 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. The nearest modeled receptors are illustrated on Exhibit 2-B.

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.

Worker Exposure Scenario:

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is located at the southeast corner of Slover Avenue and Cactus Avenue. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact at this location is 0.11 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 0.0003, 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. The nearest modeled receptors are illustrated on Exhibit 2-B.

School Child Exposure Scenario:

The school site with the greatest potential exposure to Project DPM source emissions is located at the Bloomington Junior High School and the Colton Joint Unified School located approximately 1,689 feet northwest of the Project site. At both locations the maximally exposed individual school child (MEISC) would be exposed to an incremental cancer risk impact of 0.03 in one million which is less than the threshold of 10 in one million. Maximum non-cancer risks at this same locations were estimated to be 0.00006 which would not exceed the applicable threshold of 1.0. Any other schools in the vicinity of the Project would be exposed to less emissions and consequently less impacts than what is disclosed for the MEISC. As such, the Project will not cause a significant human health or cancer risk to adjacent school children. The nearest modeled receptors are illustrated on Exhibit 2-B.

EXHIBIT 2-B: MODELED RECEPTORS



Color	Group Name
Yellow	Resident
Purple	School
Orange	Worker

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3 REFERENCES

1. **South Coast Air Quality Management District.** Mobile Source Toxics Analysis. [Online] 2003.
http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html.
2. **Goss, Tracy A and Kroeger, Amy.** White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. [Online] South Coast Air Quality Management District, 2003.
http://www.aqmd.gov/rules/ciwg/final_white_paper.pdf.
3. **Urban Crossroads, Inc.** *Slover and Cactus Warehouse Traffic Impact Analysis*. May 2018.
4. **South Coast Air Quality Management District.** RULE 403. Fugitive Dust. [Online]
<http://www.aqmd.gov/rules/reg/reg04/r403.pdf>.
5. **California Department of Transportation.** EMFAC Software. [Online]
<http://www.dot.ca.gov/hq/env/air/pages/emfac.htm>.
6. **Koizumi, James.** *Planning, Rule Development & Area Sources*. May 6, 2009.
7. **Environmental Protection Agency.** User's Guide for the AMS/EPA Regulatory Model - AERMOD. [Online] September 2004. <http://www.epa.gov/scram001/7thconf/aermod/aermodugb.pdf>.
8. **South Coast Air Quality Management District.** *Air Quality Reporting*. [pdf] Diamond Bar : Sierra Wade Associates, 1999.

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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 Slover and Cactus Warehouse Project. The information contained in this health risk assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

Haseeb Qureshi
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URBAN CROSSROADS, INC.
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Costa Mesa, CA 92626
(949) 336-5987
hqureshi@urbanxroads.com

EDUCATION

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

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

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental 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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11182 HRA

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**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.5.0
** Lakes Environmental Software Inc.
** Date: 5/10/2018
** File: C:\Lakes\AERMOD View\11182 HRA\11182 HRA.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc
  MODELOPT DFAULT CONC
  AVERTIME ANNUAL
  URBANOPT 2035210
  POLLUTID DPM
  RUNORNOT RUN
  ERRORFIL "11182 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
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** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
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** Vertical Dimension = 6.99
** SZINIT = 3.25
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** 464552.821, 3769154.486, 316.92, 3.49, 4.00
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LOCATION L0003994    VOLUME 464394.489 3769153.627 317.91
LOCATION L0003995    VOLUME 464403.079 3769153.674 317.91
LOCATION L0003996    VOLUME 464411.669 3769153.721 317.85
LOCATION L0003997    VOLUME 464420.259 3769153.767 317.59
LOCATION L0003998    VOLUME 464428.849 3769153.814 317.33
LOCATION L0003999    VOLUME 464437.439 3769153.860 317.07
LOCATION L0004000    VOLUME 464446.028 3769153.907 317.00
LOCATION L0004001    VOLUME 464454.618 3769153.954 317.00
LOCATION L0004002    VOLUME 464463.208 3769154.000 317.00
LOCATION L0004003    VOLUME 464471.798 3769154.047 317.00
LOCATION L0004004    VOLUME 464480.388 3769154.093 317.00
LOCATION L0004005    VOLUME 464488.978 3769154.140 317.00
LOCATION L0004006    VOLUME 464497.568 3769154.186 317.00
LOCATION L0004007    VOLUME 464506.158 3769154.233 316.98
LOCATION L0004008    VOLUME 464514.747 3769154.280 316.97
LOCATION L0004009    VOLUME 464523.337 3769154.326 316.95
LOCATION L0004010    VOLUME 464531.927 3769154.373 316.93

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                                11182 HRA
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LOCATION L0004012      VOLUME  464549.107 3769154.466 316.94
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** DESCRSRC On-Site Travel
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** Configuration = Adjacent
** Emission Rate = 0.0000119
** Vertical Dimension = 6.99
** SZINIT = 3.25
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** 464343.388, 3769172.261, 318.00, 3.49, 4.00
** 464560.072, 3769172.261, 317.00, 3.49, 4.00
** 464553.132, 3769179.201, 317.00, 3.49, 4.00
** 464551.847, 3769212.360, 317.12, 3.49, 4.00
** 464569.326, 3769167.635, 316.68, 3.49, 4.00
** 464592.459, 3769153.241, 316.01, 3.49, 4.00
** 464616.107, 3769151.698, 316.00, 3.49, 4.00
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LOCATION L0003949      VOLUME  464343.310 3769185.380 318.00
LOCATION L0003950      VOLUME  464343.361 3769176.790 318.00
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LOCATION L0003955      VOLUME  464381.810 3769172.261 318.00
LOCATION L0003956      VOLUME  464390.400 3769172.261 318.00
LOCATION L0003957      VOLUME  464398.990 3769172.261 318.00
LOCATION L0003958      VOLUME  464407.580 3769172.261 318.00
LOCATION L0003959      VOLUME  464416.170 3769172.261 317.90
LOCATION L0003960      VOLUME  464424.760 3769172.261 317.76
LOCATION L0003961      VOLUME  464433.350 3769172.261 317.63
LOCATION L0003962      VOLUME  464441.940 3769172.261 317.53
LOCATION L0003963      VOLUME  464450.530 3769172.261 317.53
LOCATION L0003964      VOLUME  464459.120 3769172.261 317.53
LOCATION L0003965      VOLUME  464467.710 3769172.261 317.53
LOCATION L0003966      VOLUME  464476.300 3769172.261 317.41
LOCATION L0003967      VOLUME  464484.890 3769172.261 317.26
LOCATION L0003968      VOLUME  464493.480 3769172.261 317.11
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LOCATION L0003970      VOLUME  464510.660 3769172.261 317.00
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LOCATION L0003973      VOLUME  464536.430 3769172.261 317.00
LOCATION L0003974      VOLUME  464545.020 3769172.261 317.00
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LOCATION L0003976      VOLUME  464558.568 3769173.766 317.00
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                                11182 HRA
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** Configuration = Adjacent
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** SZINIT = 3.25
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** 463416.855, 3769314.511, 326.82, 3.49, 8.37
** 463418.432, 3769434.380, 328.00, 3.49, 8.37
** 463420.640, 3769474.127, 329.00, 3.49, 8.37
** 463426.949, 3769510.718, 329.90, 3.49, 8.37
** 463447.111, 3769581.420, 334.86, 3.49, 8.37
** 463452.176, 3769623.391, 335.00, 3.49, 8.37
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LOCATION L0003875      VOLUME  464029.951 3769232.581 320.54
LOCATION L0003876      VOLUME  464011.951 3769232.562 320.66
LOCATION L0003877      VOLUME  463993.951 3769232.543 320.93
LOCATION L0003878      VOLUME  463975.951 3769232.523 321.00
LOCATION L0003879      VOLUME  463957.951 3769232.504 321.00
LOCATION L0003880      VOLUME  463939.951 3769232.485 321.00
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LOCATION L0003886      VOLUME  463831.951 3769232.371 322.00
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LOCATION L0003890      VOLUME  463759.951 3769232.295 323.00
LOCATION L0003891      VOLUME  463741.951 3769232.276 323.14
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LOCATION L0003894      VOLUME  463687.951 3769232.219 323.56
LOCATION L0003895      VOLUME  463669.951 3769232.200 323.84
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LOCATION	L0003900	VOLUME	463579.951	3769232.104 324.34
LOCATION	L0003901	VOLUME	463561.951	3769232.085 324.65
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LOCATION	L0003903	VOLUME	463525.951	3769232.047 325.00
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LOCATION	L0003905	VOLUME	463489.951	3769232.009 325.00
LOCATION	L0003906	VOLUME	463471.951	3769231.990 325.00
LOCATION	L0003907	VOLUME	463453.951	3769231.971 325.00
LOCATION	L0003908	VOLUME	463435.951	3769231.952 325.24
LOCATION	L0003909	VOLUME	463419.598	3769233.638 325.58
LOCATION	L0003910	VOLUME	463418.988	3769251.627 326.00
LOCATION	L0003911	VOLUME	463418.377	3769269.617 326.00
LOCATION	L0003912	VOLUME	463417.767	3769287.607 326.35
LOCATION	L0003913	VOLUME	463417.157	3769305.596 326.89
LOCATION	L0003914	VOLUME	463416.974	3769323.591 326.96
LOCATION	L0003915	VOLUME	463417.211	3769341.589 327.00
LOCATION	L0003916	VOLUME	463417.448	3769359.587 327.00
LOCATION	L0003917	VOLUME	463417.685	3769377.586 327.37
LOCATION	L0003918	VOLUME	463417.922	3769395.584 327.97
LOCATION	L0003919	VOLUME	463418.158	3769413.583 328.00
LOCATION	L0003920	VOLUME	463418.395	3769431.581 328.17
LOCATION	L0003921	VOLUME	463419.275	3769449.558 328.77
LOCATION	L0003922	VOLUME	463420.274	3769467.530 329.00
LOCATION	L0003923	VOLUME	463422.576	3769485.354 329.00
LOCATION	L0003924	VOLUME	463425.634	3769503.092 329.56
LOCATION	L0003925	VOLUME	463429.763	3769520.586 330.28
LOCATION	L0003926	VOLUME	463434.699	3769537.896 331.44
LOCATION	L0003927	VOLUME	463439.636	3769555.206 332.79
LOCATION	L0003928	VOLUME	463444.572	3769572.516 334.47
LOCATION	L0003929	VOLUME	463448.158	3769590.098 334.97
LOCATION	L0003930	VOLUME	463450.315	3769607.969 335.00
LOCATION	L0003931	VOLUME	463452.166	3769625.857 335.00
LOCATION	L0003932	VOLUME	463452.091	3769643.857 335.00
LOCATION	L0003933	VOLUME	463452.015	3769661.856 335.00
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LOCATION	L0003935	VOLUME	463451.865	3769697.856 335.15
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LOCATION	L0003937	VOLUME	463451.714	3769733.856 339.05
LOCATION	L0003938	VOLUME	463451.639	3769751.856 341.41
LOCATION	L0003939	VOLUME	463451.563	3769769.855 341.43
LOCATION	L0003940	VOLUME	463451.488	3769787.855 340.61
LOCATION	L0003941	VOLUME	463451.701	3769805.852 338.91
LOCATION	L0003942	VOLUME	463452.170	3769823.846 337.19
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LOCATION	L0003944	VOLUME	463453.109	3769859.834 335.00
LOCATION	L0003945	VOLUME	463453.578	3769877.827 335.00

** End of LINE VOLUME Source ID = SLINE3

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** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE4

** DESCRSRC 25% Driveway 2 to Cedar/I-10

** PREFIX

** Length of Side = 18.00

** Configuration = Adjacent

** Emission Rate = 7.448E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 12

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** 464337.927, 3769231.542, 319.00, 0.00, 8.37

** 464088.861, 3769232.643, 320.07, 0.00, 8.37

** 463419.655, 3769231.935, 325.54, 0.00, 8.37

** 463416.855, 3769314.511, 326.82, 0.00, 8.37

** 463418.432, 3769434.380, 328.00, 0.00, 8.37

** 463420.640, 3769474.127, 329.00, 0.00, 8.37

11182 HRA

** 463426.949, 3769510.718, 329.90, 0.00, 8.37
 ** 463447.111, 3769581.420, 334.86, 0.00, 8.37
 ** 463452.176, 3769623.391, 335.00, 0.00, 8.37
 ** 463451.453, 3769796.343, 340.25, 0.00, 8.37
 ** 463453.624, 3769879.563, 335.00, 0.00, 8.37
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LOCATION	L0003765	VOLUME	464437.732	3769231.527	318.51
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LOCATION	L0003767	VOLUME	464401.732	3769231.532	318.64
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LOCATION	L0003773	VOLUME	464293.732	3769231.737	319.00
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LOCATION	L0003781	VOLUME	464149.734	3769232.374	319.84
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LOCATION	L0003790	VOLUME	463987.734	3769232.536	321.00
LOCATION	L0003791	VOLUME	463969.734	3769232.517	321.00
LOCATION	L0003792	VOLUME	463951.734	3769232.498	321.00
LOCATION	L0003793	VOLUME	463933.734	3769232.479	321.00
LOCATION	L0003794	VOLUME	463915.734	3769232.460	321.00
LOCATION	L0003795	VOLUME	463897.734	3769232.441	321.03
LOCATION	L0003796	VOLUME	463879.734	3769232.422	321.36
LOCATION	L0003797	VOLUME	463861.734	3769232.403	321.66
LOCATION	L0003798	VOLUME	463843.734	3769232.384	321.94
LOCATION	L0003799	VOLUME	463825.734	3769232.365	322.00
LOCATION	L0003800	VOLUME	463807.735	3769232.345	322.06
LOCATION	L0003801	VOLUME	463789.735	3769232.326	322.66
LOCATION	L0003802	VOLUME	463771.735	3769232.307	323.00
LOCATION	L0003803	VOLUME	463753.735	3769232.288	323.00
LOCATION	L0003804	VOLUME	463735.735	3769232.269	323.25
LOCATION	L0003805	VOLUME	463717.735	3769232.250	323.53
LOCATION	L0003806	VOLUME	463699.735	3769232.231	323.53
LOCATION	L0003807	VOLUME	463681.735	3769232.212	323.65
LOCATION	L0003808	VOLUME	463663.735	3769232.193	323.94
LOCATION	L0003809	VOLUME	463645.735	3769232.174	324.00
LOCATION	L0003810	VOLUME	463627.735	3769232.155	324.00
LOCATION	L0003811	VOLUME	463609.735	3769232.136	324.00
LOCATION	L0003812	VOLUME	463591.735	3769232.117	324.14
LOCATION	L0003813	VOLUME	463573.735	3769232.098	324.45
LOCATION	L0003814	VOLUME	463555.735	3769232.079	324.74
LOCATION	L0003815	VOLUME	463537.735	3769232.060	325.00
LOCATION	L0003816	VOLUME	463519.735	3769232.041	325.00
LOCATION	L0003817	VOLUME	463501.735	3769232.022	325.00
LOCATION	L0003818	VOLUME	463483.735	3769232.003	325.00
LOCATION	L0003819	VOLUME	463465.735	3769231.984	325.00

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LOCATION L0003820	VOLUME	463447.735	3769231.965 325.03
LOCATION L0003821	VOLUME	463429.735	3769231.945 325.35
LOCATION L0003822	VOLUME	463419.387	3769239.851 325.78
LOCATION L0003823	VOLUME	463418.777	3769257.841 326.00
LOCATION L0003824	VOLUME	463418.167	3769275.830 326.00
LOCATION L0003825	VOLUME	463417.557	3769293.820 326.54
LOCATION L0003826	VOLUME	463416.947	3769311.810 326.93
LOCATION L0003827	VOLUME	463417.056	3769329.807 326.98
LOCATION L0003828	VOLUME	463417.293	3769347.805 327.00
LOCATION L0003829	VOLUME	463417.530	3769365.804 327.00
LOCATION L0003830	VOLUME	463417.767	3769383.802 327.58
LOCATION L0003831	VOLUME	463418.003	3769401.800 328.00
LOCATION L0003832	VOLUME	463418.240	3769419.799 328.00
LOCATION L0003833	VOLUME	463418.622	3769437.792 328.38
LOCATION L0003834	VOLUME	463419.620	3769455.765 328.98
LOCATION L0003835	VOLUME	463420.619	3769473.737 329.00
LOCATION L0003836	VOLUME	463423.632	3769491.480 329.17
LOCATION L0003837	VOLUME	463426.691	3769509.219 329.76
LOCATION L0003838	VOLUME	463431.468	3769526.565 330.68
LOCATION L0003839	VOLUME	463436.404	3769543.875 331.84
LOCATION L0003840	VOLUME	463441.340	3769561.185 333.35
LOCATION L0003841	VOLUME	463446.277	3769578.495 334.90
LOCATION L0003842	VOLUME	463448.903	3769596.270 334.99
LOCATION L0003843	VOLUME	463451.060	3769614.141 335.00
LOCATION L0003844	VOLUME	463452.140	3769632.073 335.00
LOCATION L0003845	VOLUME	463452.065	3769650.073 335.00
LOCATION L0003846	VOLUME	463451.989	3769668.073 335.00
LOCATION L0003847	VOLUME	463451.914	3769686.073 335.00
LOCATION L0003848	VOLUME	463451.839	3769704.073 335.79
LOCATION L0003849	VOLUME	463451.763	3769722.073 337.63
LOCATION L0003850	VOLUME	463451.688	3769740.072 339.87
LOCATION L0003851	VOLUME	463451.613	3769758.072 341.93
LOCATION L0003852	VOLUME	463451.537	3769776.072 341.18
LOCATION L0003853	VOLUME	463451.462	3769794.072 340.03
LOCATION L0003854	VOLUME	463451.863	3769812.067 338.32
LOCATION L0003855	VOLUME	463452.332	3769830.060 336.58
LOCATION L0003856	VOLUME	463452.802	3769848.054 335.00
LOCATION L0003857	VOLUME	463453.271	3769866.048 335.00

** End of LINE VOLUME Source ID = SLINE4

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE5

** DESCRSRC 5% Driveway 3 to Cedar/I-10

** PREFIX

** Length of Side = 18.00

** Configuration = Adjacent

** Emission Rate = 1.616E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 14

** 464626.148, 3769151.202, 316.00, 0.00, 8.37

** 464626.288, 3769230.677, 317.07, 0.00, 8.37

** 464551.538, 3769231.511, 317.62, 0.00, 8.37

** 464337.927, 3769231.542, 319.00, 0.00, 8.37

** 464088.861, 3769232.643, 320.07, 0.00, 8.37

** 463419.655, 3769231.935, 325.54, 0.00, 8.37

** 463416.855, 3769314.511, 326.82, 0.00, 8.37

** 463418.432, 3769434.380, 328.00, 0.00, 8.37

** 463420.640, 3769474.127, 329.00, 0.00, 8.37

** 463426.949, 3769510.718, 329.90, 0.00, 8.37

** 463447.111, 3769581.420, 334.86, 0.00, 8.37

** 463452.176, 3769623.391, 335.00, 0.00, 8.37

** 463451.453, 3769796.343, 340.25, 0.00, 8.37

** 463453.624, 3769879.563, 335.00, 0.00, 8.37

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LOCATION L0003651	VOLUME	464626.164	3769160.202 316.10
LOCATION L0003652	VOLUME	464626.195	3769178.202 316.57

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LOCATION L0003653	VOLUME	464626.227	3769196.202	316.85
LOCATION L0003654	VOLUME	464626.259	3769214.202	316.98
LOCATION L0003655	VOLUME	464624.763	3769230.694	317.00
LOCATION L0003656	VOLUME	464606.764	3769230.895	317.21
LOCATION L0003657	VOLUME	464588.765	3769231.096	317.49
LOCATION L0003658	VOLUME	464570.766	3769231.296	317.50
LOCATION L0003659	VOLUME	464552.767	3769231.497	317.62
LOCATION L0003660	VOLUME	464534.767	3769231.513	317.92
LOCATION L0003661	VOLUME	464516.767	3769231.516	318.00
LOCATION L0003662	VOLUME	464498.767	3769231.519	318.00
LOCATION L0003663	VOLUME	464480.767	3769231.521	318.00
LOCATION L0003664	VOLUME	464462.767	3769231.524	318.12
LOCATION L0003665	VOLUME	464444.767	3769231.526	318.42
LOCATION L0003666	VOLUME	464426.767	3769231.529	318.51
LOCATION L0003667	VOLUME	464408.767	3769231.531	318.52
LOCATION L0003668	VOLUME	464390.767	3769231.534	318.82
LOCATION L0003669	VOLUME	464372.767	3769231.537	319.00
LOCATION L0003670	VOLUME	464354.767	3769231.539	319.00
LOCATION L0003671	VOLUME	464336.767	3769231.547	319.00
LOCATION L0003672	VOLUME	464318.767	3769231.626	319.00
LOCATION L0003673	VOLUME	464300.768	3769231.706	319.00
LOCATION L0003674	VOLUME	464282.768	3769231.785	319.00
LOCATION L0003675	VOLUME	464264.768	3769231.865	319.00
LOCATION L0003676	VOLUME	464246.768	3769231.945	319.22
LOCATION L0003677	VOLUME	464228.768	3769232.024	319.52
LOCATION L0003678	VOLUME	464210.769	3769232.104	319.53
LOCATION L0003679	VOLUME	464192.769	3769232.183	319.53
LOCATION L0003680	VOLUME	464174.769	3769232.263	319.53
LOCATION L0003681	VOLUME	464156.769	3769232.343	319.73
LOCATION L0003682	VOLUME	464138.769	3769232.422	320.00
LOCATION L0003683	VOLUME	464120.769	3769232.502	320.00
LOCATION L0003684	VOLUME	464102.770	3769232.581	320.00
LOCATION L0003685	VOLUME	464084.770	3769232.639	320.00
LOCATION L0003686	VOLUME	464066.770	3769232.620	320.23
LOCATION L0003687	VOLUME	464048.770	3769232.601	320.54
LOCATION L0003688	VOLUME	464030.770	3769232.581	320.54
LOCATION L0003689	VOLUME	464012.770	3769232.562	320.65
LOCATION L0003690	VOLUME	463994.770	3769232.543	320.92
LOCATION L0003691	VOLUME	463976.770	3769232.524	321.00
LOCATION L0003692	VOLUME	463958.770	3769232.505	321.00
LOCATION L0003693	VOLUME	463940.770	3769232.486	321.00
LOCATION L0003694	VOLUME	463922.770	3769232.467	321.00
LOCATION L0003695	VOLUME	463904.770	3769232.448	321.00
LOCATION L0003696	VOLUME	463886.770	3769232.429	321.23
LOCATION L0003697	VOLUME	463868.770	3769232.410	321.55
LOCATION L0003698	VOLUME	463850.770	3769232.391	321.83
LOCATION L0003699	VOLUME	463832.770	3769232.372	322.00
LOCATION L0003700	VOLUME	463814.770	3769232.353	322.00
LOCATION L0003701	VOLUME	463796.770	3769232.334	322.43
LOCATION L0003702	VOLUME	463778.770	3769232.315	323.00
LOCATION L0003703	VOLUME	463760.770	3769232.296	323.00
LOCATION L0003704	VOLUME	463742.770	3769232.277	323.12
LOCATION L0003705	VOLUME	463724.770	3769232.258	323.44
LOCATION L0003706	VOLUME	463706.770	3769232.239	323.53
LOCATION L0003707	VOLUME	463688.770	3769232.220	323.54
LOCATION L0003708	VOLUME	463670.770	3769232.201	323.83
LOCATION L0003709	VOLUME	463652.770	3769232.181	324.00
LOCATION L0003710	VOLUME	463634.770	3769232.162	324.00
LOCATION L0003711	VOLUME	463616.770	3769232.143	324.00
LOCATION L0003712	VOLUME	463598.770	3769232.124	324.02
LOCATION L0003713	VOLUME	463580.770	3769232.105	324.33
LOCATION L0003714	VOLUME	463562.770	3769232.086	324.63
LOCATION L0003715	VOLUME	463544.770	3769232.067	324.92
LOCATION L0003716	VOLUME	463526.770	3769232.048	325.00
LOCATION L0003717	VOLUME	463508.770	3769232.029	325.00
LOCATION L0003718	VOLUME	463490.770	3769232.010	325.00
LOCATION L0003719	VOLUME	463472.770	3769231.991	325.00

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LOCATION	L0003720	VOLUME	463454.770	3769231.972 325.00
LOCATION	L0003721	VOLUME	463436.770	3769231.953 325.22
LOCATION	L0003722	VOLUME	463419.625	3769232.820 325.55
LOCATION	L0003723	VOLUME	463419.015	3769250.809 326.00
LOCATION	L0003724	VOLUME	463418.405	3769268.799 326.00
LOCATION	L0003725	VOLUME	463417.795	3769286.789 326.33
LOCATION	L0003726	VOLUME	463417.185	3769304.778 326.87
LOCATION	L0003727	VOLUME	463416.964	3769322.772 326.96
LOCATION	L0003728	VOLUME	463417.200	3769340.770 327.00
LOCATION	L0003729	VOLUME	463417.437	3769358.769 327.00
LOCATION	L0003730	VOLUME	463417.674	3769376.767 327.35
LOCATION	L0003731	VOLUME	463417.911	3769394.766 327.95
LOCATION	L0003732	VOLUME	463418.148	3769412.764 328.00
LOCATION	L0003733	VOLUME	463418.385	3769430.763 328.15
LOCATION	L0003734	VOLUME	463419.230	3769448.740 328.75
LOCATION	L0003735	VOLUME	463420.228	3769466.712 329.00
LOCATION	L0003736	VOLUME	463422.437	3769484.547 329.00
LOCATION	L0003737	VOLUME	463425.495	3769502.286 329.53
LOCATION	L0003738	VOLUME	463429.539	3769519.799 330.23
LOCATION	L0003739	VOLUME	463434.475	3769537.109 331.38
LOCATION	L0003740	VOLUME	463439.411	3769554.419 332.72
LOCATION	L0003741	VOLUME	463444.347	3769571.729 334.39
LOCATION	L0003742	VOLUME	463448.060	3769589.286 334.97
LOCATION	L0003743	VOLUME	463450.217	3769607.156 335.00
LOCATION	L0003744	VOLUME	463452.169	3769625.038 335.00
LOCATION	L0003745	VOLUME	463452.094	3769643.038 335.00
LOCATION	L0003746	VOLUME	463452.019	3769661.038 335.00
LOCATION	L0003747	VOLUME	463451.943	3769679.038 335.00
LOCATION	L0003748	VOLUME	463451.868	3769697.037 335.07
LOCATION	L0003749	VOLUME	463451.793	3769715.037 336.91
LOCATION	L0003750	VOLUME	463451.718	3769733.037 338.95
LOCATION	L0003751	VOLUME	463451.642	3769751.037 341.30
LOCATION	L0003752	VOLUME	463451.567	3769769.037 341.47
LOCATION	L0003753	VOLUME	463451.492	3769787.037 340.69
LOCATION	L0003754	VOLUME	463451.679	3769805.034 338.99
LOCATION	L0003755	VOLUME	463452.149	3769823.027 337.27
LOCATION	L0003756	VOLUME	463452.618	3769841.021 335.51
LOCATION	L0003757	VOLUME	463453.088	3769859.015 335.00
LOCATION	L0003758	VOLUME	463453.557	3769877.009 335.00

** End of LINE VOLUME Source ID = SLINE5

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE6

** DESCRSRC 30% Driveway 2 to Riverside/I-10

** PREFIX

** Length of Side = 18.00

** Configuration = Adjacent

** Emission Rate = 9.783E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 7

** 464553.243, 3769231.330, 317.60, 0.00, 8.37

** 464628.857, 3769231.492, 317.07, 0.00, 8.37

** 464754.114, 3769232.176, 316.40, 0.00, 8.37

** 465011.433, 3769227.174, 317.00, 0.00, 8.37

** 465699.193, 3769227.452, 309.94, 0.00, 8.37

** 465831.587, 3769225.496, 309.37, 0.00, 8.37

** 465831.587, 3769902.506, 323.00, 0.00, 8.37

LOCATION	L0003542	VOLUME	464562.243	3769231.349 317.50
LOCATION	L0003543	VOLUME	464580.243	3769231.388 317.50
LOCATION	L0003544	VOLUME	464598.243	3769231.426 317.36
LOCATION	L0003545	VOLUME	464616.243	3769231.465 317.06
LOCATION	L0003546	VOLUME	464634.242	3769231.522 317.00
LOCATION	L0003547	VOLUME	464652.242	3769231.620 316.96
LOCATION	L0003548	VOLUME	464670.242	3769231.718 316.67
LOCATION	L0003549	VOLUME	464688.242	3769231.816 316.52

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LOCATION L0003550	VOLUME	464706.241	3769231.914	316.52
LOCATION L0003551	VOLUME	464724.241	3769232.013	316.52
LOCATION L0003552	VOLUME	464742.241	3769232.111	316.48
LOCATION L0003553	VOLUME	464760.240	3769232.057	316.16
LOCATION L0003554	VOLUME	464778.236	3769231.707	316.00
LOCATION L0003555	VOLUME	464796.233	3769231.357	316.00
LOCATION L0003556	VOLUME	464814.229	3769231.007	316.00
LOCATION L0003557	VOLUME	464832.226	3769230.657	316.00
LOCATION L0003558	VOLUME	464850.223	3769230.307	316.00
LOCATION L0003559	VOLUME	464868.219	3769229.958	316.00
LOCATION L0003560	VOLUME	464886.216	3769229.608	316.00
LOCATION L0003561	VOLUME	464904.212	3769229.258	316.21
LOCATION L0003562	VOLUME	464922.209	3769228.908	316.47
LOCATION L0003563	VOLUME	464940.206	3769228.558	316.81
LOCATION L0003564	VOLUME	464958.202	3769228.208	317.00
LOCATION L0003565	VOLUME	464976.199	3769227.859	317.00
LOCATION L0003566	VOLUME	464994.195	3769227.509	317.00
LOCATION L0003567	VOLUME	465012.192	3769227.174	317.03
LOCATION L0003568	VOLUME	465030.192	3769227.181	317.25
LOCATION L0003569	VOLUME	465048.192	3769227.189	317.36
LOCATION L0003570	VOLUME	465066.192	3769227.196	317.36
LOCATION L0003571	VOLUME	465084.192	3769227.203	317.19
LOCATION L0003572	VOLUME	465102.192	3769227.210	317.00
LOCATION L0003573	VOLUME	465120.192	3769227.218	317.00
LOCATION L0003574	VOLUME	465138.192	3769227.225	316.82
LOCATION L0003575	VOLUME	465156.192	3769227.232	316.44
LOCATION L0003576	VOLUME	465174.192	3769227.239	316.36
LOCATION L0003577	VOLUME	465192.192	3769227.247	316.33
LOCATION L0003578	VOLUME	465210.192	3769227.254	316.11
LOCATION L0003579	VOLUME	465228.192	3769227.261	316.00
LOCATION L0003580	VOLUME	465246.192	3769227.269	316.00
LOCATION L0003581	VOLUME	465264.192	3769227.276	315.69
LOCATION L0003582	VOLUME	465282.192	3769227.283	315.33
LOCATION L0003583	VOLUME	465300.192	3769227.290	315.12
LOCATION L0003584	VOLUME	465318.192	3769227.298	315.00
LOCATION L0003585	VOLUME	465336.192	3769227.305	315.00
LOCATION L0003586	VOLUME	465354.192	3769227.312	314.69
LOCATION L0003587	VOLUME	465372.192	3769227.319	314.42
LOCATION L0003588	VOLUME	465390.192	3769227.327	314.80
LOCATION L0003589	VOLUME	465408.192	3769227.334	314.82
LOCATION L0003590	VOLUME	465426.192	3769227.341	314.43
LOCATION L0003591	VOLUME	465444.192	3769227.349	314.19
LOCATION L0003592	VOLUME	465462.192	3769227.356	313.91
LOCATION L0003593	VOLUME	465480.192	3769227.363	313.31
LOCATION L0003594	VOLUME	465498.192	3769227.370	312.71
LOCATION L0003595	VOLUME	465516.192	3769227.378	312.11
LOCATION L0003596	VOLUME	465534.192	3769227.385	311.69
LOCATION L0003597	VOLUME	465552.192	3769227.392	311.33
LOCATION L0003598	VOLUME	465570.192	3769227.399	311.11
LOCATION L0003599	VOLUME	465588.192	3769227.407	310.82
LOCATION L0003600	VOLUME	465606.192	3769227.414	310.44
LOCATION L0003601	VOLUME	465624.192	3769227.421	310.19
LOCATION L0003602	VOLUME	465642.192	3769227.429	310.00
LOCATION L0003603	VOLUME	465660.192	3769227.436	310.00
LOCATION L0003604	VOLUME	465678.192	3769227.443	310.00
LOCATION L0003605	VOLUME	465696.192	3769227.450	310.00
LOCATION L0003606	VOLUME	465714.190	3769227.230	310.35
LOCATION L0003607	VOLUME	465732.188	3769226.964	310.67
LOCATION L0003608	VOLUME	465750.186	3769226.698	310.45
LOCATION L0003609	VOLUME	465768.184	3769226.432	310.33
LOCATION L0003610	VOLUME	465786.183	3769226.166	310.32
LOCATION L0003611	VOLUME	465804.181	3769225.901	309.83
LOCATION L0003612	VOLUME	465822.179	3769225.635	309.37
LOCATION L0003613	VOLUME	465831.587	3769234.086	309.75
LOCATION L0003614	VOLUME	465831.587	3769252.086	310.00
LOCATION L0003615	VOLUME	465831.587	3769270.086	310.00
LOCATION L0003616	VOLUME	465831.587	3769288.086	310.00

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LOCATION	L0003617	VOLUME	465831.587	3769306.086	310.00
LOCATION	L0003618	VOLUME	465831.587	3769324.086	310.35
LOCATION	L0003619	VOLUME	465831.587	3769342.086	310.67
LOCATION	L0003620	VOLUME	465831.587	3769360.086	310.91
LOCATION	L0003621	VOLUME	465831.587	3769378.086	311.23
LOCATION	L0003622	VOLUME	465831.587	3769396.086	311.59
LOCATION	L0003623	VOLUME	465831.587	3769414.086	311.83
LOCATION	L0003624	VOLUME	465831.587	3769432.086	312.19
LOCATION	L0003625	VOLUME	465831.587	3769450.086	312.79
LOCATION	L0003626	VOLUME	465831.587	3769468.086	313.77
LOCATION	L0003627	VOLUME	465831.587	3769486.086	314.97
LOCATION	L0003628	VOLUME	465831.587	3769504.086	316.17
LOCATION	L0003629	VOLUME	465831.587	3769522.086	317.00
LOCATION	L0003630	VOLUME	465831.587	3769540.086	317.00
LOCATION	L0003631	VOLUME	465831.587	3769558.086	317.15
LOCATION	L0003632	VOLUME	465831.587	3769576.086	317.40
LOCATION	L0003633	VOLUME	465831.587	3769594.086	320.69
LOCATION	L0003634	VOLUME	465831.587	3769612.086	323.11
LOCATION	L0003635	VOLUME	465831.587	3769630.086	323.47
LOCATION	L0003636	VOLUME	465831.587	3769648.086	323.60
LOCATION	L0003637	VOLUME	465831.587	3769666.086	323.60
LOCATION	L0003638	VOLUME	465831.587	3769684.086	323.83
LOCATION	L0003639	VOLUME	465831.587	3769702.086	325.01
LOCATION	L0003640	VOLUME	465831.587	3769720.086	328.25
LOCATION	L0003641	VOLUME	465831.587	3769738.086	329.25
LOCATION	L0003642	VOLUME	465831.587	3769756.086	329.01
LOCATION	L0003643	VOLUME	465831.587	3769774.086	327.94
LOCATION	L0003644	VOLUME	465831.587	3769792.086	327.95
LOCATION	L0003645	VOLUME	465831.587	3769810.086	330.35
LOCATION	L0003646	VOLUME	465831.587	3769828.086	328.03
LOCATION	L0003647	VOLUME	465831.587	3769846.086	323.11
LOCATION	L0003648	VOLUME	465831.587	3769864.086	323.00
LOCATION	L0003649	VOLUME	465831.587	3769882.086	323.00
LOCATION	L0003650	VOLUME	465831.587	3769900.086	323.00

** End of LINE VOLUME Source ID = SLINE6

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE7

** DESCRSRC 10% Driveway 3 to Riverside/I-10

** PREFIX

** Length of Side = 18.00

** Configuration = Adjacent

** Emission Rate = 3.277E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 8

** 464626.158, 3769149.586, 316.00, 3.49, 8.37

** 464625.587, 3769231.492, 317.07, 3.49, 8.37

** 464630.161, 3769231.499, 317.07, 3.49, 8.37

** 464754.114, 3769232.176, 316.40, 3.49, 8.37

** 465011.433, 3769227.174, 317.00, 3.49, 8.37

** 465699.193, 3769227.452, 309.94, 3.49, 8.37

** 465831.587, 3769225.496, 309.37, 3.49, 8.37

** 465831.587, 3769902.506, 323.00, 3.49, 8.37

**

LOCATION	L0003433	VOLUME	464626.096	3769158.585	316.06
LOCATION	L0003434	VOLUME	464625.970	3769176.585	316.53
LOCATION	L0003435	VOLUME	464625.845	3769194.585	316.85
LOCATION	L0003436	VOLUME	464625.719	3769212.584	316.97
LOCATION	L0003437	VOLUME	464625.594	3769230.584	317.00
LOCATION	L0003438	VOLUME	464642.678	3769231.568	317.00
LOCATION	L0003439	VOLUME	464660.678	3769231.666	316.82
LOCATION	L0003440	VOLUME	464678.678	3769231.764	316.53
LOCATION	L0003441	VOLUME	464696.678	3769231.862	316.52
LOCATION	L0003442	VOLUME	464714.677	3769231.960	316.52
LOCATION	L0003443	VOLUME	464732.677	3769232.059	316.52
LOCATION	L0003444	VOLUME	464750.677	3769232.157	316.33

			11182 HRA	
LOCATION L0003445	VOLUME	464768.674	3769231.893	316.02
LOCATION L0003446	VOLUME	464786.671	3769231.543	316.00
LOCATION L0003447	VOLUME	464804.667	3769231.193	316.00
LOCATION L0003448	VOLUME	464822.664	3769230.843	316.00
LOCATION L0003449	VOLUME	464840.660	3769230.493	316.00
LOCATION L0003450	VOLUME	464858.657	3769230.143	316.00
LOCATION L0003451	VOLUME	464876.654	3769229.794	316.00
LOCATION L0003452	VOLUME	464894.650	3769229.444	316.07
LOCATION L0003453	VOLUME	464912.647	3769229.094	316.33
LOCATION L0003454	VOLUME	464930.643	3769228.744	316.63
LOCATION L0003455	VOLUME	464948.640	3769228.394	316.98
LOCATION L0003456	VOLUME	464966.637	3769228.044	317.00
LOCATION L0003457	VOLUME	464984.633	3769227.695	317.00
LOCATION L0003458	VOLUME	465002.630	3769227.345	317.00
LOCATION L0003459	VOLUME	465020.628	3769227.177	317.13
LOCATION L0003460	VOLUME	465038.628	3769227.185	317.35
LOCATION L0003461	VOLUME	465056.628	3769227.192	317.36
LOCATION L0003462	VOLUME	465074.628	3769227.199	317.30
LOCATION L0003463	VOLUME	465092.628	3769227.206	317.08
LOCATION L0003464	VOLUME	465110.628	3769227.214	317.00
LOCATION L0003465	VOLUME	465128.628	3769227.221	317.00
LOCATION L0003466	VOLUME	465146.628	3769227.228	316.64
LOCATION L0003467	VOLUME	465164.628	3769227.236	316.36
LOCATION L0003468	VOLUME	465182.628	3769227.243	316.36
LOCATION L0003469	VOLUME	465200.628	3769227.250	316.23
LOCATION L0003470	VOLUME	465218.628	3769227.257	316.01
LOCATION L0003471	VOLUME	465236.628	3769227.265	316.00
LOCATION L0003472	VOLUME	465254.628	3769227.272	315.89
LOCATION L0003473	VOLUME	465272.628	3769227.279	315.51
LOCATION L0003474	VOLUME	465290.628	3769227.286	315.23
LOCATION L0003475	VOLUME	465308.628	3769227.294	315.01
LOCATION L0003476	VOLUME	465326.628	3769227.301	315.00
LOCATION L0003477	VOLUME	465344.628	3769227.308	314.89
LOCATION L0003478	VOLUME	465362.628	3769227.316	314.51
LOCATION L0003479	VOLUME	465380.628	3769227.323	314.60
LOCATION L0003480	VOLUME	465398.628	3769227.330	314.98
LOCATION L0003481	VOLUME	465416.628	3769227.337	314.64
LOCATION L0003482	VOLUME	465434.628	3769227.345	314.30
LOCATION L0003483	VOLUME	465452.628	3769227.352	314.08
LOCATION L0003484	VOLUME	465470.628	3769227.359	313.63
LOCATION L0003485	VOLUME	465488.628	3769227.366	313.03
LOCATION L0003486	VOLUME	465506.628	3769227.374	312.43
LOCATION L0003487	VOLUME	465524.628	3769227.381	311.89
LOCATION L0003488	VOLUME	465542.628	3769227.388	311.51
LOCATION L0003489	VOLUME	465560.628	3769227.396	311.23
LOCATION L0003490	VOLUME	465578.628	3769227.403	311.01
LOCATION L0003491	VOLUME	465596.628	3769227.410	310.64
LOCATION L0003492	VOLUME	465614.628	3769227.417	310.30
LOCATION L0003493	VOLUME	465632.628	3769227.425	310.08
LOCATION L0003494	VOLUME	465650.628	3769227.432	310.00
LOCATION L0003495	VOLUME	465668.628	3769227.439	310.00
LOCATION L0003496	VOLUME	465686.628	3769227.446	310.00
LOCATION L0003497	VOLUME	465704.628	3769227.471	310.12
LOCATION L0003498	VOLUME	465722.626	3769227.105	310.54
LOCATION L0003499	VOLUME	465740.624	3769226.839	310.56
LOCATION L0003500	VOLUME	465758.622	3769226.574	310.35
LOCATION L0003501	VOLUME	465776.620	3769226.308	310.33
LOCATION L0003502	VOLUME	465794.618	3769226.042	310.15
LOCATION L0003503	VOLUME	465812.616	3769225.776	309.54
LOCATION L0003504	VOLUME	465830.614	3769225.510	309.56
LOCATION L0003505	VOLUME	465831.587	3769242.523	309.92
LOCATION L0003506	VOLUME	465831.587	3769260.523	310.00
LOCATION L0003507	VOLUME	465831.587	3769278.523	310.00
LOCATION L0003508	VOLUME	465831.587	3769296.523	310.00
LOCATION L0003509	VOLUME	465831.587	3769314.523	310.16
LOCATION L0003510	VOLUME	465831.587	3769332.523	310.52
LOCATION L0003511	VOLUME	465831.587	3769350.523	310.79

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LOCATION	L0003512	VOLUME	465831.587	3769368.523	311.04
LOCATION	L0003513	VOLUME	465831.587	3769386.523	311.40
LOCATION	L0003514	VOLUME	465831.587	3769404.523	311.71
LOCATION	L0003515	VOLUME	465831.587	3769422.523	311.95
LOCATION	L0003516	VOLUME	465831.587	3769440.523	312.47
LOCATION	L0003517	VOLUME	465831.587	3769458.523	313.14
LOCATION	L0003518	VOLUME	465831.587	3769476.523	314.34
LOCATION	L0003519	VOLUME	465831.587	3769494.523	315.54
LOCATION	L0003520	VOLUME	465831.587	3769512.523	316.74
LOCATION	L0003521	VOLUME	465831.587	3769530.523	317.00
LOCATION	L0003522	VOLUME	465831.587	3769548.523	317.03
LOCATION	L0003523	VOLUME	465831.587	3769566.523	317.27
LOCATION	L0003524	VOLUME	465831.587	3769584.523	318.90
LOCATION	L0003525	VOLUME	465831.587	3769602.523	322.26
LOCATION	L0003526	VOLUME	465831.587	3769620.523	323.28
LOCATION	L0003527	VOLUME	465831.587	3769638.523	323.60
LOCATION	L0003528	VOLUME	465831.587	3769656.523	323.60
LOCATION	L0003529	VOLUME	465831.587	3769674.523	323.71
LOCATION	L0003530	VOLUME	465831.587	3769692.523	323.95
LOCATION	L0003531	VOLUME	465831.587	3769710.523	326.53
LOCATION	L0003532	VOLUME	465831.587	3769728.523	329.37
LOCATION	L0003533	VOLUME	465831.587	3769746.523	329.13
LOCATION	L0003534	VOLUME	465831.587	3769764.523	328.52
LOCATION	L0003535	VOLUME	465831.587	3769782.523	327.44
LOCATION	L0003536	VOLUME	465831.587	3769800.523	329.07
LOCATION	L0003537	VOLUME	465831.587	3769818.523	330.64
LOCATION	L0003538	VOLUME	465831.587	3769836.523	325.72
LOCATION	L0003539	VOLUME	465831.587	3769854.523	323.00
LOCATION	L0003540	VOLUME	465831.587	3769872.523	323.00
LOCATION	L0003541	VOLUME	465831.587	3769890.523	323.00

** End of LINE VOLUME Source ID = SLINE7

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM	L0003993	0.000000627	3.49	4.00	3.25
SRCPARAM	L0003994	0.000000627	3.49	4.00	3.25
SRCPARAM	L0003995	0.000000627	3.49	4.00	3.25
SRCPARAM	L0003996	0.000000627	3.49	4.00	3.25
SRCPARAM	L0003997	0.000000627	3.49	4.00	3.25
SRCPARAM	L0003998	0.000000627	3.49	4.00	3.25
SRCPARAM	L0003999	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004000	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004001	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004002	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004003	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004004	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004005	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004006	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004007	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004008	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004009	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004010	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004011	0.000000627	3.49	4.00	3.25
SRCPARAM	L0004012	0.000000627	3.49	4.00	3.25

**

** LINE VOLUME Source ID = SLINE2

SRCPARAM	L0003946	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003947	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003948	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003949	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003950	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003951	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003952	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003953	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003954	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003955	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003956	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003957	0.0000002532	3.49	4.00	3.25

SRCPARAM	L0003958	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003959	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003960	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003961	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003962	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003963	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003964	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003965	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003966	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003967	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003968	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003969	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003970	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003971	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003972	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003973	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003974	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003975	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003976	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003977	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003978	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003979	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003980	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003981	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003982	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003983	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003984	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003985	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003986	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003987	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003988	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003989	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003990	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003991	0.0000002532	3.49	4.00	3.25
SRCPARAM	L0003992	0.0000002532	3.49	4.00	3.25

** LINE VOLUME Source ID = SLINE3

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[illegible]

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** LINE VOLUME Source ID = SLINE4
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[illegible]

SRCPARAM	L0003833	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003834	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003835	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003836	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003837	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003838	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003839	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003840	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003841	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003842	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003843	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003844	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003845	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003846	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003847	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003848	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003849	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003850	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003851	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003852	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003853	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003854	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003855	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003856	0.00000007523	0.00	8.37	3.25
SRCPARAM	L0003857	0.00000007523	0.00	8.37	3.25

** LINE VOLUME Source ID = SLINE5

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[illegible]

[illegible]

[illegible]

** LINE VOLUME Source ID = SLINE7

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[illegible]

			11182 HRA	
SRCPARAM L0003520	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003521	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003522	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003523	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003524	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003525	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003526	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003527	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003528	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003529	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003530	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003531	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003532	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003533	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003534	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003535	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003536	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003537	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003538	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003539	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003540	0.00000003006	3.49	8.37	3.25
SRCPARAM L0003541	0.00000003006	3.49	8.37	3.25

** -----

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "11182 HRA.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE FONT_V9_ADJU\FONT_v9.SFC

PROFFILE FONT_V9_ADJU\FONT_v9.PFL

SURFDATA 3102 2011

UAIRDATA 3190 2011

SITEDATA 99999 2011

PROFBASE 367.0 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

** Auto-Generated Plotfiles

PLOTFILE ANNUAL ALL "11182 HRA.AD\AN00GALL.PLT" 31

SUMMFILE "11182 HRA.sum"

OU FINISHED

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

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

A Total of 0 Fatal Error Message(s)

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

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

***** WARNING MESSAGES *****
ME W186 1389 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 1389 MEOPEN: ADJ_U* Option for Low Winds used in AERMET

*** SETUP Finishes Successfully ***

♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
05/10/18
*** AERMET - VERSION 16216 *** ***
23:54:25

PAGE 1
*** 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 580 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2035210.0 ; 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* BETA option for SBL in AERMET
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: DPM

**Model Calculates ANNUAL Averages Only

**This Run Includes: 580 Source(s); 1 Source Group(s); and 42 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 580 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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**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 Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 367.00 ; 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.

**Detailed Error/Message File: 11182 HRA.err

**File for Summary of Results: 11182 HRA.sum

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003993	0	0.62700E-06	464385.9	3769153.6	317.9	3.49	4.00	3.25	YES	
L0003994	0	0.62700E-06	464394.5	3769153.6	317.9	3.49	4.00	3.25	YES	
L0003995	0	0.62700E-06	464403.1	3769153.7	317.9	3.49	4.00	3.25	YES	
L0003996	0	0.62700E-06	464411.7	3769153.7	317.9	3.49	4.00	3.25	YES	
L0003997	0	0.62700E-06	464420.3	3769153.8	317.6	3.49	4.00	3.25	YES	
L0003998	0	0.62700E-06	464428.8	3769153.8	317.3	3.49	4.00	3.25	YES	
L0003999	0	0.62700E-06	464437.4	3769153.9	317.1	3.49	4.00	3.25	YES	
L0004000	0	0.62700E-06	464446.0	3769153.9	317.0	3.49	4.00	3.25	YES	
L0004001	0	0.62700E-06	464454.6	3769154.0	317.0	3.49	4.00	3.25	YES	
L0004002	0	0.62700E-06	464463.2	3769154.0	317.0	3.49	4.00	3.25	YES	
L0004003	0	0.62700E-06	464471.8	3769154.0	317.0	3.49	4.00	3.25	YES	
L0004004	0	0.62700E-06	464480.4	3769154.1	317.0	3.49	4.00	3.25	YES	
L0004005	0	0.62700E-06	464489.0	3769154.1	317.0	3.49	4.00	3.25	YES	
L0004006	0	0.62700E-06	464497.6	3769154.2	317.0	3.49	4.00	3.25	YES	
L0004007	0	0.62700E-06	464506.2	3769154.2	317.0	3.49	4.00	3.25	YES	
L0004008	0	0.62700E-06	464514.7	3769154.3	317.0	3.49	4.00	3.25	YES	
L0004009	0	0.62700E-06	464523.3	3769154.3	316.9	3.49	4.00	3.25	YES	
L0004010	0	0.62700E-06	464531.9	3769154.4	316.9	3.49	4.00	3.25	YES	
L0004011	0	0.62700E-06	464540.5	3769154.4	316.9	3.49	4.00	3.25	YES	
L0004012	0	0.62700E-06	464549.1	3769154.5	316.9	3.49	4.00	3.25	YES	
L0003946	0	0.25320E-06	464343.2	3769211.1	318.8	3.49	4.00	3.25	YES	
L0003947	0	0.25320E-06	464343.2	3769202.6	318.5	3.49	4.00	3.25	YES	
L0003948	0	0.25320E-06	464343.3	3769194.0	318.2	3.49	4.00	3.25	YES	

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L0003949	0	0.25320E-06	464343.3	3769185.4	318.0	3.49	4.00	3.25	YES
L0003950	0	0.25320E-06	464343.4	3769176.8	318.0	3.49	4.00	3.25	YES
L0003951	0	0.25320E-06	464347.5	3769172.3	318.0	3.49	4.00	3.25	YES
L0003952	0	0.25320E-06	464356.0	3769172.3	318.0	3.49	4.00	3.25	YES
L0003953	0	0.25320E-06	464364.6	3769172.3	318.0	3.49	4.00	3.25	YES
L0003954	0	0.25320E-06	464373.2	3769172.3	318.0	3.49	4.00	3.25	YES
L0003955	0	0.25320E-06	464381.8	3769172.3	318.0	3.49	4.00	3.25	YES
L0003956	0	0.25320E-06	464390.4	3769172.3	318.0	3.49	4.00	3.25	YES
L0003957	0	0.25320E-06	464399.0	3769172.3	318.0	3.49	4.00	3.25	YES
L0003958	0	0.25320E-06	464407.6	3769172.3	318.0	3.49	4.00	3.25	YES
L0003959	0	0.25320E-06	464416.2	3769172.3	317.9	3.49	4.00	3.25	YES
L0003960	0	0.25320E-06	464424.8	3769172.3	317.8	3.49	4.00	3.25	YES
L0003961	0	0.25320E-06	464433.3	3769172.3	317.6	3.49	4.00	3.25	YES
L0003962	0	0.25320E-06	464441.9	3769172.3	317.5	3.49	4.00	3.25	YES
L0003963	0	0.25320E-06	464450.5	3769172.3	317.5	3.49	4.00	3.25	YES
L0003964	0	0.25320E-06	464459.1	3769172.3	317.5	3.49	4.00	3.25	YES
L0003965	0	0.25320E-06	464467.7	3769172.3	317.5	3.49	4.00	3.25	YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003966	0	0.25320E-06	464476.3	3769172.3	317.4	3.49	4.00	3.25	YES	
L0003967	0	0.25320E-06	464484.9	3769172.3	317.3	3.49	4.00	3.25	YES	
L0003968	0	0.25320E-06	464493.5	3769172.3	317.1	3.49	4.00	3.25	YES	
L0003969	0	0.25320E-06	464502.1	3769172.3	317.0	3.49	4.00	3.25	YES	
L0003970	0	0.25320E-06	464510.7	3769172.3	317.0	3.49	4.00	3.25	YES	
L0003971	0	0.25320E-06	464519.2	3769172.3	317.0	3.49	4.00	3.25	YES	
L0003972	0	0.25320E-06	464527.8	3769172.3	317.0	3.49	4.00	3.25	YES	
L0003973	0	0.25320E-06	464536.4	3769172.3	317.0	3.49	4.00	3.25	YES	
L0003974	0	0.25320E-06	464545.0	3769172.3	317.0	3.49	4.00	3.25	YES	
L0003975	0	0.25320E-06	464553.6	3769172.3	317.0	3.49	4.00	3.25	YES	
L0003976	0	0.25320E-06	464558.6	3769173.8	317.0	3.49	4.00	3.25	YES	
L0003977	0	0.25320E-06	464553.1	3769180.1	317.0	3.49	4.00	3.25	YES	
L0003978	0	0.25320E-06	464552.8	3769188.7	317.0	3.49	4.00	3.25	YES	
L0003979	0	0.25320E-06	464552.4	3769197.3	317.1	3.49	4.00	3.25	YES	
L0003980	0	0.25320E-06	464552.1	3769205.9	317.2	3.49	4.00	3.25	YES	
L0003981	0	0.25320E-06	464552.6	3769210.4	317.2	3.49	4.00	3.25	YES	
L0003982	0	0.25320E-06	464555.7	3769202.4	317.1	3.49	4.00	3.25	YES	
L0003983	0	0.25320E-06	464558.9	3769194.4	317.0	3.49	4.00	3.25	YES	
L0003984	0	0.25320E-06	464562.0	3769186.4	317.0	3.49	4.00	3.25	YES	
L0003985	0	0.25320E-06	464565.1	3769178.4	316.9	3.49	4.00	3.25	YES	
L0003986	0	0.25320E-06	464568.2	3769170.4	316.9	3.49	4.00	3.25	YES	
L0003987	0	0.25320E-06	464574.1	3769164.7	316.7	3.49	4.00	3.25	YES	
L0003988	0	0.25320E-06	464581.4	3769160.1	316.4	3.49	4.00	3.25	YES	
L0003989	0	0.25320E-06	464588.7	3769155.6	316.0	3.49	4.00	3.25	YES	
L0003990	0	0.25320E-06	464596.6	3769153.0	316.0	3.49	4.00	3.25	YES	
L0003991	0	0.25320E-06	464605.1	3769152.4	316.0	3.49	4.00	3.25	YES	
L0003992	0	0.25320E-06	464613.7	3769151.9	316.0	3.49	4.00	3.25	YES	
L0003858	0	0.89640E-07	464335.9	3769231.5	319.0	3.49	8.37	3.25	YES	
L0003859	0	0.89640E-07	464317.9	3769231.6	319.0	3.49	8.37	3.25	YES	
L0003860	0	0.89640E-07	464299.9	3769231.7	319.0	3.49	8.37	3.25	YES	
L0003861	0	0.89640E-07	464281.9	3769231.8	319.0	3.49	8.37	3.25	YES	
L0003862	0	0.89640E-07	464263.9	3769231.9	319.0	3.49	8.37	3.25	YES	
L0003863	0	0.89640E-07	464245.9	3769231.9	319.2	3.49	8.37	3.25	YES	

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L0003864	0	0.89640E-07	464228.0	3769232.0	319.5	3.49	8.37	3.25	YES
L0003865	0	0.89640E-07	464210.0	3769232.1	319.5	3.49	8.37	3.25	YES
L0003866	0	0.89640E-07	464192.0	3769232.2	319.5	3.49	8.37	3.25	YES
L0003867	0	0.89640E-07	464174.0	3769232.3	319.5	3.49	8.37	3.25	YES
L0003868	0	0.89640E-07	464156.0	3769232.3	319.8	3.49	8.37	3.25	YES
L0003869	0	0.89640E-07	464138.0	3769232.4	320.0	3.49	8.37	3.25	YES
L0003870	0	0.89640E-07	464120.0	3769232.5	320.0	3.49	8.37	3.25	YES

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003871	0	0.89640E-07	464102.0	3769232.6	320.0	3.49	8.37	3.25	YES	
L0003872	0	0.89640E-07	464084.0	3769232.6	320.0	3.49	8.37	3.25	YES	
L0003873	0	0.89640E-07	464066.0	3769232.6	320.2	3.49	8.37	3.25	YES	
L0003874	0	0.89640E-07	464048.0	3769232.6	320.5	3.49	8.37	3.25	YES	
L0003875	0	0.89640E-07	464030.0	3769232.6	320.5	3.49	8.37	3.25	YES	
L0003876	0	0.89640E-07	464012.0	3769232.6	320.7	3.49	8.37	3.25	YES	
L0003877	0	0.89640E-07	463994.0	3769232.5	320.9	3.49	8.37	3.25	YES	
L0003878	0	0.89640E-07	463976.0	3769232.5	321.0	3.49	8.37	3.25	YES	
L0003879	0	0.89640E-07	463958.0	3769232.5	321.0	3.49	8.37	3.25	YES	
L0003880	0	0.89640E-07	463940.0	3769232.5	321.0	3.49	8.37	3.25	YES	
L0003881	0	0.89640E-07	463922.0	3769232.5	321.0	3.49	8.37	3.25	YES	
L0003882	0	0.89640E-07	463904.0	3769232.4	321.0	3.49	8.37	3.25	YES	
L0003883	0	0.89640E-07	463886.0	3769232.4	321.2	3.49	8.37	3.25	YES	
L0003884	0	0.89640E-07	463868.0	3769232.4	321.6	3.49	8.37	3.25	YES	
L0003885	0	0.89640E-07	463850.0	3769232.4	321.8	3.49	8.37	3.25	YES	
L0003886	0	0.89640E-07	463832.0	3769232.4	322.0	3.49	8.37	3.25	YES	
L0003887	0	0.89640E-07	463814.0	3769232.4	322.0	3.49	8.37	3.25	YES	
L0003888	0	0.89640E-07	463796.0	3769232.3	322.5	3.49	8.37	3.25	YES	
L0003889	0	0.89640E-07	463778.0	3769232.3	323.0	3.49	8.37	3.25	YES	
L0003890	0	0.89640E-07	463760.0	3769232.3	323.0	3.49	8.37	3.25	YES	
L0003891	0	0.89640E-07	463742.0	3769232.3	323.1	3.49	8.37	3.25	YES	
L0003892	0	0.89640E-07	463724.0	3769232.3	323.4	3.49	8.37	3.25	YES	
L0003893	0	0.89640E-07	463706.0	3769232.2	323.5	3.49	8.37	3.25	YES	
L0003894	0	0.89640E-07	463688.0	3769232.2	323.6	3.49	8.37	3.25	YES	
L0003895	0	0.89640E-07	463670.0	3769232.2	323.8	3.49	8.37	3.25	YES	
L0003896	0	0.89640E-07	463652.0	3769232.2	324.0	3.49	8.37	3.25	YES	
L0003897	0	0.89640E-07	463634.0	3769232.2	324.0	3.49	8.37	3.25	YES	
L0003898	0	0.89640E-07	463616.0	3769232.1	324.0	3.49	8.37	3.25	YES	
L0003899	0	0.89640E-07	463598.0	3769232.1	324.0	3.49	8.37	3.25	YES	
L0003900	0	0.89640E-07	463580.0	3769232.1	324.3	3.49	8.37	3.25	YES	
L0003901	0	0.89640E-07	463562.0	3769232.1	324.7	3.49	8.37	3.25	YES	
L0003902	0	0.89640E-07	463544.0	3769232.1	324.9	3.49	8.37	3.25	YES	
L0003903	0	0.89640E-07	463526.0	3769232.0	325.0	3.49	8.37	3.25	YES	
L0003904	0	0.89640E-07	463508.0	3769232.0	325.0	3.49	8.37	3.25	YES	
L0003905	0	0.89640E-07	463490.0	3769232.0	325.0	3.49	8.37	3.25	YES	
L0003906	0	0.89640E-07	463472.0	3769232.0	325.0	3.49	8.37	3.25	YES	
L0003907	0	0.89640E-07	463454.0	3769232.0	325.0	3.49	8.37	3.25	YES	
L0003908	0	0.89640E-07	463436.0	3769232.0	325.2	3.49	8.37	3.25	YES	
L0003909	0	0.89640E-07	463419.0	3769233.6	325.6	3.49	8.37	3.25	YES	
L0003910	0	0.89640E-07	463419.0	3769251.6	326.0	3.49	8.37	3.25	YES	

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003911	0	0.89640E-07	463418.4	3769269.6	326.0	3.49	8.37	3.25	YES	
L0003912	0	0.89640E-07	463417.8	3769287.6	326.4	3.49	8.37	3.25	YES	
L0003913	0	0.89640E-07	463417.2	3769305.6	326.9	3.49	8.37	3.25	YES	
L0003914	0	0.89640E-07	463417.0	3769323.6	327.0	3.49	8.37	3.25	YES	
L0003915	0	0.89640E-07	463417.2	3769341.6	327.0	3.49	8.37	3.25	YES	
L0003916	0	0.89640E-07	463417.4	3769359.6	327.0	3.49	8.37	3.25	YES	
L0003917	0	0.89640E-07	463417.7	3769377.6	327.4	3.49	8.37	3.25	YES	
L0003918	0	0.89640E-07	463417.9	3769395.6	328.0	3.49	8.37	3.25	YES	
L0003919	0	0.89640E-07	463418.2	3769413.6	328.0	3.49	8.37	3.25	YES	
L0003920	0	0.89640E-07	463418.4	3769431.6	328.2	3.49	8.37	3.25	YES	
L0003921	0	0.89640E-07	463419.3	3769449.6	328.8	3.49	8.37	3.25	YES	
L0003922	0	0.89640E-07	463420.3	3769467.5	329.0	3.49	8.37	3.25	YES	
L0003923	0	0.89640E-07	463422.6	3769485.4	329.0	3.49	8.37	3.25	YES	
L0003924	0	0.89640E-07	463425.6	3769503.1	329.6	3.49	8.37	3.25	YES	
L0003925	0	0.89640E-07	463429.8	3769520.6	330.3	3.49	8.37	3.25	YES	
L0003926	0	0.89640E-07	463434.7	3769537.9	331.4	3.49	8.37	3.25	YES	
L0003927	0	0.89640E-07	463439.6	3769555.2	332.8	3.49	8.37	3.25	YES	
L0003928	0	0.89640E-07	463444.6	3769572.5	334.5	3.49	8.37	3.25	YES	
L0003929	0	0.89640E-07	463448.2	3769590.1	335.0	3.49	8.37	3.25	YES	
L0003930	0	0.89640E-07	463450.3	3769608.0	335.0	3.49	8.37	3.25	YES	
L0003931	0	0.89640E-07	463452.2	3769625.9	335.0	3.49	8.37	3.25	YES	
L0003932	0	0.89640E-07	463452.1	3769643.9	335.0	3.49	8.37	3.25	YES	
L0003933	0	0.89640E-07	463452.0	3769661.9	335.0	3.49	8.37	3.25	YES	
L0003934	0	0.89640E-07	463451.9	3769679.9	335.0	3.49	8.37	3.25	YES	
L0003935	0	0.89640E-07	463451.9	3769697.9	335.2	3.49	8.37	3.25	YES	
L0003936	0	0.89640E-07	463451.8	3769715.9	337.0	3.49	8.37	3.25	YES	
L0003937	0	0.89640E-07	463451.7	3769733.9	339.1	3.49	8.37	3.25	YES	
L0003938	0	0.89640E-07	463451.6	3769751.9	341.4	3.49	8.37	3.25	YES	
L0003939	0	0.89640E-07	463451.6	3769769.9	341.4	3.49	8.37	3.25	YES	
L0003940	0	0.89640E-07	463451.5	3769787.9	340.6	3.49	8.37	3.25	YES	
L0003941	0	0.89640E-07	463451.7	3769805.9	338.9	3.49	8.37	3.25	YES	
L0003942	0	0.89640E-07	463452.2	3769823.8	337.2	3.49	8.37	3.25	YES	
L0003943	0	0.89640E-07	463452.6	3769841.8	335.4	3.49	8.37	3.25	YES	
L0003944	0	0.89640E-07	463453.1	3769859.8	335.0	3.49	8.37	3.25	YES	
L0003945	0	0.89640E-07	463453.6	3769877.8	335.0	3.49	8.37	3.25	YES	
L0003759	0	0.75230E-07	464545.7	3769231.5	317.7	0.00	8.37	3.25	YES	
L0003760	0	0.75230E-07	464527.7	3769231.5	318.0	0.00	8.37	3.25	YES	
L0003761	0	0.75230E-07	464509.7	3769231.5	318.0	0.00	8.37	3.25	YES	
L0003762	0	0.75230E-07	464491.7	3769231.5	318.0	0.00	8.37	3.25	YES	
L0003763	0	0.75230E-07	464473.7	3769231.5	318.0	0.00	8.37	3.25	YES	

♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE	NUMBER PART.	EMISSION RATE (GRAMS/SEC)	X	Y	BASE ELEV.	RELEASE HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY
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11182 HRA									
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	BY

L0003764	0	0.75230E-07	464455.7	3769231.5	318.2	0.00	8.37	3.25	YES
L0003765	0	0.75230E-07	464437.7	3769231.5	318.5	0.00	8.37	3.25	YES
L0003766	0	0.75230E-07	464419.7	3769231.5	318.5	0.00	8.37	3.25	YES
L0003767	0	0.75230E-07	464401.7	3769231.5	318.6	0.00	8.37	3.25	YES
L0003768	0	0.75230E-07	464383.7	3769231.5	318.9	0.00	8.37	3.25	YES
L0003769	0	0.75230E-07	464365.7	3769231.5	319.0	0.00	8.37	3.25	YES
L0003770	0	0.75230E-07	464347.7	3769231.5	319.0	0.00	8.37	3.25	YES
L0003771	0	0.75230E-07	464329.7	3769231.6	319.0	0.00	8.37	3.25	YES
L0003772	0	0.75230E-07	464311.7	3769231.7	319.0	0.00	8.37	3.25	YES
L0003773	0	0.75230E-07	464293.7	3769231.7	319.0	0.00	8.37	3.25	YES
L0003774	0	0.75230E-07	464275.7	3769231.8	319.0	0.00	8.37	3.25	YES
L0003775	0	0.75230E-07	464257.7	3769231.9	319.0	0.00	8.37	3.25	YES
L0003776	0	0.75230E-07	464239.7	3769232.0	319.4	0.00	8.37	3.25	YES
L0003777	0	0.75230E-07	464221.7	3769232.1	319.5	0.00	8.37	3.25	YES
L0003778	0	0.75230E-07	464203.7	3769232.1	319.5	0.00	8.37	3.25	YES
L0003779	0	0.75230E-07	464185.7	3769232.2	319.5	0.00	8.37	3.25	YES
L0003780	0	0.75230E-07	464167.7	3769232.3	319.6	0.00	8.37	3.25	YES
L0003781	0	0.75230E-07	464149.7	3769232.4	319.8	0.00	8.37	3.25	YES
L0003782	0	0.75230E-07	464131.7	3769232.5	320.0	0.00	8.37	3.25	YES
L0003783	0	0.75230E-07	464113.7	3769232.5	320.0	0.00	8.37	3.25	YES
L0003784	0	0.75230E-07	464095.7	3769232.6	320.0	0.00	8.37	3.25	YES
L0003785	0	0.75230E-07	464077.7	3769232.6	320.0	0.00	8.37	3.25	YES
L0003786	0	0.75230E-07	464059.7	3769232.6	320.4	0.00	8.37	3.25	YES
L0003787	0	0.75230E-07	464041.7	3769232.6	320.5	0.00	8.37	3.25	YES
L0003788	0	0.75230E-07	464023.7	3769232.6	320.5	0.00	8.37	3.25	YES
L0003789	0	0.75230E-07	464005.7	3769232.6	320.8	0.00	8.37	3.25	YES
L0003790	0	0.75230E-07	463987.7	3769232.5	321.0	0.00	8.37	3.25	YES
L0003791	0	0.75230E-07	463969.7	3769232.5	321.0	0.00	8.37	3.25	YES
L0003792	0	0.75230E-07	463951.7	3769232.5	321.0	0.00	8.37	3.25	YES
L0003793	0	0.75230E-07	463933.7	3769232.5	321.0	0.00	8.37	3.25	YES
L0003794	0	0.75230E-07	463915.7	3769232.5	321.0	0.00	8.37	3.25	YES
L0003795	0	0.75230E-07	463897.7	3769232.4	321.0	0.00	8.37	3.25	YES
L0003796	0	0.75230E-07	463879.7	3769232.4	321.4	0.00	8.37	3.25	YES
L0003797	0	0.75230E-07	463861.7	3769232.4	321.7	0.00	8.37	3.25	YES
L0003798	0	0.75230E-07	463843.7	3769232.4	321.9	0.00	8.37	3.25	YES
L0003799	0	0.75230E-07	463825.7	3769232.4	322.0	0.00	8.37	3.25	YES
L0003800	0	0.75230E-07	463807.7	3769232.3	322.1	0.00	8.37	3.25	YES
L0003801	0	0.75230E-07	463789.7	3769232.3	322.7	0.00	8.37	3.25	YES
L0003802	0	0.75230E-07	463771.7	3769232.3	323.0	0.00	8.37	3.25	YES
L0003803	0	0.75230E-07	463753.7	3769232.3	323.0	0.00	8.37	3.25	YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

L0003804	0	0.75230E-07	463735.7	3769232.3	323.2	0.00	8.37	3.25	YES	
L0003805	0	0.75230E-07	463717.7	3769232.2	323.5	0.00	8.37	3.25	YES	
L0003806	0	0.75230E-07	463699.7	3769232.2	323.5	0.00	8.37	3.25	YES	
L0003807	0	0.75230E-07	463681.7	3769232.2	323.7	0.00	8.37	3.25	YES	
L0003808	0	0.75230E-07	463663.7	3769232.2	323.9	0.00	8.37	3.25	YES	
L0003809	0	0.75230E-07	463645.7	3769232.2	324.0	0.00	8.37	3.25	YES	

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L0003810	0	0.75230E-07	463627.7	3769232.2	324.0	0.00	8.37	3.25	YES
L0003811	0	0.75230E-07	463609.7	3769232.1	324.0	0.00	8.37	3.25	YES
L0003812	0	0.75230E-07	463591.7	3769232.1	324.1	0.00	8.37	3.25	YES
L0003813	0	0.75230E-07	463573.7	3769232.1	324.4	0.00	8.37	3.25	YES
L0003814	0	0.75230E-07	463555.7	3769232.1	324.7	0.00	8.37	3.25	YES
L0003815	0	0.75230E-07	463537.7	3769232.1	325.0	0.00	8.37	3.25	YES
L0003816	0	0.75230E-07	463519.7	3769232.0	325.0	0.00	8.37	3.25	YES
L0003817	0	0.75230E-07	463501.7	3769232.0	325.0	0.00	8.37	3.25	YES
L0003818	0	0.75230E-07	463483.7	3769232.0	325.0	0.00	8.37	3.25	YES
L0003819	0	0.75230E-07	463465.7	3769232.0	325.0	0.00	8.37	3.25	YES
L0003820	0	0.75230E-07	463447.7	3769232.0	325.0	0.00	8.37	3.25	YES
L0003821	0	0.75230E-07	463429.7	3769231.9	325.4	0.00	8.37	3.25	YES
L0003822	0	0.75230E-07	463419.4	3769239.9	325.8	0.00	8.37	3.25	YES
L0003823	0	0.75230E-07	463418.8	3769257.8	326.0	0.00	8.37	3.25	YES
L0003824	0	0.75230E-07	463418.2	3769275.8	326.0	0.00	8.37	3.25	YES
L0003825	0	0.75230E-07	463417.6	3769293.8	326.5	0.00	8.37	3.25	YES
L0003826	0	0.75230E-07	463416.9	3769311.8	326.9	0.00	8.37	3.25	YES
L0003827	0	0.75230E-07	463417.1	3769329.8	327.0	0.00	8.37	3.25	YES
L0003828	0	0.75230E-07	463417.3	3769347.8	327.0	0.00	8.37	3.25	YES
L0003829	0	0.75230E-07	463417.5	3769365.8	327.0	0.00	8.37	3.25	YES
L0003830	0	0.75230E-07	463417.8	3769383.8	327.6	0.00	8.37	3.25	YES
L0003831	0	0.75230E-07	463418.0	3769401.8	328.0	0.00	8.37	3.25	YES
L0003832	0	0.75230E-07	463418.2	3769419.8	328.0	0.00	8.37	3.25	YES
L0003833	0	0.75230E-07	463418.6	3769437.8	328.4	0.00	8.37	3.25	YES
L0003834	0	0.75230E-07	463419.6	3769455.8	329.0	0.00	8.37	3.25	YES
L0003835	0	0.75230E-07	463420.6	3769473.7	329.0	0.00	8.37	3.25	YES
L0003836	0	0.75230E-07	463423.6	3769491.5	329.2	0.00	8.37	3.25	YES
L0003837	0	0.75230E-07	463426.7	3769509.2	329.8	0.00	8.37	3.25	YES
L0003838	0	0.75230E-07	463431.5	3769526.6	330.7	0.00	8.37	3.25	YES
L0003839	0	0.75230E-07	463436.4	3769543.9	331.8	0.00	8.37	3.25	YES
L0003840	0	0.75230E-07	463441.3	3769561.2	333.4	0.00	8.37	3.25	YES
L0003841	0	0.75230E-07	463446.3	3769578.5	334.9	0.00	8.37	3.25	YES
L0003842	0	0.75230E-07	463448.9	3769596.3	335.0	0.00	8.37	3.25	YES
L0003843	0	0.75230E-07	463451.1	3769614.1	335.0	0.00	8.37	3.25	YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003844	0	0.75230E-07	463452.1	3769632.1	335.0	0.00	8.37	3.25	YES	
L0003845	0	0.75230E-07	463452.1	3769650.1	335.0	0.00	8.37	3.25	YES	
L0003846	0	0.75230E-07	463452.0	3769668.1	335.0	0.00	8.37	3.25	YES	
L0003847	0	0.75230E-07	463451.9	3769686.1	335.0	0.00	8.37	3.25	YES	
L0003848	0	0.75230E-07	463451.8	3769704.1	335.8	0.00	8.37	3.25	YES	
L0003849	0	0.75230E-07	463451.8	3769722.1	337.6	0.00	8.37	3.25	YES	
L0003850	0	0.75230E-07	463451.7	3769740.1	339.9	0.00	8.37	3.25	YES	
L0003851	0	0.75230E-07	463451.6	3769758.1	341.9	0.00	8.37	3.25	YES	
L0003852	0	0.75230E-07	463451.5	3769776.1	341.2	0.00	8.37	3.25	YES	
L0003853	0	0.75230E-07	463451.5	3769794.1	340.0	0.00	8.37	3.25	YES	
L0003854	0	0.75230E-07	463451.9	3769812.1	338.3	0.00	8.37	3.25	YES	
L0003855	0	0.75230E-07	463452.3	3769830.1	336.6	0.00	8.37	3.25	YES	
L0003856	0	0.75230E-07	463452.8	3769848.1	335.0	0.00	8.37	3.25	YES	
L0003857	0	0.75230E-07	463453.3	3769866.0	335.0	0.00	8.37	3.25	YES	
L0003651	0	0.14960E-07	464626.2	3769160.2	316.1	0.00	8.37	3.25	YES	
L0003652	0	0.14960E-07	464626.2	3769178.2	316.6	0.00	8.37	3.25	YES	

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L0003653	0	0.14960E-07	464626.2	3769196.2	316.9	0.00	8.37	3.25	YES
L0003654	0	0.14960E-07	464626.3	3769214.2	317.0	0.00	8.37	3.25	YES
L0003655	0	0.14960E-07	464624.8	3769230.7	317.0	0.00	8.37	3.25	YES
L0003656	0	0.14960E-07	464606.8	3769230.9	317.2	0.00	8.37	3.25	YES
L0003657	0	0.14960E-07	464588.8	3769231.1	317.5	0.00	8.37	3.25	YES
L0003658	0	0.14960E-07	464570.8	3769231.3	317.5	0.00	8.37	3.25	YES
L0003659	0	0.14960E-07	464552.8	3769231.5	317.6	0.00	8.37	3.25	YES
L0003660	0	0.14960E-07	464534.8	3769231.5	317.9	0.00	8.37	3.25	YES
L0003661	0	0.14960E-07	464516.8	3769231.5	318.0	0.00	8.37	3.25	YES
L0003662	0	0.14960E-07	464498.8	3769231.5	318.0	0.00	8.37	3.25	YES
L0003663	0	0.14960E-07	464480.8	3769231.5	318.0	0.00	8.37	3.25	YES
L0003664	0	0.14960E-07	464462.8	3769231.5	318.1	0.00	8.37	3.25	YES
L0003665	0	0.14960E-07	464444.8	3769231.5	318.4	0.00	8.37	3.25	YES
L0003666	0	0.14960E-07	464426.8	3769231.5	318.5	0.00	8.37	3.25	YES
L0003667	0	0.14960E-07	464408.8	3769231.5	318.5	0.00	8.37	3.25	YES
L0003668	0	0.14960E-07	464390.8	3769231.5	318.8	0.00	8.37	3.25	YES
L0003669	0	0.14960E-07	464372.8	3769231.5	319.0	0.00	8.37	3.25	YES
L0003670	0	0.14960E-07	464354.8	3769231.5	319.0	0.00	8.37	3.25	YES
L0003671	0	0.14960E-07	464336.8	3769231.5	319.0	0.00	8.37	3.25	YES
L0003672	0	0.14960E-07	464318.8	3769231.6	319.0	0.00	8.37	3.25	YES
L0003673	0	0.14960E-07	464300.8	3769231.7	319.0	0.00	8.37	3.25	YES
L0003674	0	0.14960E-07	464282.8	3769231.8	319.0	0.00	8.37	3.25	YES
L0003675	0	0.14960E-07	464264.8	3769231.9	319.0	0.00	8.37	3.25	YES
L0003676	0	0.14960E-07	464246.8	3769231.9	319.2	0.00	8.37	3.25	YES

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003677	0	0.14960E-07	464228.8	3769232.0	319.5	0.00	8.37	3.25	YES	
L0003678	0	0.14960E-07	464210.8	3769232.1	319.5	0.00	8.37	3.25	YES	
L0003679	0	0.14960E-07	464192.8	3769232.2	319.5	0.00	8.37	3.25	YES	
L0003680	0	0.14960E-07	464174.8	3769232.3	319.5	0.00	8.37	3.25	YES	
L0003681	0	0.14960E-07	464156.8	3769232.3	319.7	0.00	8.37	3.25	YES	
L0003682	0	0.14960E-07	464138.8	3769232.4	320.0	0.00	8.37	3.25	YES	
L0003683	0	0.14960E-07	464120.8	3769232.5	320.0	0.00	8.37	3.25	YES	
L0003684	0	0.14960E-07	464102.8	3769232.6	320.0	0.00	8.37	3.25	YES	
L0003685	0	0.14960E-07	464084.8	3769232.6	320.0	0.00	8.37	3.25	YES	
L0003686	0	0.14960E-07	464066.8	3769232.6	320.2	0.00	8.37	3.25	YES	
L0003687	0	0.14960E-07	464048.8	3769232.6	320.5	0.00	8.37	3.25	YES	
L0003688	0	0.14960E-07	464030.8	3769232.6	320.5	0.00	8.37	3.25	YES	
L0003689	0	0.14960E-07	464012.8	3769232.6	320.7	0.00	8.37	3.25	YES	
L0003690	0	0.14960E-07	463994.8	3769232.5	320.9	0.00	8.37	3.25	YES	
L0003691	0	0.14960E-07	463976.8	3769232.5	321.0	0.00	8.37	3.25	YES	
L0003692	0	0.14960E-07	463958.8	3769232.5	321.0	0.00	8.37	3.25	YES	
L0003693	0	0.14960E-07	463940.8	3769232.5	321.0	0.00	8.37	3.25	YES	
L0003694	0	0.14960E-07	463922.8	3769232.5	321.0	0.00	8.37	3.25	YES	
L0003695	0	0.14960E-07	463904.8	3769232.4	321.0	0.00	8.37	3.25	YES	
L0003696	0	0.14960E-07	463886.8	3769232.4	321.2	0.00	8.37	3.25	YES	
L0003697	0	0.14960E-07	463868.8	3769232.4	321.6	0.00	8.37	3.25	YES	
L0003698	0	0.14960E-07	463850.8	3769232.4	321.8	0.00	8.37	3.25	YES	
L0003699	0	0.14960E-07	463832.8	3769232.4	322.0	0.00	8.37	3.25	YES	
L0003700	0	0.14960E-07	463814.8	3769232.4	322.0	0.00	8.37	3.25	YES	
L0003701	0	0.14960E-07	463796.8	3769232.3	322.4	0.00	8.37	3.25	YES	
L0003702	0	0.14960E-07	463778.8	3769232.3	323.0	0.00	8.37	3.25	YES	

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L0003703	0	0.14960E-07	463760.8	3769232.3	323.0	0.00	8.37	3.25	YES
L0003704	0	0.14960E-07	463742.8	3769232.3	323.1	0.00	8.37	3.25	YES
L0003705	0	0.14960E-07	463724.8	3769232.3	323.4	0.00	8.37	3.25	YES
L0003706	0	0.14960E-07	463706.8	3769232.2	323.5	0.00	8.37	3.25	YES
L0003707	0	0.14960E-07	463688.8	3769232.2	323.5	0.00	8.37	3.25	YES
L0003708	0	0.14960E-07	463670.8	3769232.2	323.8	0.00	8.37	3.25	YES
L0003709	0	0.14960E-07	463652.8	3769232.2	324.0	0.00	8.37	3.25	YES
L0003710	0	0.14960E-07	463634.8	3769232.2	324.0	0.00	8.37	3.25	YES
L0003711	0	0.14960E-07	463616.8	3769232.1	324.0	0.00	8.37	3.25	YES
L0003712	0	0.14960E-07	463598.8	3769232.1	324.0	0.00	8.37	3.25	YES
L0003713	0	0.14960E-07	463580.8	3769232.1	324.3	0.00	8.37	3.25	YES
L0003714	0	0.14960E-07	463562.8	3769232.1	324.6	0.00	8.37	3.25	YES
L0003715	0	0.14960E-07	463544.8	3769232.1	324.9	0.00	8.37	3.25	YES
L0003716	0	0.14960E-07	463526.8	3769232.0	325.0	0.00	8.37	3.25	YES

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003717	0	0.14960E-07	463508.8	3769232.0	325.0	0.00	8.37	3.25	YES	
L0003718	0	0.14960E-07	463490.8	3769232.0	325.0	0.00	8.37	3.25	YES	
L0003719	0	0.14960E-07	463472.8	3769232.0	325.0	0.00	8.37	3.25	YES	
L0003720	0	0.14960E-07	463454.8	3769232.0	325.0	0.00	8.37	3.25	YES	
L0003721	0	0.14960E-07	463436.8	3769232.0	325.2	0.00	8.37	3.25	YES	
L0003722	0	0.14960E-07	463419.6	3769232.8	325.6	0.00	8.37	3.25	YES	
L0003723	0	0.14960E-07	463419.0	3769250.8	326.0	0.00	8.37	3.25	YES	
L0003724	0	0.14960E-07	463418.4	3769268.8	326.0	0.00	8.37	3.25	YES	
L0003725	0	0.14960E-07	463417.8	3769286.8	326.3	0.00	8.37	3.25	YES	
L0003726	0	0.14960E-07	463417.2	3769304.8	326.9	0.00	8.37	3.25	YES	
L0003727	0	0.14960E-07	463417.0	3769322.8	327.0	0.00	8.37	3.25	YES	
L0003728	0	0.14960E-07	463417.2	3769340.8	327.0	0.00	8.37	3.25	YES	
L0003729	0	0.14960E-07	463417.4	3769358.8	327.0	0.00	8.37	3.25	YES	
L0003730	0	0.14960E-07	463417.7	3769376.8	327.4	0.00	8.37	3.25	YES	
L0003731	0	0.14960E-07	463417.9	3769394.8	327.9	0.00	8.37	3.25	YES	
L0003732	0	0.14960E-07	463418.1	3769412.8	328.0	0.00	8.37	3.25	YES	
L0003733	0	0.14960E-07	463418.4	3769430.8	328.2	0.00	8.37	3.25	YES	
L0003734	0	0.14960E-07	463419.2	3769448.7	328.8	0.00	8.37	3.25	YES	
L0003735	0	0.14960E-07	463420.2	3769466.7	329.0	0.00	8.37	3.25	YES	
L0003736	0	0.14960E-07	463422.4	3769484.5	329.0	0.00	8.37	3.25	YES	
L0003737	0	0.14960E-07	463425.5	3769502.3	329.5	0.00	8.37	3.25	YES	
L0003738	0	0.14960E-07	463429.5	3769519.8	330.2	0.00	8.37	3.25	YES	
L0003739	0	0.14960E-07	463434.5	3769537.1	331.4	0.00	8.37	3.25	YES	
L0003740	0	0.14960E-07	463439.4	3769554.4	332.7	0.00	8.37	3.25	YES	
L0003741	0	0.14960E-07	463444.3	3769571.7	334.4	0.00	8.37	3.25	YES	
L0003742	0	0.14960E-07	463448.1	3769589.3	335.0	0.00	8.37	3.25	YES	
L0003743	0	0.14960E-07	463450.2	3769607.2	335.0	0.00	8.37	3.25	YES	
L0003744	0	0.14960E-07	463452.2	3769625.0	335.0	0.00	8.37	3.25	YES	
L0003745	0	0.14960E-07	463452.1	3769643.0	335.0	0.00	8.37	3.25	YES	
L0003746	0	0.14960E-07	463452.0	3769661.0	335.0	0.00	8.37	3.25	YES	
L0003747	0	0.14960E-07	463451.9	3769679.0	335.0	0.00	8.37	3.25	YES	
L0003748	0	0.14960E-07	463451.9	3769697.0	335.1	0.00	8.37	3.25	YES	
L0003749	0	0.14960E-07	463451.8	3769715.0	336.9	0.00	8.37	3.25	YES	
L0003750	0	0.14960E-07	463451.7	3769733.0	338.9	0.00	8.37	3.25	YES	
L0003751	0	0.14960E-07	463451.6	3769751.0	341.3	0.00	8.37	3.25	YES	
L0003752	0	0.14960E-07	463451.6	3769769.0	341.5	0.00	8.37	3.25	YES	

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L0003753	0	0.14960E-07	463451.5	3769787.0	340.7	0.00	8.37	3.25	YES
L0003754	0	0.14960E-07	463451.7	3769805.0	339.0	0.00	8.37	3.25	YES
L0003755	0	0.14960E-07	463452.1	3769823.0	337.3	0.00	8.37	3.25	YES
L0003756	0	0.14960E-07	463452.6	3769841.0	335.5	0.00	8.37	3.25	YES

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*** MODELOPTS: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003757	0	0.14960E-07	463453.1	3769859.0	335.0	0.00	8.37	3.25	YES	
L0003758	0	0.14960E-07	463453.6	3769877.0	335.0	0.00	8.37	3.25	YES	
L0003542	0	0.89750E-07	464562.2	3769231.3	317.5	0.00	8.37	3.25	YES	
L0003543	0	0.89750E-07	464580.2	3769231.4	317.5	0.00	8.37	3.25	YES	
L0003544	0	0.89750E-07	464598.2	3769231.4	317.4	0.00	8.37	3.25	YES	
L0003545	0	0.89750E-07	464616.2	3769231.5	317.1	0.00	8.37	3.25	YES	
L0003546	0	0.89750E-07	464634.2	3769231.5	317.0	0.00	8.37	3.25	YES	
L0003547	0	0.89750E-07	464652.2	3769231.6	317.0	0.00	8.37	3.25	YES	
L0003548	0	0.89750E-07	464670.2	3769231.7	316.7	0.00	8.37	3.25	YES	
L0003549	0	0.89750E-07	464688.2	3769231.8	316.5	0.00	8.37	3.25	YES	
L0003550	0	0.89750E-07	464706.2	3769231.9	316.5	0.00	8.37	3.25	YES	
L0003551	0	0.89750E-07	464724.2	3769232.0	316.5	0.00	8.37	3.25	YES	
L0003552	0	0.89750E-07	464742.2	3769232.1	316.5	0.00	8.37	3.25	YES	
L0003553	0	0.89750E-07	464760.2	3769232.1	316.2	0.00	8.37	3.25	YES	
L0003554	0	0.89750E-07	464778.2	3769231.7	316.0	0.00	8.37	3.25	YES	
L0003555	0	0.89750E-07	464796.2	3769231.4	316.0	0.00	8.37	3.25	YES	
L0003556	0	0.89750E-07	464814.2	3769231.0	316.0	0.00	8.37	3.25	YES	
L0003557	0	0.89750E-07	464832.2	3769230.7	316.0	0.00	8.37	3.25	YES	
L0003558	0	0.89750E-07	464850.2	3769230.3	316.0	0.00	8.37	3.25	YES	
L0003559	0	0.89750E-07	464868.2	3769230.0	316.0	0.00	8.37	3.25	YES	
L0003560	0	0.89750E-07	464886.2	3769229.6	316.0	0.00	8.37	3.25	YES	
L0003561	0	0.89750E-07	464904.2	3769229.3	316.2	0.00	8.37	3.25	YES	
L0003562	0	0.89750E-07	464922.2	3769228.9	316.5	0.00	8.37	3.25	YES	
L0003563	0	0.89750E-07	464940.2	3769228.6	316.8	0.00	8.37	3.25	YES	
L0003564	0	0.89750E-07	464958.2	3769228.2	317.0	0.00	8.37	3.25	YES	
L0003565	0	0.89750E-07	464976.2	3769227.9	317.0	0.00	8.37	3.25	YES	
L0003566	0	0.89750E-07	464994.2	3769227.5	317.0	0.00	8.37	3.25	YES	
L0003567	0	0.89750E-07	465012.2	3769227.2	317.0	0.00	8.37	3.25	YES	
L0003568	0	0.89750E-07	465030.2	3769227.2	317.2	0.00	8.37	3.25	YES	
L0003569	0	0.89750E-07	465048.2	3769227.2	317.4	0.00	8.37	3.25	YES	
L0003570	0	0.89750E-07	465066.2	3769227.2	317.4	0.00	8.37	3.25	YES	
L0003571	0	0.89750E-07	465084.2	3769227.2	317.2	0.00	8.37	3.25	YES	
L0003572	0	0.89750E-07	465102.2	3769227.2	317.0	0.00	8.37	3.25	YES	
L0003573	0	0.89750E-07	465120.2	3769227.2	317.0	0.00	8.37	3.25	YES	
L0003574	0	0.89750E-07	465138.2	3769227.2	316.8	0.00	8.37	3.25	YES	
L0003575	0	0.89750E-07	465156.2	3769227.2	316.4	0.00	8.37	3.25	YES	
L0003576	0	0.89750E-07	465174.2	3769227.2	316.4	0.00	8.37	3.25	YES	
L0003577	0	0.89750E-07	465192.2	3769227.2	316.3	0.00	8.37	3.25	YES	
L0003578	0	0.89750E-07	465210.2	3769227.3	316.1	0.00	8.37	3.25	YES	
L0003579	0	0.89750E-07	465228.2	3769227.3	316.0	0.00	8.37	3.25	YES	

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003580	0	0.89750E-07	465246.2	3769227.3	316.0	0.00	8.37	3.25	YES	
L0003581	0	0.89750E-07	465264.2	3769227.3	315.7	0.00	8.37	3.25	YES	
L0003582	0	0.89750E-07	465282.2	3769227.3	315.3	0.00	8.37	3.25	YES	
L0003583	0	0.89750E-07	465300.2	3769227.3	315.1	0.00	8.37	3.25	YES	
L0003584	0	0.89750E-07	465318.2	3769227.3	315.0	0.00	8.37	3.25	YES	
L0003585	0	0.89750E-07	465336.2	3769227.3	315.0	0.00	8.37	3.25	YES	
L0003586	0	0.89750E-07	465354.2	3769227.3	314.7	0.00	8.37	3.25	YES	
L0003587	0	0.89750E-07	465372.2	3769227.3	314.4	0.00	8.37	3.25	YES	
L0003588	0	0.89750E-07	465390.2	3769227.3	314.8	0.00	8.37	3.25	YES	
L0003589	0	0.89750E-07	465408.2	3769227.3	314.8	0.00	8.37	3.25	YES	
L0003590	0	0.89750E-07	465426.2	3769227.3	314.4	0.00	8.37	3.25	YES	
L0003591	0	0.89750E-07	465444.2	3769227.3	314.2	0.00	8.37	3.25	YES	
L0003592	0	0.89750E-07	465462.2	3769227.4	313.9	0.00	8.37	3.25	YES	
L0003593	0	0.89750E-07	465480.2	3769227.4	313.3	0.00	8.37	3.25	YES	
L0003594	0	0.89750E-07	465498.2	3769227.4	312.7	0.00	8.37	3.25	YES	
L0003595	0	0.89750E-07	465516.2	3769227.4	312.1	0.00	8.37	3.25	YES	
L0003596	0	0.89750E-07	465534.2	3769227.4	311.7	0.00	8.37	3.25	YES	
L0003597	0	0.89750E-07	465552.2	3769227.4	311.3	0.00	8.37	3.25	YES	
L0003598	0	0.89750E-07	465570.2	3769227.4	311.1	0.00	8.37	3.25	YES	
L0003599	0	0.89750E-07	465588.2	3769227.4	310.8	0.00	8.37	3.25	YES	
L0003600	0	0.89750E-07	465606.2	3769227.4	310.4	0.00	8.37	3.25	YES	
L0003601	0	0.89750E-07	465624.2	3769227.4	310.2	0.00	8.37	3.25	YES	
L0003602	0	0.89750E-07	465642.2	3769227.4	310.0	0.00	8.37	3.25	YES	
L0003603	0	0.89750E-07	465660.2	3769227.4	310.0	0.00	8.37	3.25	YES	
L0003604	0	0.89750E-07	465678.2	3769227.4	310.0	0.00	8.37	3.25	YES	
L0003605	0	0.89750E-07	465696.2	3769227.4	310.0	0.00	8.37	3.25	YES	
L0003606	0	0.89750E-07	465714.2	3769227.2	310.4	0.00	8.37	3.25	YES	
L0003607	0	0.89750E-07	465732.2	3769227.0	310.7	0.00	8.37	3.25	YES	
L0003608	0	0.89750E-07	465750.2	3769226.7	310.4	0.00	8.37	3.25	YES	
L0003609	0	0.89750E-07	465768.2	3769226.4	310.3	0.00	8.37	3.25	YES	
L0003610	0	0.89750E-07	465786.2	3769226.2	310.3	0.00	8.37	3.25	YES	
L0003611	0	0.89750E-07	465804.2	3769225.9	309.8	0.00	8.37	3.25	YES	
L0003612	0	0.89750E-07	465822.2	3769225.6	309.4	0.00	8.37	3.25	YES	
L0003613	0	0.89750E-07	465831.6	3769234.1	309.8	0.00	8.37	3.25	YES	
L0003614	0	0.89750E-07	465831.6	3769252.1	310.0	0.00	8.37	3.25	YES	
L0003615	0	0.89750E-07	465831.6	3769270.1	310.0	0.00	8.37	3.25	YES	
L0003616	0	0.89750E-07	465831.6	3769288.1	310.0	0.00	8.37	3.25	YES	
L0003617	0	0.89750E-07	465831.6	3769306.1	310.0	0.00	8.37	3.25	YES	
L0003618	0	0.89750E-07	465831.6	3769324.1	310.4	0.00	8.37	3.25	YES	
L0003619	0	0.89750E-07	465831.6	3769342.1	310.7	0.00	8.37	3.25	YES	

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
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L0003620	0	0.89750E-07	465831.6	3769360.1	310.9	0.00	8.37	3.25	YES
L0003621	0	0.89750E-07	465831.6	3769378.1	311.2	0.00	8.37	3.25	YES
L0003622	0	0.89750E-07	465831.6	3769396.1	311.6	0.00	8.37	3.25	YES
L0003623	0	0.89750E-07	465831.6	3769414.1	311.8	0.00	8.37	3.25	YES
L0003624	0	0.89750E-07	465831.6	3769432.1	312.2	0.00	8.37	3.25	YES
L0003625	0	0.89750E-07	465831.6	3769450.1	312.8	0.00	8.37	3.25	YES
L0003626	0	0.89750E-07	465831.6	3769468.1	313.8	0.00	8.37	3.25	YES
L0003627	0	0.89750E-07	465831.6	3769486.1	315.0	0.00	8.37	3.25	YES
L0003628	0	0.89750E-07	465831.6	3769504.1	316.2	0.00	8.37	3.25	YES
L0003629	0	0.89750E-07	465831.6	3769522.1	317.0	0.00	8.37	3.25	YES
L0003630	0	0.89750E-07	465831.6	3769540.1	317.0	0.00	8.37	3.25	YES
L0003631	0	0.89750E-07	465831.6	3769558.1	317.2	0.00	8.37	3.25	YES
L0003632	0	0.89750E-07	465831.6	3769576.1	317.4	0.00	8.37	3.25	YES
L0003633	0	0.89750E-07	465831.6	3769594.1	320.7	0.00	8.37	3.25	YES
L0003634	0	0.89750E-07	465831.6	3769612.1	323.1	0.00	8.37	3.25	YES
L0003635	0	0.89750E-07	465831.6	3769630.1	323.5	0.00	8.37	3.25	YES
L0003636	0	0.89750E-07	465831.6	3769648.1	323.6	0.00	8.37	3.25	YES
L0003637	0	0.89750E-07	465831.6	3769666.1	323.6	0.00	8.37	3.25	YES
L0003638	0	0.89750E-07	465831.6	3769684.1	323.8	0.00	8.37	3.25	YES
L0003639	0	0.89750E-07	465831.6	3769702.1	325.0	0.00	8.37	3.25	YES
L0003640	0	0.89750E-07	465831.6	3769720.1	328.2	0.00	8.37	3.25	YES
L0003641	0	0.89750E-07	465831.6	3769738.1	329.2	0.00	8.37	3.25	YES
L0003642	0	0.89750E-07	465831.6	3769756.1	329.0	0.00	8.37	3.25	YES
L0003643	0	0.89750E-07	465831.6	3769774.1	327.9	0.00	8.37	3.25	YES
L0003644	0	0.89750E-07	465831.6	3769792.1	327.9	0.00	8.37	3.25	YES
L0003645	0	0.89750E-07	465831.6	3769810.1	330.4	0.00	8.37	3.25	YES
L0003646	0	0.89750E-07	465831.6	3769828.1	328.0	0.00	8.37	3.25	YES
L0003647	0	0.89750E-07	465831.6	3769846.1	323.1	0.00	8.37	3.25	YES
L0003648	0	0.89750E-07	465831.6	3769864.1	323.0	0.00	8.37	3.25	YES
L0003649	0	0.89750E-07	465831.6	3769882.1	323.0	0.00	8.37	3.25	YES
L0003650	0	0.89750E-07	465831.6	3769900.1	323.0	0.00	8.37	3.25	YES
L0003433	0	0.30060E-07	464626.1	3769158.6	316.1	3.49	8.37	3.25	YES
L0003434	0	0.30060E-07	464626.0	3769176.6	316.5	3.49	8.37	3.25	YES
L0003435	0	0.30060E-07	464625.8	3769194.6	316.9	3.49	8.37	3.25	YES
L0003436	0	0.30060E-07	464625.7	3769212.6	317.0	3.49	8.37	3.25	YES
L0003437	0	0.30060E-07	464625.6	3769230.6	317.0	3.49	8.37	3.25	YES
L0003438	0	0.30060E-07	464642.7	3769231.6	317.0	3.49	8.37	3.25	YES
L0003439	0	0.30060E-07	464660.7	3769231.7	316.8	3.49	8.37	3.25	YES
L0003440	0	0.30060E-07	464678.7	3769231.8	316.5	3.49	8.37	3.25	YES
L0003441	0	0.30060E-07	464696.7	3769231.9	316.5	3.49	8.37	3.25	YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003442	0	0.30060E-07	464714.7	3769232.0	316.5	3.49	8.37	3.25	YES	
L0003443	0	0.30060E-07	464732.7	3769232.1	316.5	3.49	8.37	3.25	YES	
L0003444	0	0.30060E-07	464750.7	3769232.2	316.3	3.49	8.37	3.25	YES	
L0003445	0	0.30060E-07	464768.7	3769231.9	316.0	3.49	8.37	3.25	YES	
L0003446	0	0.30060E-07	464786.7	3769231.5	316.0	3.49	8.37	3.25	YES	
L0003447	0	0.30060E-07	464804.7	3769231.2	316.0	3.49	8.37	3.25	YES	
L0003448	0	0.30060E-07	464822.7	3769230.8	316.0	3.49	8.37	3.25	YES	
L0003449	0	0.30060E-07	464840.7	3769230.5	316.0	3.49	8.37	3.25	YES	
L0003450	0	0.30060E-07	464858.7	3769230.1	316.0	3.49	8.37	3.25	YES	

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L0003451	0	0.30060E-07	464876.7	3769229.8	316.0	3.49	8.37	3.25	YES
L0003452	0	0.30060E-07	464894.6	3769229.4	316.1	3.49	8.37	3.25	YES
L0003453	0	0.30060E-07	464912.6	3769229.1	316.3	3.49	8.37	3.25	YES
L0003454	0	0.30060E-07	464930.6	3769228.7	316.6	3.49	8.37	3.25	YES
L0003455	0	0.30060E-07	464948.6	3769228.4	317.0	3.49	8.37	3.25	YES
L0003456	0	0.30060E-07	464966.6	3769228.0	317.0	3.49	8.37	3.25	YES
L0003457	0	0.30060E-07	464984.6	3769227.7	317.0	3.49	8.37	3.25	YES
L0003458	0	0.30060E-07	465002.6	3769227.3	317.0	3.49	8.37	3.25	YES
L0003459	0	0.30060E-07	465020.6	3769227.2	317.1	3.49	8.37	3.25	YES
L0003460	0	0.30060E-07	465038.6	3769227.2	317.4	3.49	8.37	3.25	YES
L0003461	0	0.30060E-07	465056.6	3769227.2	317.4	3.49	8.37	3.25	YES
L0003462	0	0.30060E-07	465074.6	3769227.2	317.3	3.49	8.37	3.25	YES
L0003463	0	0.30060E-07	465092.6	3769227.2	317.1	3.49	8.37	3.25	YES
L0003464	0	0.30060E-07	465110.6	3769227.2	317.0	3.49	8.37	3.25	YES
L0003465	0	0.30060E-07	465128.6	3769227.2	317.0	3.49	8.37	3.25	YES
L0003466	0	0.30060E-07	465146.6	3769227.2	316.6	3.49	8.37	3.25	YES
L0003467	0	0.30060E-07	465164.6	3769227.2	316.4	3.49	8.37	3.25	YES
L0003468	0	0.30060E-07	465182.6	3769227.2	316.4	3.49	8.37	3.25	YES
L0003469	0	0.30060E-07	465200.6	3769227.2	316.2	3.49	8.37	3.25	YES
L0003470	0	0.30060E-07	465218.6	3769227.3	316.0	3.49	8.37	3.25	YES
L0003471	0	0.30060E-07	465236.6	3769227.3	316.0	3.49	8.37	3.25	YES
L0003472	0	0.30060E-07	465254.6	3769227.3	315.9	3.49	8.37	3.25	YES
L0003473	0	0.30060E-07	465272.6	3769227.3	315.5	3.49	8.37	3.25	YES
L0003474	0	0.30060E-07	465290.6	3769227.3	315.2	3.49	8.37	3.25	YES
L0003475	0	0.30060E-07	465308.6	3769227.3	315.0	3.49	8.37	3.25	YES
L0003476	0	0.30060E-07	465326.6	3769227.3	315.0	3.49	8.37	3.25	YES
L0003477	0	0.30060E-07	465344.6	3769227.3	314.9	3.49	8.37	3.25	YES
L0003478	0	0.30060E-07	465362.6	3769227.3	314.5	3.49	8.37	3.25	YES
L0003479	0	0.30060E-07	465380.6	3769227.3	314.6	3.49	8.37	3.25	YES
L0003480	0	0.30060E-07	465398.6	3769227.3	315.0	3.49	8.37	3.25	YES
L0003481	0	0.30060E-07	465416.6	3769227.3	314.6	3.49	8.37	3.25	YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003482	0	0.30060E-07	465434.6	3769227.3	314.3	3.49	8.37	3.25	YES	
L0003483	0	0.30060E-07	465452.6	3769227.4	314.1	3.49	8.37	3.25	YES	
L0003484	0	0.30060E-07	465470.6	3769227.4	313.6	3.49	8.37	3.25	YES	
L0003485	0	0.30060E-07	465488.6	3769227.4	313.0	3.49	8.37	3.25	YES	
L0003486	0	0.30060E-07	465506.6	3769227.4	312.4	3.49	8.37	3.25	YES	
L0003487	0	0.30060E-07	465524.6	3769227.4	311.9	3.49	8.37	3.25	YES	
L0003488	0	0.30060E-07	465542.6	3769227.4	311.5	3.49	8.37	3.25	YES	
L0003489	0	0.30060E-07	465560.6	3769227.4	311.2	3.49	8.37	3.25	YES	
L0003490	0	0.30060E-07	465578.6	3769227.4	311.0	3.49	8.37	3.25	YES	
L0003491	0	0.30060E-07	465596.6	3769227.4	310.6	3.49	8.37	3.25	YES	
L0003492	0	0.30060E-07	465614.6	3769227.4	310.3	3.49	8.37	3.25	YES	
L0003493	0	0.30060E-07	465632.6	3769227.4	310.1	3.49	8.37	3.25	YES	
L0003494	0	0.30060E-07	465650.6	3769227.4	310.0	3.49	8.37	3.25	YES	
L0003495	0	0.30060E-07	465668.6	3769227.4	310.0	3.49	8.37	3.25	YES	
L0003496	0	0.30060E-07	465686.6	3769227.4	310.0	3.49	8.37	3.25	YES	
L0003497	0	0.30060E-07	465704.6	3769227.4	310.1	3.49	8.37	3.25	YES	
L0003498	0	0.30060E-07	465722.6	3769227.1	310.5	3.49	8.37	3.25	YES	
L0003499	0	0.30060E-07	465740.6	3769226.8	310.6	3.49	8.37	3.25	YES	
L0003500	0	0.30060E-07	465758.6	3769226.6	310.4	3.49	8.37	3.25	YES	

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L0003501	0	0.30060E-07	465776.6	3769226.3	310.3	3.49	8.37	3.25	YES
L0003502	0	0.30060E-07	465794.6	3769226.0	310.2	3.49	8.37	3.25	YES
L0003503	0	0.30060E-07	465812.6	3769225.8	309.5	3.49	8.37	3.25	YES
L0003504	0	0.30060E-07	465830.6	3769225.5	309.6	3.49	8.37	3.25	YES
L0003505	0	0.30060E-07	465831.6	3769242.5	309.9	3.49	8.37	3.25	YES
L0003506	0	0.30060E-07	465831.6	3769260.5	310.0	3.49	8.37	3.25	YES
L0003507	0	0.30060E-07	465831.6	3769278.5	310.0	3.49	8.37	3.25	YES
L0003508	0	0.30060E-07	465831.6	3769296.5	310.0	3.49	8.37	3.25	YES
L0003509	0	0.30060E-07	465831.6	3769314.5	310.2	3.49	8.37	3.25	YES
L0003510	0	0.30060E-07	465831.6	3769332.5	310.5	3.49	8.37	3.25	YES
L0003511	0	0.30060E-07	465831.6	3769350.5	310.8	3.49	8.37	3.25	YES
L0003512	0	0.30060E-07	465831.6	3769368.5	311.0	3.49	8.37	3.25	YES
L0003513	0	0.30060E-07	465831.6	3769386.5	311.4	3.49	8.37	3.25	YES
L0003514	0	0.30060E-07	465831.6	3769404.5	311.7	3.49	8.37	3.25	YES
L0003515	0	0.30060E-07	465831.6	3769422.5	311.9	3.49	8.37	3.25	YES
L0003516	0	0.30060E-07	465831.6	3769440.5	312.5	3.49	8.37	3.25	YES
L0003517	0	0.30060E-07	465831.6	3769458.5	313.1	3.49	8.37	3.25	YES
L0003518	0	0.30060E-07	465831.6	3769476.5	314.3	3.49	8.37	3.25	YES
L0003519	0	0.30060E-07	465831.6	3769494.5	315.5	3.49	8.37	3.25	YES
L0003520	0	0.30060E-07	465831.6	3769512.5	316.7	3.49	8.37	3.25	YES
L0003521	0	0.30060E-07	465831.6	3769530.5	317.0	3.49	8.37	3.25	YES

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0003522	0	0.30060E-07	465831.6	3769548.5	317.0	3.49	8.37	3.25	YES	
L0003523	0	0.30060E-07	465831.6	3769566.5	317.3	3.49	8.37	3.25	YES	
L0003524	0	0.30060E-07	465831.6	3769584.5	318.9	3.49	8.37	3.25	YES	
L0003525	0	0.30060E-07	465831.6	3769602.5	322.3	3.49	8.37	3.25	YES	
L0003526	0	0.30060E-07	465831.6	3769620.5	323.3	3.49	8.37	3.25	YES	
L0003527	0	0.30060E-07	465831.6	3769638.5	323.6	3.49	8.37	3.25	YES	
L0003528	0	0.30060E-07	465831.6	3769656.5	323.6	3.49	8.37	3.25	YES	
L0003529	0	0.30060E-07	465831.6	3769674.5	323.7	3.49	8.37	3.25	YES	
L0003530	0	0.30060E-07	465831.6	3769692.5	323.9	3.49	8.37	3.25	YES	
L0003531	0	0.30060E-07	465831.6	3769710.5	326.5	3.49	8.37	3.25	YES	
L0003532	0	0.30060E-07	465831.6	3769728.5	329.4	3.49	8.37	3.25	YES	
L0003533	0	0.30060E-07	465831.6	3769746.5	329.1	3.49	8.37	3.25	YES	
L0003534	0	0.30060E-07	465831.6	3769764.5	328.5	3.49	8.37	3.25	YES	
L0003535	0	0.30060E-07	465831.6	3769782.5	327.4	3.49	8.37	3.25	YES	
L0003536	0	0.30060E-07	465831.6	3769800.5	329.1	3.49	8.37	3.25	YES	
L0003537	0	0.30060E-07	465831.6	3769818.5	330.6	3.49	8.37	3.25	YES	
L0003538	0	0.30060E-07	465831.6	3769836.5	325.7	3.49	8.37	3.25	YES	
L0003539	0	0.30060E-07	465831.6	3769854.5	323.0	3.49	8.37	3.25	YES	
L0003540	0	0.30060E-07	465831.6	3769872.5	323.0	3.49	8.37	3.25	YES	
L0003541	0	0.30060E-07	465831.6	3769890.5	323.0	3.49	8.37	3.25	YES	

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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 *** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID -----	SOURCE IDs -----							
ALL	L0003993	, L0003994	, L0003995	, L0003996	, L0003997	, L0003998	, L0003999	,
L0004000	,							
	L0004001	, L0004002	, L0004003	, L0004004	, L0004005	, L0004006	, L0004007	,
L0004008	,							
	L0004009	, L0004010	, L0004011	, L0004012	, L0003946	, L0003947	, L0003948	,
L0003949	,							
	L0003950	, L0003951	, L0003952	, L0003953	, L0003954	, L0003955	, L0003956	,
L0003957	,							
	L0003958	, L0003959	, L0003960	, L0003961	, L0003962	, L0003963	, L0003964	,
L0003965	,							
	L0003966	, L0003967	, L0003968	, L0003969	, L0003970	, L0003971	, L0003972	,
L0003973	,							
	L0003974	, L0003975	, L0003976	, L0003977	, L0003978	, L0003979	, L0003980	,
L0003981	,							
	L0003982	, L0003983	, L0003984	, L0003985	, L0003986	, L0003987	, L0003988	,
L0003989	,							
	L0003990	, L0003991	, L0003992	, L0003858	, L0003859	, L0003860	, L0003861	,
L0003862	,							
	L0003863	, L0003864	, L0003865	, L0003866	, L0003867	, L0003868	, L0003869	,
L0003870	,							
	L0003871	, L0003872	, L0003873	, L0003874	, L0003875	, L0003876	, L0003877	,
L0003878	,							
	L0003879	, L0003880	, L0003881	, L0003882	, L0003883	, L0003884	, L0003885	,
L0003886	,							
	L0003887	, L0003888	, L0003889	, L0003890	, L0003891	, L0003892	, L0003893	,
L0003894	,							
	L0003895	, L0003896	, L0003897	, L0003898	, L0003899	, L0003900	, L0003901	,
L0003902	,							
	L0003903	, L0003904	, L0003905	, L0003906	, L0003907	, L0003908	, L0003909	,
L0003910	,							
	L0003911	, L0003912	, L0003913	, L0003914	, L0003915	, L0003916	, L0003917	,
L0003918	,							
	L0003919	, L0003920	, L0003921	, L0003922	, L0003923	, L0003924	, L0003925	,
L0003926	,							
	L0003927	, L0003928	, L0003929	, L0003930	, L0003931	, L0003932	, L0003933	,
L0003934	,							
	L0003935	, L0003936	, L0003937	, L0003938	, L0003939	, L0003940	, L0003941	,
L0003942	,							
	L0003943	, L0003944	, L0003945	, L0003759	, L0003760	, L0003761	, L0003762	,
L0003763	,							

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
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L0003771	L0003764 , L0003765 , L0003766 , L0003767 , L0003768 , L0003769 , L0003770 ,
L0003779	L0003772 , L0003773 , L0003774 , L0003775 , L0003776 , L0003777 , L0003778 ,
L0003787	L0003780 , L0003781 , L0003782 , L0003783 , L0003784 , L0003785 , L0003786 ,
L0003795	L0003788 , L0003789 , L0003790 , L0003791 , L0003792 , L0003793 , L0003794 ,
L0003803	L0003796 , L0003797 , L0003798 , L0003799 , L0003800 , L0003801 , L0003802 ,
L0003811	L0003804 , L0003805 , L0003806 , L0003807 , L0003808 , L0003809 , L0003810 ,
L0003819	L0003812 , L0003813 , L0003814 , L0003815 , L0003816 , L0003817 , L0003818 ,
L0003827	L0003820 , L0003821 , L0003822 , L0003823 , L0003824 , L0003825 , L0003826 ,
L0003835	L0003828 , L0003829 , L0003830 , L0003831 , L0003832 , L0003833 , L0003834 ,
L0003843	L0003836 , L0003837 , L0003838 , L0003839 , L0003840 , L0003841 , L0003842 ,
L0003851	L0003844 , L0003845 , L0003846 , L0003847 , L0003848 , L0003849 , L0003850 ,
L0003652	L0003852 , L0003853 , L0003854 , L0003855 , L0003856 , L0003857 , L0003651 ,
L0003660	L0003653 , L0003654 , L0003655 , L0003656 , L0003657 , L0003658 , L0003659 ,
L0003668	L0003661 , L0003662 , L0003663 , L0003664 , L0003665 , L0003666 , L0003667 ,
L0003676	L0003669 , L0003670 , L0003671 , L0003672 , L0003673 , L0003674 , L0003675 ,
L0003684	L0003677 , L0003678 , L0003679 , L0003680 , L0003681 , L0003682 , L0003683 ,
L0003692	L0003685 , L0003686 , L0003687 , L0003688 , L0003689 , L0003690 , L0003691 ,
L0003700	L0003693 , L0003694 , L0003695 , L0003696 , L0003697 , L0003698 , L0003699 ,

11182 HRA
 L0003708 , L0003701 , L0003702 , L0003703 , L0003704 , L0003705 , L0003706 , L0003707 ,
 L0003716 , L0003709 , L0003710 , L0003711 , L0003712 , L0003713 , L0003714 , L0003715 ,
 ♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
 05/10/18
 *** AERMET - VERSION 16216 *** ***
 23:54:25

PAGE 19
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
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L0003724 ,	L0003717 , L0003718 , L0003719 , L0003720 , L0003721 , L0003722 , L0003723 ,
L0003732 ,	L0003725 , L0003726 , L0003727 , L0003728 , L0003729 , L0003730 , L0003731 ,
L0003740 ,	L0003733 , L0003734 , L0003735 , L0003736 , L0003737 , L0003738 , L0003739 ,
L0003748 ,	L0003741 , L0003742 , L0003743 , L0003744 , L0003745 , L0003746 , L0003747 ,
L0003756 ,	L0003749 , L0003750 , L0003751 , L0003752 , L0003753 , L0003754 , L0003755 ,
L0003547 ,	L0003757 , L0003758 , L0003542 , L0003543 , L0003544 , L0003545 , L0003546 ,
L0003555 ,	L0003548 , L0003549 , L0003550 , L0003551 , L0003552 , L0003553 , L0003554 ,
L0003563 ,	L0003556 , L0003557 , L0003558 , L0003559 , L0003560 , L0003561 , L0003562 ,
L0003571 ,	L0003564 , L0003565 , L0003566 , L0003567 , L0003568 , L0003569 , L0003570 ,
L0003579 ,	L0003572 , L0003573 , L0003574 , L0003575 , L0003576 , L0003577 , L0003578 ,
L0003587 ,	L0003580 , L0003581 , L0003582 , L0003583 , L0003584 , L0003585 , L0003586 ,
L0003595 ,	L0003588 , L0003589 , L0003590 , L0003591 , L0003592 , L0003593 , L0003594 ,
L0003603 ,	L0003596 , L0003597 , L0003598 , L0003599 , L0003600 , L0003601 , L0003602 ,
L0003611 ,	L0003604 , L0003605 , L0003606 , L0003607 , L0003608 , L0003609 , L0003610 ,
L0003619 ,	L0003612 , L0003613 , L0003614 , L0003615 , L0003616 , L0003617 , L0003618 ,
L0003627 ,	L0003620 , L0003621 , L0003622 , L0003623 , L0003624 , L0003625 , L0003626 ,

11182 HRA

L0003635 , L0003628 , L0003629 , L0003630 , L0003631 , L0003632 , L0003633 , L0003634 ,
 L0003643 , L0003636 , L0003637 , L0003638 , L0003639 , L0003640 , L0003641 , L0003642 ,
 L0003433 , L0003644 , L0003645 , L0003646 , L0003647 , L0003648 , L0003649 , L0003650 ,
 L0003441 , L0003434 , L0003435 , L0003436 , L0003437 , L0003438 , L0003439 , L0003440 ,
 ♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
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 *** AERMET - VERSION 16216 *** ***
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PAGE 20
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
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L0003449 ,	L0003442 , L0003443 , L0003444 , L0003445 , L0003446 , L0003447 , L0003448 ,
L0003457 ,	L0003450 , L0003451 , L0003452 , L0003453 , L0003454 , L0003455 , L0003456 ,
L0003465 ,	L0003458 , L0003459 , L0003460 , L0003461 , L0003462 , L0003463 , L0003464 ,
L0003473 ,	L0003466 , L0003467 , L0003468 , L0003469 , L0003470 , L0003471 , L0003472 ,
L0003481 ,	L0003474 , L0003475 , L0003476 , L0003477 , L0003478 , L0003479 , L0003480 ,
L0003489 ,	L0003482 , L0003483 , L0003484 , L0003485 , L0003486 , L0003487 , L0003488 ,
L0003497 ,	L0003490 , L0003491 , L0003492 , L0003493 , L0003494 , L0003495 , L0003496 ,
L0003505 ,	L0003498 , L0003499 , L0003500 , L0003501 , L0003502 , L0003503 , L0003504 ,
L0003513 ,	L0003506 , L0003507 , L0003508 , L0003509 , L0003510 , L0003511 , L0003512 ,
L0003521 ,	L0003514 , L0003515 , L0003516 , L0003517 , L0003518 , L0003519 , L0003520 ,
L0003529 ,	L0003522 , L0003523 , L0003524 , L0003525 , L0003526 , L0003527 , L0003528 ,
L0003537 ,	L0003530 , L0003531 , L0003532 , L0003533 , L0003534 , L0003535 , L0003536 ,
♀ *** AERMOD - VERSION 16216r *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc *** 05/10/18 *** AERMET - VERSION 16216 *** ***	L0003538 , L0003539 , L0003540 , L0003541 ,

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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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L0003999 L0004000	2035210.	L0003993 , L0003994 , L0003995 , L0003996 , L0003997 , L0003998 ,
L0004008	L0004001 ,	L0004002 , L0004003 , L0004004 , L0004005 , L0004006 , L0004007 ,
L0003949	L0004009 ,	L0004010 , L0004011 , L0004012 , L0003946 , L0003947 , L0003948 ,
L0003957	L0003950 ,	L0003951 , L0003952 , L0003953 , L0003954 , L0003955 , L0003956 ,
L0003965	L0003958 ,	L0003959 , L0003960 , L0003961 , L0003962 , L0003963 , L0003964 ,
L0003973	L0003966 ,	L0003967 , L0003968 , L0003969 , L0003970 , L0003971 , L0003972 ,
L0003981	L0003974 ,	L0003975 , L0003976 , L0003977 , L0003978 , L0003979 , L0003980 ,
L0003989	L0003982 ,	L0003983 , L0003984 , L0003985 , L0003986 , L0003987 , L0003988 ,
L0003862	L0003990 ,	L0003991 , L0003992 , L0003858 , L0003859 , L0003860 , L0003861 ,
L0003870	L0003863 ,	L0003864 , L0003865 , L0003866 , L0003867 , L0003868 , L0003869 ,
L0003878	L0003871 ,	L0003872 , L0003873 , L0003874 , L0003875 , L0003876 , L0003877 ,
L0003886	L0003879 ,	L0003880 , L0003881 , L0003882 , L0003883 , L0003884 , L0003885 ,
L0003894	L0003887 ,	L0003888 , L0003889 , L0003890 , L0003891 , L0003892 , L0003893 ,
L0003902	L0003895 ,	L0003896 , L0003897 , L0003898 , L0003899 , L0003900 , L0003901 ,
L0003910	L0003903 ,	L0003904 , L0003905 , L0003906 , L0003907 , L0003908 , L0003909 ,
L0003918	L0003911 ,	L0003912 , L0003913 , L0003914 , L0003915 , L0003916 , L0003917 ,
L0003926	L0003919 ,	L0003920 , L0003921 , L0003922 , L0003923 , L0003924 , L0003925 ,
L0003934	L0003927 ,	L0003928 , L0003929 , L0003930 , L0003931 , L0003932 , L0003933 ,

11182 HRA
 L0003942 , L0003935 , L0003936 , L0003937 , L0003938 , L0003939 , L0003940 , L0003941 ,
 L0003943 , L0003944 , L0003945 , L0003759 , L0003760 , L0003761 , L0003762 ,
 L0003763 ,
 *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
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 *** AERMET - VERSION 16216 *** ***
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0003771	L0003764 ,	L0003765 , L0003766 , L0003767 , L0003768 , L0003769 , L0003770 ,
L0003779	L0003772 ,	L0003773 , L0003774 , L0003775 , L0003776 , L0003777 , L0003778 ,
L0003787	L0003780 ,	L0003781 , L0003782 , L0003783 , L0003784 , L0003785 , L0003786 ,
L0003795	L0003788 ,	L0003789 , L0003790 , L0003791 , L0003792 , L0003793 , L0003794 ,
L0003803	L0003796 ,	L0003797 , L0003798 , L0003799 , L0003800 , L0003801 , L0003802 ,
L0003811	L0003804 ,	L0003805 , L0003806 , L0003807 , L0003808 , L0003809 , L0003810 ,
L0003819	L0003812 ,	L0003813 , L0003814 , L0003815 , L0003816 , L0003817 , L0003818 ,
L0003827	L0003820 ,	L0003821 , L0003822 , L0003823 , L0003824 , L0003825 , L0003826 ,
L0003835	L0003828 ,	L0003829 , L0003830 , L0003831 , L0003832 , L0003833 , L0003834 ,
L0003843	L0003836 ,	L0003837 , L0003838 , L0003839 , L0003840 , L0003841 , L0003842 ,
L0003851	L0003844 ,	L0003845 , L0003846 , L0003847 , L0003848 , L0003849 , L0003850 ,
L0003652	L0003852 ,	L0003853 , L0003854 , L0003855 , L0003856 , L0003857 , L0003651 ,
L0003660	L0003653 ,	L0003654 , L0003655 , L0003656 , L0003657 , L0003658 , L0003659 ,
L0003668	L0003661 ,	L0003662 , L0003663 , L0003664 , L0003665 , L0003666 , L0003667 ,
L0003676	L0003669 ,	L0003670 , L0003671 , L0003672 , L0003673 , L0003674 , L0003675 ,
L0003684	L0003677 ,	L0003678 , L0003679 , L0003680 , L0003681 , L0003682 , L0003683 ,

11182 HRA

L0003692 , L0003685 , L0003686 , L0003687 , L0003688 , L0003689 , L0003690 , L0003691 ,
 L0003700 , L0003693 , L0003694 , L0003695 , L0003696 , L0003697 , L0003698 , L0003699 ,
 L0003708 , L0003701 , L0003702 , L0003703 , L0003704 , L0003705 , L0003706 , L0003707 ,
 L0003716 , L0003709 , L0003710 , L0003711 , L0003712 , L0003713 , L0003714 , L0003715 ,
 ♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
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 *** AERMET - VERSION 16216 *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0003724	L0003717 ,	L0003718 , L0003719 , L0003720 , L0003721 , L0003722 , L0003723 ,
L0003732	L0003725 ,	L0003726 , L0003727 , L0003728 , L0003729 , L0003730 , L0003731 ,
L0003740	L0003733 ,	L0003734 , L0003735 , L0003736 , L0003737 , L0003738 , L0003739 ,
L0003748	L0003741 ,	L0003742 , L0003743 , L0003744 , L0003745 , L0003746 , L0003747 ,
L0003756	L0003749 ,	L0003750 , L0003751 , L0003752 , L0003753 , L0003754 , L0003755 ,
L0003547	L0003757 ,	L0003758 , L0003542 , L0003543 , L0003544 , L0003545 , L0003546 ,
L0003555	L0003548 ,	L0003549 , L0003550 , L0003551 , L0003552 , L0003553 , L0003554 ,
L0003563	L0003556 ,	L0003557 , L0003558 , L0003559 , L0003560 , L0003561 , L0003562 ,
L0003571	L0003564 ,	L0003565 , L0003566 , L0003567 , L0003568 , L0003569 , L0003570 ,
L0003579	L0003572 ,	L0003573 , L0003574 , L0003575 , L0003576 , L0003577 , L0003578 ,
L0003587	L0003580 ,	L0003581 , L0003582 , L0003583 , L0003584 , L0003585 , L0003586 ,
L0003595	L0003588 ,	L0003589 , L0003590 , L0003591 , L0003592 , L0003593 , L0003594 ,
L0003603	L0003596 ,	L0003597 , L0003598 , L0003599 , L0003600 , L0003601 , L0003602 ,
	L0003604 ,	L0003605 , L0003606 , L0003607 , L0003608 , L0003609 , L0003610 ,

11182 HRA

L0003611 ,

L0003612 , L0003613 , L0003614 , L0003615 , L0003616 , L0003617 , L0003618 ,

L0003619 ,

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L0003627 ,

L0003628 , L0003629 , L0003630 , L0003631 , L0003632 , L0003633 , L0003634 ,

L0003635 ,

L0003636 , L0003637 , L0003638 , L0003639 , L0003640 , L0003641 , L0003642 ,

L0003643 ,

L0003644 , L0003645 , L0003646 , L0003647 , L0003648 , L0003649 , L0003650 ,

L0003433 ,

L0003434 , L0003435 , L0003436 , L0003437 , L0003438 , L0003439 , L0003440 ,

L0003441 ,

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***

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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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L0003449	L0003442 , L0003443 , L0003444 , L0003445 , L0003446 , L0003447 , L0003448 ,	
L0003457	L0003450 , L0003451 , L0003452 , L0003453 , L0003454 , L0003455 , L0003456 ,	
L0003465	L0003458 , L0003459 , L0003460 , L0003461 , L0003462 , L0003463 , L0003464 ,	
L0003473	L0003466 , L0003467 , L0003468 , L0003469 , L0003470 , L0003471 , L0003472 ,	
L0003481	L0003474 , L0003475 , L0003476 , L0003477 , L0003478 , L0003479 , L0003480 ,	
L0003489	L0003482 , L0003483 , L0003484 , L0003485 , L0003486 , L0003487 , L0003488 ,	
L0003497	L0003490 , L0003491 , L0003492 , L0003493 , L0003494 , L0003495 , L0003496 ,	
L0003505	L0003498 , L0003499 , L0003500 , L0003501 , L0003502 , L0003503 , L0003504 ,	
L0003513	L0003506 , L0003507 , L0003508 , L0003509 , L0003510 , L0003511 , L0003512 ,	
L0003521	L0003514 , L0003515 , L0003516 , L0003517 , L0003518 , L0003519 , L0003520 ,	
L0003529	L0003522 , L0003523 , L0003524 , L0003525 , L0003526 , L0003527 , L0003528 ,	

11182 HRA
L0003530 , L0003531 , L0003532 , L0003533 , L0003534 , L0003535 , L0003536 ,
L0003537 ,

L0003538 , L0003539 , L0003540 , L0003541 ,
♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

(464581.1, 3768952.5, 313.2, 313.2, 0.0);	(464538.7, 3768952.9, 313.8, 313.8, 0.0);
(464504.4, 3768952.7, 314.0, 314.0, 0.0);	(464458.1, 3768953.4, 314.2, 314.2, 0.0);
(464258.6, 3768955.8, 315.0, 315.0, 0.0);	(464250.0, 3769049.9, 316.4, 316.4, 0.0);
(464299.9, 3768955.9, 315.0, 315.0, 0.0);	(464347.5, 3768953.8, 315.0, 315.0, 0.0);
(464398.7, 3768956.1, 314.3, 314.3, 0.0);	(464250.8, 3769093.9, 317.0, 317.0, 0.0);
(464250.6, 3769141.2, 318.0, 318.0, 0.0);	(464251.0, 3769180.2, 318.2, 318.2, 0.0);
(464268.6, 3769192.3, 318.2, 318.2, 0.0);	(464649.5, 3769045.8, 314.3, 314.3, 0.0);
(464661.5, 3769200.1, 316.3, 316.3, 0.0);	(462734.3, 3770016.8, 337.7, 337.7, 0.0);
(466235.2, 3770195.6, 327.0, 327.0, 0.0);	(463443.2, 3769368.5, 327.1, 327.1, 0.0);
(463795.5, 3769341.5, 323.1, 323.1, 0.0);	(463661.6, 3769395.9, 325.9, 325.9, 0.0);
(463654.6, 3769353.2, 325.1, 325.1, 0.0);	(463708.6, 3769353.2, 324.7, 324.7, 0.0);
(463468.2, 3769336.4, 326.4, 326.4, 0.0);	(464318.7, 3769194.4, 318.3, 318.3, 0.0);
(464318.2, 3769165.9, 318.0, 318.0, 0.0);	(464317.7, 3769142.6, 318.0, 318.0, 0.0);
(464318.7, 3769102.8, 317.2, 317.2, 0.0);	(464390.6, 3769024.1, 315.6, 315.6, 0.0);
(464461.5, 3769023.1, 315.2, 315.2, 0.0);	(464548.4, 3769025.2, 314.8, 314.8, 0.0);
(464589.3, 3769025.7, 314.6, 314.6, 0.0);	(464648.8, 3769140.6, 316.0, 316.0, 0.0);
(464098.3, 3769282.1, 321.0, 321.0, 0.0);	(463546.2, 3769337.5, 326.0, 326.0, 0.0);
(463624.9, 3769200.7, 323.6, 323.6, 0.0);	(463389.8, 3769342.5, 327.0, 327.0, 0.0);
(463693.0, 3769478.8, 326.9, 326.9, 0.0);	(464869.9, 3769190.9, 315.4, 315.4, 0.0);
(465137.6, 3769187.6, 316.0, 316.0, 0.0);	(465562.5, 3769185.9, 310.6, 310.6, 0.0);
(465783.2, 3769189.3, 309.1, 309.1, 0.0);	(465868.6, 3769477.0, 313.9, 313.9, 0.0);

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\11182 HRA\11182 HRA.isc ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

11182 HRA
(1=YES; 0=NO)

1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1

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

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

♀ *** AERMOD - VERSION 16216r *** 1.54, 3.09, 5.14, 8.23, 10.80, ***
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*** AERMET - VERSION 16216 *** ***
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

Surface file: FONT_V9_ADJU\FONT_v9.SFC Met Version:
16216
Profile file: FONT_V9_ADJU\FONT_v9.PFL
Surface format: FREE

Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2011 Year: 2011

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																			
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	01	01	1	01	-18.5	0.194	-9.000	-9.000	-999.	204.	41.2	0.25	2.82	1.00	1.80	69.	9.1	276.4	
5.5																			
11	01	01	1	02	-23.8	0.239	-9.000	-9.000	-999.	281.	63.0	0.25	2.82	1.00	2.20	52.	9.1	275.4	
5.5																			
11	01	01	1	03	-18.5	0.194	-9.000	-9.000	-999.	205.	41.2	0.25	2.82	1.00	1.80	32.	9.1	275.4	
5.5																			
11	01	01	1	04	-1.4	0.067	-9.000	-9.000	-999.	57.	18.3	0.25	2.82	1.00	0.40	27.	9.1	274.2	
5.5																			
11	01	01	1	05	-18.6	0.194	-9.000	-9.000	-999.	204.	41.2	0.25	2.82	1.00	1.80	51.	9.1	274.2	
5.5																			
11	01	01	1	06	-29.7	0.296	-9.000	-9.000	-999.	387.	96.6	0.25	2.82	1.00	2.70	53.	9.1	274.2	
5.5																			
11	01	01	1	07	-24.0	0.239	-9.000	-9.000	-999.	282.	63.0	0.25	2.82	1.00	2.20	70.	9.1	274.2	
5.5																			

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11 01 01	1 08	-8.4	0.138	-9.000	-9.000	-999.	127.	27.3	0.25	2.82	0.54	1.30	72.	9.1	275.4
5.5															
11 01 01	1 09	44.3	0.280	0.571	0.005	147.	356.	-43.5	0.25	2.82	0.32	2.20	67.	9.1	277.5
5.5															
11 01 01	1 10	122.7	0.264	0.952	0.005	247.	326.	-13.2	0.25	2.82	0.25	1.80	83.	9.1	279.9
5.5															
11 01 01	1 11	179.8	0.316	1.733	0.005	1017.	426.	-15.4	0.25	2.82	0.22	2.20	58.	9.1	282.0
5.5															
11 01 01	1 12	206.0	0.320	1.940	0.008	1244.	435.	-14.0	0.25	2.82	0.21	2.20	115.	9.1	283.1
5.5															
11 01 01	1 13	132.6	0.214	1.733	0.009	1377.	243.	-6.5	0.25	2.82	0.21	1.30	147.	9.1	284.2
5.5															
11 01 01	1 14	147.0	0.216	1.818	0.009	1431.	242.	-6.0	0.25	2.82	0.23	1.30	219.	9.1	284.9
5.5															
11 01 01	1 15	104.0	0.208	1.633	0.009	1468.	228.	-7.6	0.25	2.82	0.26	1.30	126.	9.1	285.4
5.5															
11 01 01	1 16	26.4	0.140	1.037	0.009	1477.	127.	-9.1	0.25	2.82	0.35	0.90	151.	9.1	284.9
5.5															
11 01 01	1 17	-9.0	0.137	-9.000	-9.000	-999.	121.	24.9	0.25	2.82	0.63	1.30	69.	9.1	283.1
5.5															
11 01 01	1 18	-33.4	0.342	-9.000	-9.000	-999.	481.	129.0	0.25	2.82	1.00	3.10	81.	9.1	281.4
5.5															
11 01 01	1 19	-33.6	0.342	-9.000	-9.000	-999.	481.	128.9	0.25	2.82	1.00	3.10	51.	9.1	279.9
5.5															
11 01 01	1 20	-23.6	0.239	-9.000	-9.000	-999.	287.	63.1	0.25	2.82	1.00	2.20	77.	9.1	278.8
5.5															
11 01 01	1 21	-18.5	0.194	-9.000	-9.000	-999.	205.	41.2	0.25	2.82	1.00	1.80	53.	9.1	277.5
5.5															
11 01 01	1 22	-23.7	0.239	-9.000	-9.000	-999.	281.	63.0	0.25	2.82	1.00	2.20	58.	9.1	277.5
5.5															
11 01 01	1 23	-18.5	0.194	-9.000	-9.000	-999.	205.	41.2	0.25	2.82	1.00	1.80	64.	9.1	277.5
5.5															
11 01 01	1 24	-4.5	0.094	-9.000	-9.000	-999.	74.	16.3	0.25	2.82	1.00	0.90	52.	9.1	277.0
5.5															

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB	TMP	sigmaA	sigmaW	sigmaV
11	01	01	01	5.5	0	-999.	-99.00	276.5	99.0	-99.00	-99.00	-99.00
11	01	01	01	9.1	1	69.	1.80	-999.0	99.0	-99.00	-99.00	-99.00

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

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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):		L0003993	L0003994	L0003995	L0003996	
L0003997	,					
		L0003998	L0003999	L0004000	L0004001	L0004002
L0004005	,					
		L0004006	L0004007	L0004008	L0004009	L0004010
						L0004011
L0003946	,					
		L0003947	L0003948	L0003949	L0003950	L0003951
						L0003952
						L0003953
. . .	,					

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

**

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

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464581.06	3768952.50	0.00043	464538.68	3768952.86	0.00047
464504.42	3768952.68	0.00049	464458.07	3768953.40	0.00050
464258.60	3768955.75	0.00035	464249.95	3769049.89	0.00051
464299.90	3768955.93	0.00040	464347.51	3768953.76	0.00044
464398.73	3768956.11	0.00049	464250.80	3769093.87	0.00062
464250.59	3769141.19	0.00076	464251.01	3769180.23	0.00092
464268.62	3769192.32	0.00113	464649.51	3769045.83	0.00061
464661.51	3769200.15	0.00153	462734.32	3770016.80	0.00002
466235.22	3770195.56	0.00005	463443.19	3769368.51	0.00080
463795.55	3769341.49	0.00030	463661.65	3769395.91	0.00024
463654.61	3769353.24	0.00028	463708.63	3769353.24	0.00028
463468.25	3769336.40	0.00053	464318.72	3769194.37	0.00228
464318.20	3769165.91	0.00197	464317.68	3769142.63	0.00155
464318.72	3769102.79	0.00109	464390.63	3769024.14	0.00081
464461.52	3769023.11	0.00089	464548.44	3769025.18	0.00080
464589.32	3769025.69	0.00070	464648.82	3769140.56	0.00140
464098.31	3769282.13	0.00062	463546.22	3769337.55	0.00034
463624.87	3769200.66	0.00065	463389.80	3769342.54	0.00069
463693.03	3769478.85	0.00018	464869.94	3769190.93	0.00058
465137.57	3769187.59	0.00044	465562.45	3769185.92	0.00038
465783.25	3769189.26	0.00040	465868.56	3769476.97	0.00042

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*** MODELOPTS: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

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

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

- -			
ALL	1ST HIGHEST VALUE IS	0.00228 AT (464318.72, 3769194.37, 318.27, 318.27, 0.00)	DC
	2ND HIGHEST VALUE IS	0.00197 AT (464318.20, 3769165.91, 318.00, 318.00, 0.00)	DC

		11182 HRA					
3RD HIGHEST VALUE IS	0.00155 AT (	464317.68,	3769142.63,	318.00,	318.00,	0.00)	DC
4TH HIGHEST VALUE IS	0.00153 AT (	464661.51,	3769200.15,	316.28,	316.28,	0.00)	DC
5TH HIGHEST VALUE IS	0.00140 AT (	464648.82,	3769140.56,	316.00,	316.00,	0.00)	DC
6TH HIGHEST VALUE IS	0.00113 AT (	464268.62,	3769192.32,	318.20,	318.20,	0.00)	DC
7TH HIGHEST VALUE IS	0.00109 AT (	464318.72,	3769102.79,	317.21,	317.21,	0.00)	DC
8TH HIGHEST VALUE IS	0.00092 AT (	464251.01,	3769180.23,	318.23,	318.23,	0.00)	DC
9TH HIGHEST VALUE IS	0.00089 AT (	464461.52,	3769023.11,	315.15,	315.15,	0.00)	DC
10TH HIGHEST VALUE IS	0.00081 AT (	464390.63,	3769024.14,	315.59,	315.59,	0.00)	DC

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

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

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

A Total of 0 Fatal Error Message(s)
 A Total of 7 Warning Message(s)
 A Total of 838 Informational Message(s)
 A Total of 43848 Hours Were Processed
 A Total of 40 Calm Hours Identified
 A Total of 798 Missing Hours Identified (1.82 Percent)

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

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

ME W186	1389	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	1389	MEOPEN: ADJ_U* Option for Low Winds used in AERMET	
MX W438	8800	METQA: Convective Velocity Data Out-of-Range. KURDAT =	12010216
MX W438	11536	METQA: Convective Velocity Data Out-of-Range. KURDAT =	12042516
MX W420	16779	METQA: Wind Speed Out-of-Range. KURDAT =	12113003
MX W450	26305	CHKDAT: Record Out of Sequence in Meteorological File at:	15010101
MX W450	26305	CHKDAT: Record Out of Sequence in Meteorological File at:	1 year gap

 *** AERMOD Finishes Successfully ***

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)
	0.00228	2.28E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	7.9E-07	2.5E-08	5.0E+00	1.4E-03	4.6E-04							
TOTAL								2.5E-08			4.6E-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)
	0.00228	2.28E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	2.4E-06	6.1E-07	5.0E+00	1.4E-03	4.6E-04							
TOTAL								6.1E-07			4.6E-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)	(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)
	0.00228	2.28E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	1.3E-06	5.7E-07	5.0E+00	1.4E-03	4.6E-04							
TOTAL								5.7E-07			4.6E-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)
	0.00228	2.28E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	5.7E-07	8.7E-08	5.0E+00	1.4E-03	4.6E-04							
TOTAL								8.7E-08			4.6E-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))	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) 1.29

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) (a) (b)	(mg/m ³) (c) (c)			URF (ug/m ³) ⁻¹ (f)	CPF (mg/kg/day) ⁻¹ (g) (g)	DOSE (mg/kg-day) (h) (h)	RISK (i) (i)	REL (ug/m ³) (j) (j)	RfD (mg/kg/day) (k) (k)	RESP (l) (l)	CNS/PNS (m) (m)	CV/BL (n) (n)	IMMUN (o) (o)	KIDN (p) (p)	GI/LV (q) (q)	REPRO (r) (r)	EYES (s) (s)
1	Diesel Particulates	1.53E-03	1.53E-06	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	2.7E-07	1.0E-07	5.0E+00	1.4E-03	3.1E-04							
TOTAL									1.1E-07			3.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
									0.11										

** Key to Toxicological Endpoints

Note:

Exposure factors used to calculate contaminant intake

RESP	Respiratory System	exposure frequency (days/year)	240
CNS/PNS	Central/Peripheral Nervous System	exposure duration (years)	25
CV/BL	Cardiovascular/Blood System	inhalation rate (L/kg-day))	271
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		

Table 6
Quantification of Carcinogenic Risks and Noncarcinogenic Risks
9-Year School Child 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	3.00E-04	3.00E-07	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	8.5E-08	3.4E-08	5.0E+00	1.4E-03	6.0E-05							
TOTAL									3.4E-08			6.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
									0.03										

** Key to Toxicological Endpoints

Note:

Exposure factors used to calculate contaminant intake

RESP	Respiratory System	exposure frequency (days/year)	180
CNS/PNS	Central/Peripheral Nervous System	exposure duration (years)	9
CV/BL	Cardiovascular/Blood System	inhalation rate (L/kg-day))	572
IMMUN	Immune System	inhalation absorption factor	1
KIDN	Kidney	averaging time (years)	70
GI/LV	Gastrointestinal System/Liver	age sensitivity factor (ages 4-13)	3
REPRO	Reproductive System (e.g. teratogenic and developmental effects)		
EYES	Eye irritation and/or other effects		

**AVERAGE EMISSION FACTOR
SCAQMD 2020 (DIESEL)**

Speed	LHD1	MHD	HHD
0	0.335222	0.132926	0.01988
5	0.046804	0.059025	0.04096
25	0.01570	0.041045	0.02327

Speed	Weighted Average Emissions
0	0.09630
5	0.04575
25	0.02576

Emission Rates - 2020 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	45			0.0963	1.08	1.254E-05
On-Site Travel	90	22.47	0.0457		1.03	1.190E-05
Off-Site Travel 30% Driveway 1 to Cedar/I-10	27	26.45	0.0258		0.68	7.888E-06
Off-Site Travel 25% Driveway 2 to Cedar/I-10	23	24.98	0.0258		0.64	7.448E-06
Off-Site Travel 5% Driveway 3 to Cedar/I-10	5	5.42	0.0258		0.14	1.616E-06
Off-Site Travel 30% Driveway 2 to Riverside/I-10	27	32.81	0.0258		0.85	9.783E-06
Off-Site Travel 10% Driveway 3 to Riverside/I-10	9	10.99	0.0258		0.28	3.277E-06