



Discovery Village

MOBILE SOURCE HEALTH RISK ASSESSMENT

CITY OF MURRIETA

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LIST OF ABBREVIATED TERMS

| | |
|---------|--|
| (1) | Reference |
| µg | Microgram |
| AERMOD | American Meteorological Society/Environmental Protection Agency Regulatory Model |
| APS | Auxiliary Power System |
| AQMD | Air Quality Management District |
| ARB | Air Resources Board |
| CEQA | California Environmental Quality Act |
| CPF | Cancer Potency Factor |
| DPM | Diesel Particulate Matter |
| EMFAC | Emission Factor Model |
| EPA | Environmental Protection Agency |
| HHD | Heavy Heavy-Duty |
| HI | Hazard Index |
| HRA | Health Risk Assessment |
| LHD | Light Heavy-Duty |
| MATES | Multiple Air Toxics Exposure Study |
| MEIR | Maximally Exposed Individual Receptor |
| MEIW | Maximally Exposed Individual Worker |
| MHD | Medium Heavy-Duty |
| NAD | North American Datum |
| OEHHA | Office of Environmental Health Hazard Assessment |
| PM10 | Particulate Matter 10 microns in diameter or less |
| Project | Discovery Village |
| REL | Reference Exposure Level |
| RM | Recommended Measures |
| SCAQMD | South Coast Air Quality Management District |
| SRA | Source Receptor Area |
| TAC | Toxic Air Contaminant |
| TA | Traffic Analysis |
| URF | Unit Risk Factor |
| UTM | Universal Transverse Mercator |
| VMT | Vehicle Miles Traveled |

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EXECUTIVE SUMMARY

This report evaluates the potential health risk impacts to sensitive receptors (which are residents) and adjacent workers associated with the development of the Project, more specifically, health risk impacts as a result of exposure to Toxic Air Contaminants (TACs) including diesel particulate matter (DPM) as a result of heavy-duty diesel trucks accessing the Innovation portion of the Project if it were to be developed with light manufacturing uses which is allowed under the Innovation designation. This section summarizes the significance criteria and Project health risks.

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

CONSTRUCTION IMPACTS

Health risks associated with construction of the proposed Project have been evaluated in a separate memo. The results of the analysis indicate that diesel particulate matter emitted during construction of the proposed Project would result in a less than significant impact for nearby sensitive receptors and workers. It is expected that construction health risk would be identical under all project scenarios.

OPERATIONAL IMPACTS

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to Project operational-source DPM emissions is Location R12 which is located approximately 1,592 feet south of the Project site at an existing residence located at 28460 Kara Street. R12 is placed in the private outdoor living areas (backyard) facing the Project site. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project operational-source DPM emissions is estimated at 0.54 in one million, which is less than the SCAQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Because all other modeled residential receptors are exposed to lesser concentrations and are located at a greater distance from the Project site and primary truck route than the MEIR analyzed herein, and TACs generally dissipate with distance from the source, all other residential receptors in the vicinity of the Project site would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby residences. The modeled receptors are illustrated on Exhibit 2-C.

Worker Exposure Scenario¹:

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

The worker receptor land use with the greatest potential exposure to Project operational-source DPM emissions is Location R11, which represents the potential worker receptor located approximately 42 feet west of the Project site. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact is 0.11 in one million, which is less than the SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Because all other modeled worker receptors are located at a greater distance than the MEIW analyzed herein, and DPM dissipates with distance from the source, all other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent workers. The modeled receptors are illustrated on Exhibit 2-C.

School Child Exposure Scenario:

The nearest school is Vista Murrieta High School, located approximately 4,100 feet south of the Project site. At the maximally exposed individual school child (MEISC), the maximum incremental cancer risk impact attributable to the Project is calculated to be 0.04 in one million, which is less than the significance threshold of 10 in one million. At this same location, non-cancer risks attributable to the Project were calculated to be <0.01, which would not exceed the applicable significance threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to nearby school children.

CONSTRUCTION AND OPERATIONAL IMPACTS

The land use with the greatest potential exposure to Project construction-source and operational-source DPM emissions is Location R10, which is located approximately 122 feet north of the Project site at an existing residence located at 28327 Cottage Way. At the MEIR, the maximum incremental cancer risk attributable to Project construction-source and operational-source DPM emissions is estimated at 8.71 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction and operational activity. All other receptors during construction and operational activity would experience less risk than what is identified for this location. The modeled receptors are illustrated on Exhibit 2-C.

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

| Time Period | Location | Maximum Lifetime Cancer Risk (Risk per Million) | Significance Threshold (Risk per Million) | Exceeds Significance Threshold |
|--------------------|---|--|--|---------------------------------------|
| 30 Year Exposure | Maximum Exposed Sensitive Receptor | 0.54 | 10 | NO |
| 25 Year Exposure | Maximum Exposed Worker Receptor | 0.11 | 10 | NO |
| 9 Year Exposure | Maximum Exposed Individual School Child | 0.04 | 10 | NO |
| Time Period | Location | Maximum Hazard Index | Significance Threshold | Exceeds Significance Threshold |
| Annual Average | Maximum Exposed Sensitive Receptor | ≤0.01 | 1.0 | NO |
| Annual Average | Maximum Exposed Worker Receptor | ≤0.01 | 1.0 | NO |
| Annual Average | Maximum Exposed Individual School Child | ≤0.01 | 1.0 | NO |

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

| Time Period | Location | Maximum Lifetime Cancer Risk (Risk per Million) | Significance Threshold (Risk per Million) | Exceeds Significance Threshold |
|--------------------|------------------------------------|--|--|---------------------------------------|
| 30 Year Exposure | Maximum Exposed Sensitive Receptor | 8.71 | 10 | NO |
| Time Period | Location | Maximum Hazard Index | Significance Threshold | Exceeds Significance Threshold |
| Annual Average | Maximum Exposed Sensitive Receptor | ≤0.01 | 1.0 | NO |

1 INTRODUCTION

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

The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (2)*. In this report the AQMD states (Page D-3):

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

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

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

1.1 SITE LOCATION

This report presents the results of the health risk assessment (HRA) for the proposed Discovery Village (“Project”), which is located east of Interstate 215 (I-215), at the southwest corner of Whitewood Road and Baxter Road in the City of Murrieta. The Project’s location in relation to the surrounding area is shown on Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project involves consideration of a large lot Tentative Tract Map (TTM) No. 38228 (eight individual parcels) (refer to Exhibit 1-B), and associated grading and infrastructure installation to facilitate future development of the Project site compliant with current General Plan and zoning designations. A portion of the Project site would be preserved as open space. For purposes of analysis, and based on existing General Plan and zoning designations, it is anticipated that future development at the Project site could also include: light manufacturing uses and commercial uses on Lot 1 through Lot 3 (18.8 gross acres/16.53 net acres), instead of or in addition to business park uses, consistent with the “Innovation” land use designation; and multifamily (low-rise) housing units (condo) and single family detached residential dwelling units on Lot 4 through Lot 8 (28.55 net acres), consistent with the existing General Plan land use designation and zoning (MF-2, Multi-Family Residential). Because light manufacturing uses generally entail more truck trips, this analysis assumes that future development associated with the Project would consist of 199 multifamily (low-rise) housing units (condo), 237 single family detached residential dwelling units, 267,000 square feet (sf) of light manufacturing use, and 5,000 sf of commercial use. The Project would also involve site-adjacent roadway improvements. It is anticipated that the Project would be developed in a single phase with an anticipated Opening Year of 2027. The proposed Project is anticipated to generate 5,056 trips per day (4,932 passenger car trips per day and 124 truck trips per day).

EXHIBIT 1-A: LOCATION MAP

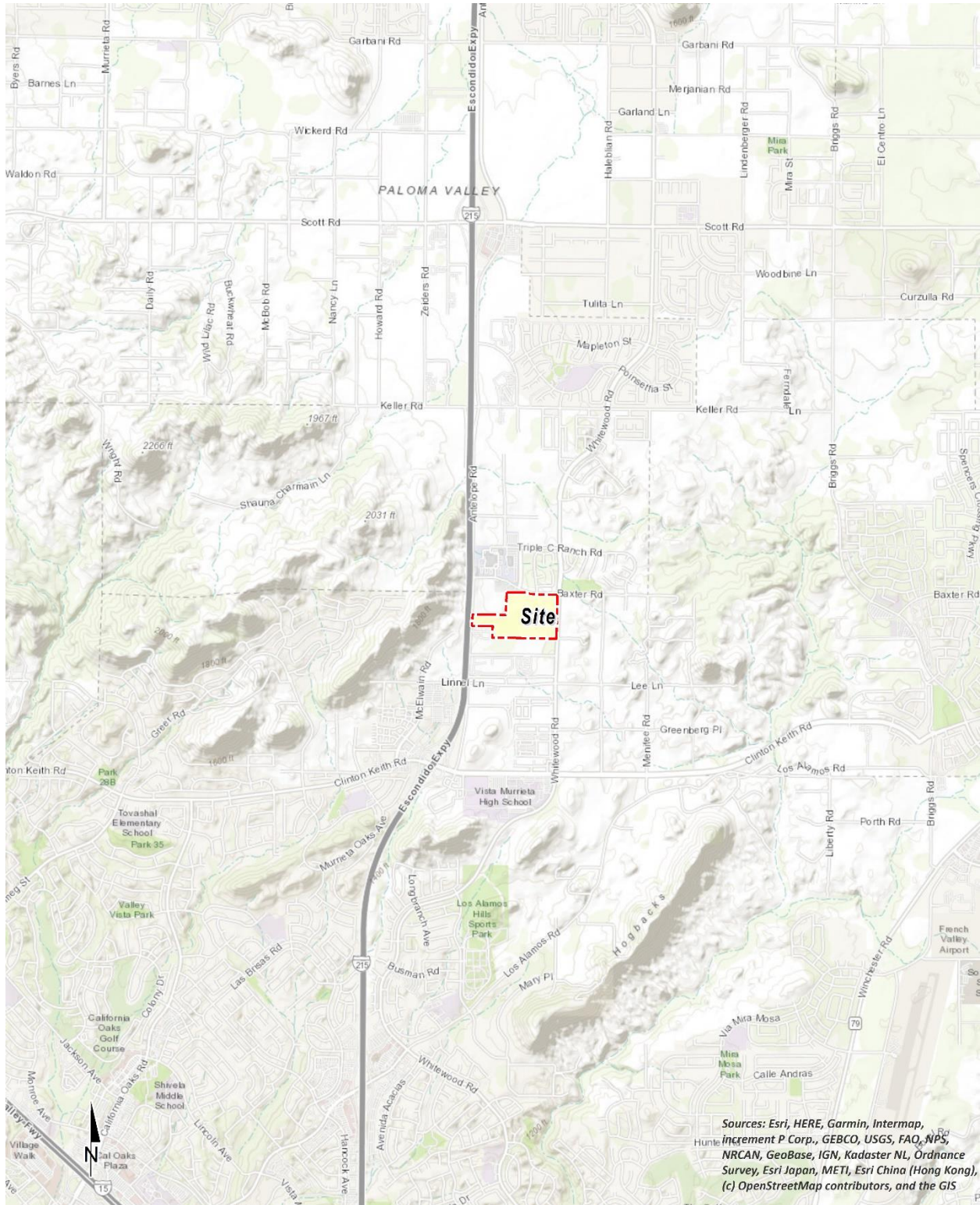
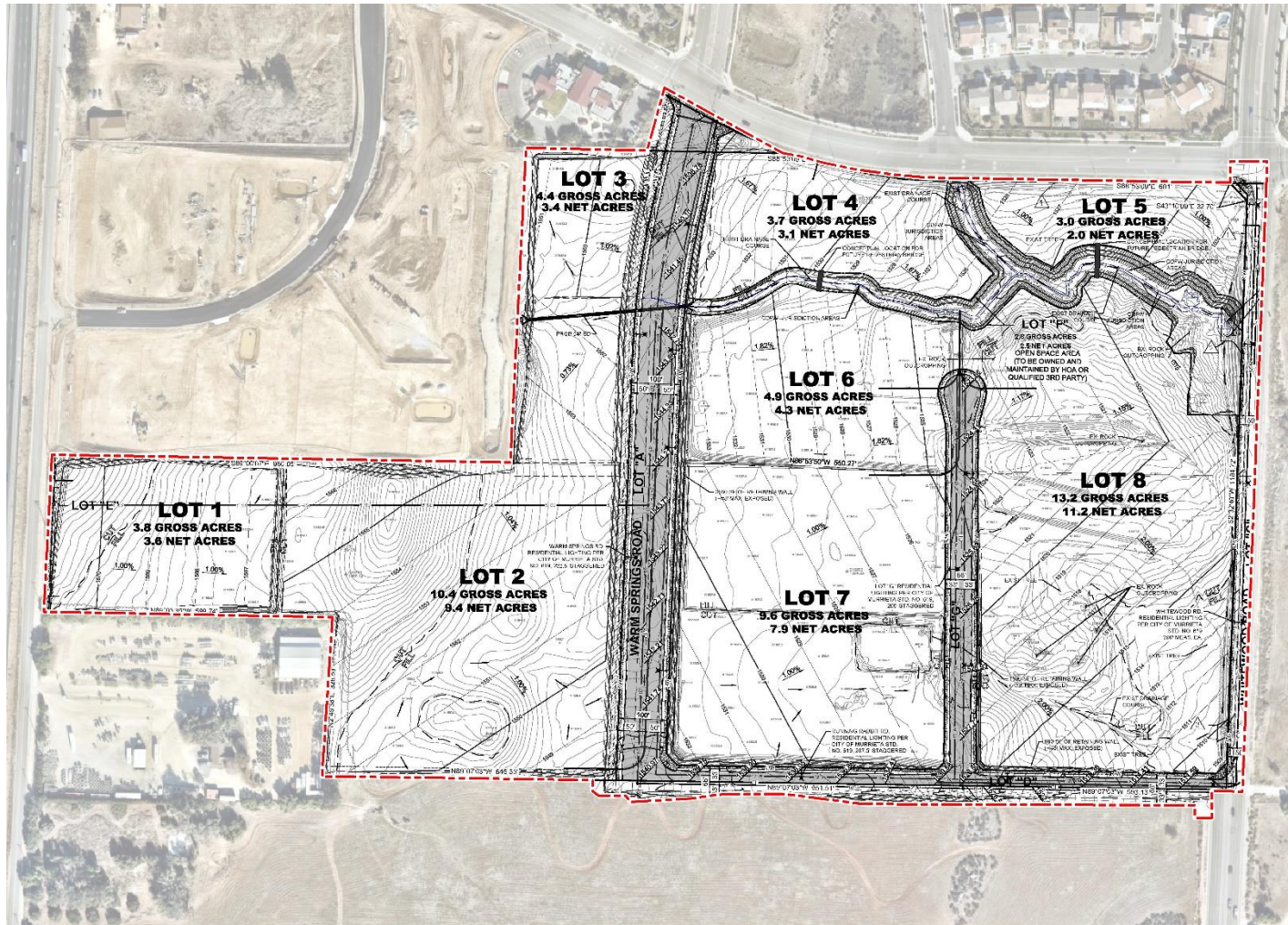


EXHIBIT 1-B: SITE PLAN



LEGEND:
 N
 Site Boundary

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2 BACKGROUND

2.1 BACKGROUND ON RECOMMENDED METHODOLOGY

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

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

2.2 OPERATIONAL HEALTH RISK ASSESSMENT

The emissions calculations for the operational HRA component are based on the truck activity associated with the business park component as presented in the *Discovery Village Air Quality Impact Analysis* ("technical study") prepared by Urban Crossroads, Inc. (3)

2.2.1 ON-SITE AND OFF-SITE TRUCK ACTIVITY

Vehicle DPM emissions were calculated using emission factors for particulate matter 10 μm in diameter or less (PM_{10}) generated with the 2021 version of the Emission FACtor model (EMFAC) developed by the CARB. EMFAC 2021 is a mathematical model that CARB developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources (4). The most recent version of this model, EMFAC 2021, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

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

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

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

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

Calculated emission factors are shown at Table 2-1. As a conservative measure, a 2027 EMFAC 2021 run was conducted and a static 2027 emissions factor data set was used for the entire duration of analysis herein (e.g., 30 years). Use of 2027 emission factors would overstate potential impacts since this approach assumes that emission factors remain “static” and do not change over time due to fleet turnover or cleaner technology with lower emissions that would be incorporated into vehicles after 2027. Additionally, based on EMFAC 2021, Light-Heavy-Duty Trucks are comprised of 59.8% diesel, Medium-Heavy-Duty Trucks are comprised of 92.1% diesel, and Heavy-Heavy-Duty Trucks are comprised of 94.9% diesel. Trucks fueled by diesel are accounted for by these percentages accordingly in the emissions factor generation. Appendix 2.1 includes additional details on the emissions estimates from EMFAC.

The vehicle DPM exhaust emissions were calculated for running exhaust emissions. The running exhaust emissions were calculated by applying the running exhaust PM₁₀ emission factor (g/VMT) from EMFAC over the total distance traveled. The following equation was used to estimate off-site emissions for each of the different vehicle classes comprising the mobile sources (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 assumed idle time (15 minutes). The following equation was used to estimate the on-site vehicle idling emissions for each of the different vehicle classes (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:

Emissions_{idle} (g/s): Vehicle emissions during idling;

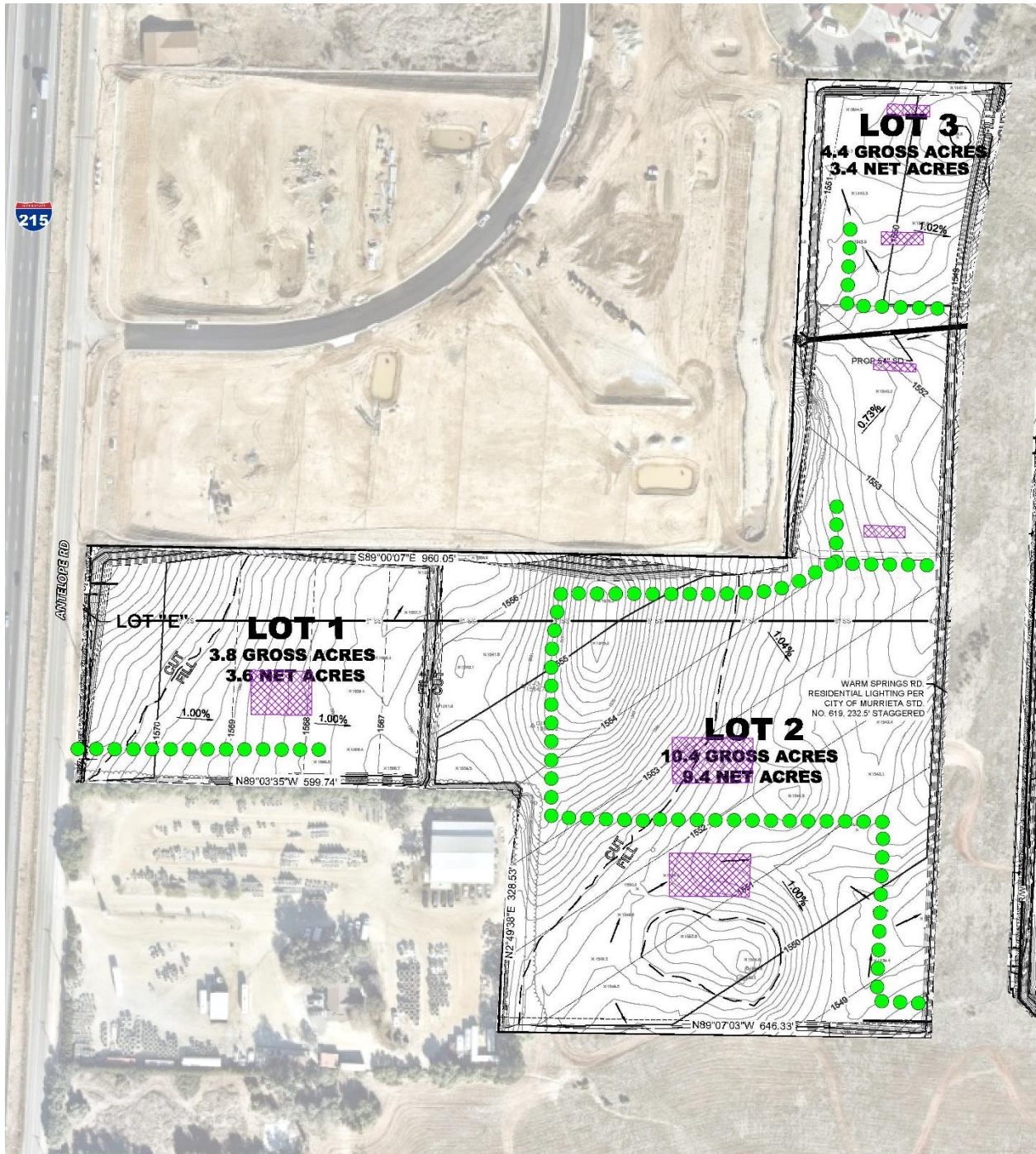
EF_{idle}(g/s): EMFAC idle exhaust PM₁₀ emission factor.

TABLE 2-1: 2027 WEIGHTED AVERAGE DPM EMISSIONS FACTORS

| Speed | Weighted Average |
|------------|---------------------|
| 0 (idling) | 0.08748 (g/idle-hr) |
| 5 | 0.01965 (g/s) |
| 25 | 0.00854 (g/s) |

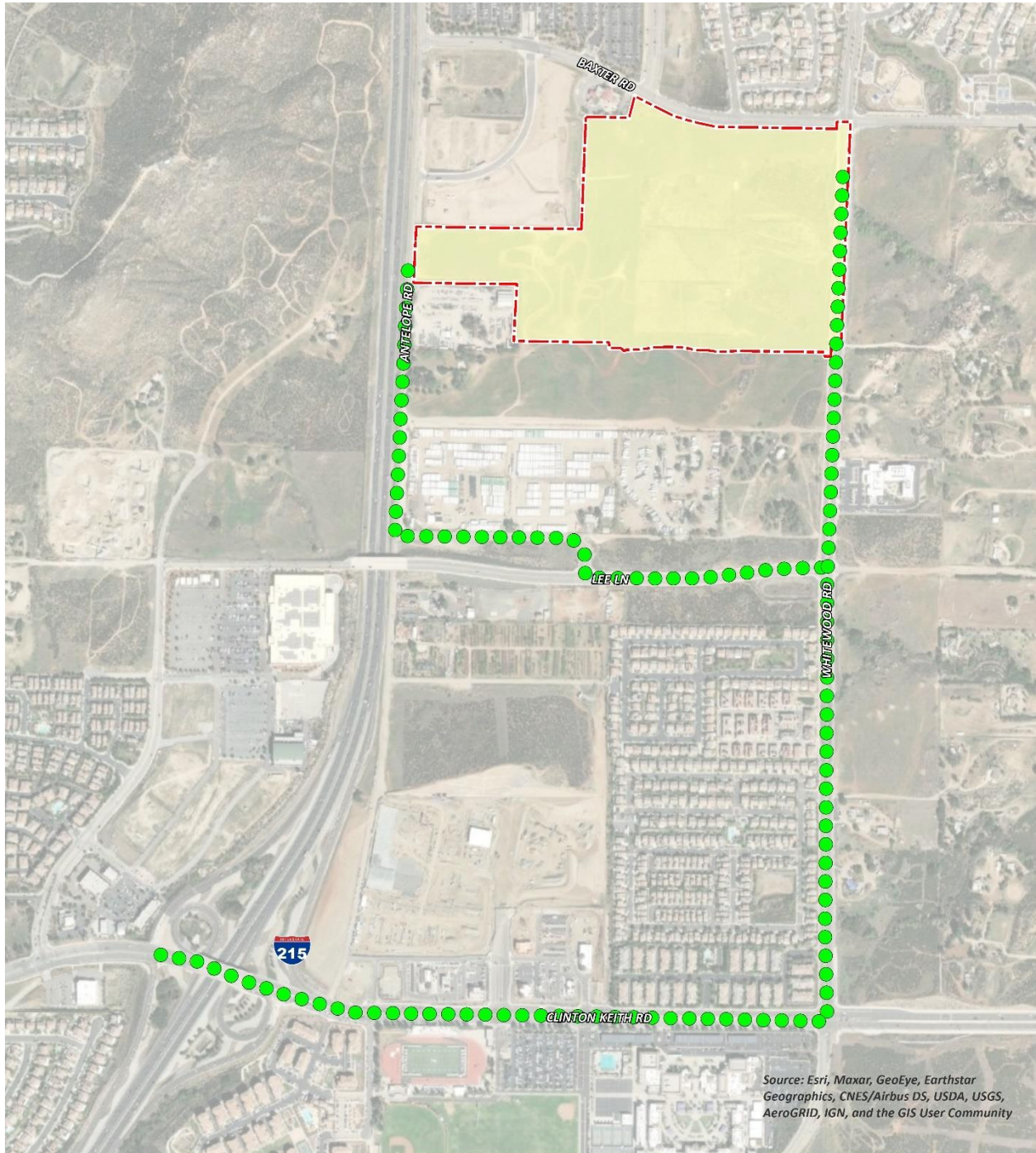
Each roadway was modeled as a line source (made up of multiple adjacent volume sources). Due to the large number of volume sources modeled for this analysis, the corresponding coordinates of each volume source have not been included in this report but are included in Appendix 2.2. The DPM emission rate 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 for on-site sources and Exhibit 2-B for off-site sources. The modeling domain is limited to the Project's primary truck route and includes off-site sources in the study area for more than $\frac{3}{4}$ mile. This modeling domain is more inclusive and conservative than using only a $\frac{1}{4}$ mile modeling domain which is the distance supported by several reputable studies which conclude that the greatest potential risks occur within a $\frac{1}{4}$ mile of the primary source of emissions (6) (in the case of the Project, the primary source of emissions is the on-site idling and on-site travel).

EXHIBIT 2-A: MODELED ON-SITE EMISSION SOURCES



LEGEND:
[Hatched Box] Loading Dock Activity [Green Dot] Truck Movements

EXHIBIT 2-B: MODELED OFF-SITE EMISSION SOURCES



LEGEND:

-  Truck Movements
-  Site Boundary

TABLE 2-2: DPM EMISSIONS FROM PROJECT TRUCKS (2027 ANALYSIS YEAR)

| Truck Emission Rates | | | | | | |
|--|----------------|---------------------------------|--|---|---|--------------------------------------|
| Source | Trucks Per Day | VMT ^a (miles/day) | Truck Emission Rate ^b (grams/mile) | Truck Emission Rate ^b (grams/idle-hour) | Daily Truck Emissions ^c (grams/day) | Modeled Emission Rates (g/second) |
| On-Site Idling - Bldg 1A/1B | 14 | | | 0.0875 | 0.30 | 3.443E-06 |
| On-Site Idling - Bldg 2A/2B | 19 | | | 0.0875 | 0.42 | 4.840E-06 |
| On-Site Idling - Bldg 2C/2D | 19 | | | 0.0875 | 0.41 | 4.704E-06 |
| On-Site Idling - Bldg 3A/3B | 5 | | | 0.0875 | 0.12 | 1.366E-06 |
| On-Site Idling - Bldg 4A/4B | 5 | | | 0.0875 | 0.12 | 1.342E-06 |
| On-Site Travel - Bldg 1A/1B | 27 | 1.77 | 0.0197 | | 0.03 | 4.033E-07 |
| On-Site Travel - Bldg 2A/2B | 38 | 8.41 | 0.0197 | | 0.17 | 1.914E-06 |
| On-Site Travel - Bldg 2C/2D | 37 | 4.22 | 0.0197 | | 0.08 | 9.592E-07 |
| On-Site Travel - Bldg 3A/3B | 11 | 0.47 | 0.0197 | | 0.01 | 1.079E-07 |
| On-Site Travel - Bldg 4A/4B | 11 | 0.54 | 0.0197 | | 0.01 | 1.235E-07 |
| Off-Site Travel - Antelope Road 22% Inbound/Outbound | 27 | 14.35 | 0.0085 | | 0.12 | 1.418E-06 |
| Off-Site Travel - Linnel Lane 22% Inbound/Outbound | 27 | 7.11 | 0.0085 | | 0.06 | 7.030E-07 |
| Off-Site Travel - Warm Springs Road 9% Inbound/Outbound | 11 | 0.71 | 0.0085 | | 0.01 | 7.027E-08 |
| Off-Site Travel - Warm Springs Road 17% Inbound/Outbound | 21 | 2.48 | 0.0085 | | 0.02 | 2.451E-07 |
| Off-Site Travel - Running Rabbit Road 78% Inbound/Outbound | 97 | 22.60 | 0.0085 | | 0.19 | 2.234E-06 |
| Off-Site Travel - Whitewood Road 78% Inbound/Outbound | 97 | 23.81 | 0.0085 | | 0.20 | 2.353E-06 |
| Off-Site Travel - Whitewood Road 100% Inbound/Outbound | 124 | 155.73 | 0.0085 | | 1.33 | 1.539E-05 |

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

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

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

On-site truck idling was estimated to occur as trucks enter and travel through the Project site. Although the Project's diesel-fueled truck and equipment operators will be required by State law to comply with CARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions be calculated assuming 15 minutes of truck idling (7), 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 calculates truck idling at 15 minutes, consistent with SCAQMD's recommendation.

As summarized in the *Discovery Village Supplemental Trip Generation and VMT Letter* prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 5,056 trips per day (4,932 passenger car trips per day and 124 truck trips per day) (8).

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). The Environmental Protection Agency's (U.S. EPA's) AERMOD model has been utilized. For purposes of this analysis, the Lakes AERMOD View (Version 11.2.0) was used to calculate annual average particulate concentrations associated with site operations. Lakes AERMOD View was utilized to incorporate the U.S. EPA's latest AERMOD Version 22112 (9).

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

Model parameters are presented in Table 2-3 (10). The model requires additional input parameters including emission data and local meteorology. Meteorological data from the SCAQMD's Lake Elsinore monitoring station was used to represent local weather conditions and prevailing winds (11).

TABLE 2-3: AERMOD MODEL PARAMETERS

| | |
|--------------------------------------|---|
| Dispersion Coefficient (Urban/Rural) | Urban (population 2,189,641) |
| Terrain (Flat/Elevated) | Elevated (Regulatory Default) |
| Averaging Time | 1 year (5-year Meteorological Data Set) |
| Receptor Height | 0 meters (Regulatory Default) |

Universal Transverse Mercator (UTM) coordinates for World Geodetic System (WGS) 84 were used to locate the Project site boundaries, each volume source location, and receptor locations in the Project vicinity. The AERMOD dispersion model summary output files for the Project are presented in Appendix 2.2. Modeled sensitive receptors were placed at residential and non-residential locations.

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

For purposes of this HRA, receptors include residential, school, and non-residential (worker) land uses in the vicinity of the Project. These receptors are included in the HRA since residents and workers may be exposed at these locations over a long-term duration of 30, 9, and 25 years, respectively. This methodology is consistent with SCAQMD and OEHHA recommended guidance.

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

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

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the 2015 OEHHA Guidelines. Tables 2-4 through 2-6 summarize the Exposure Parameters for Residents, Workers, and School Children based on 2015 OEHHA Guidelines. Appendix 2.3 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 | 1,090 | 10 | 2 | 0.85 | 350 | 24 |
| 2 to 16 | 572 | 3 | 14 | 0.72 | 350 | 24 |
| 16 to 30 | 261 | 1 | 14 | 0.73 | 350 | 24 |

TABLE 2-5: 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 | 631 | 3 | 9 | 180 | 12 |
| ^a To represent the unique characteristics of the school-based population, the assessment employed the U.S. Environmental Protection Agency's guidance to develop viable dose estimates based on reasonable maximum exposures (RME). RME's are defined as the "highest exposure that is reasonably expected to occur" for a given receptor population. As a result, lifetime risk values for the student population were adjusted to account for an exposure duration of 180 days per year for nine (9) years. The 9 year exposure duration is also consistent with OEHHA Recommendations and consistent with the exposure duration utilized in school-based risk assessments for various schools within the Los Angeles County Unified School District (LAUSD) that have been accepted by the SCAQMD. | | | | | |

2.4 CARCINOGENIC CHEMICAL RISK

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

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

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

Where:

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

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

| | | |
|---|---|---|
| [BR/BW] 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) |
| 1×10^{-6} | = | conversion factors (ug to mg, L to m3) |
| RISK _{air} = DOSE _{air} x CPF x ED/AT | | |

Where:

| | | |
|---------------------|---|---|
| DOSE _{air} | = | chronic daily intake (mg/kg/day) |
| CPF | = | cancer potency factor |
| ED | = | number of years within particular age group |
| AT | = | averaging time |

2.5 NON-CARCINOGENIC EXPOSURES

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

The non-cancer hazard index was calculated 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 DPM-SOURCE CANCER AND NON-CANCER RISKS

CONSTRUCTION IMPACTS

Health risks associated with construction of the proposed Project have been evaluated in a separate memo. The results of the analysis indicate that diesel particulate matter emitted during construction of the proposed Project would result in a less than significant impact for nearby sensitive receptors and workers. It is expected that construction health risk would be identical under all project scenarios.

OPERATIONAL IMPACTS

Residential Exposure Scenario:

The residential land use with the greatest potential exposure to Project operational-source DPM emissions is Location R12 which is located approximately 1,592 feet south of the Project site at an existing residence located at 28460 Kara Street. R12 is placed in the private outdoor living areas (backyard) facing the Project site. At the MEIR, the maximum incremental cancer risk attributable to Project operational-source DPM emissions is estimated at 0.54 in one million, which is less than the SCAQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Because all other modeled residential receptors are exposed to lesser concentrations and are located at a greater distance from the Project site and primary truck route than the MEIR analyzed herein, and TACs generally dissipates with distance from the source, all other residential receptors in the vicinity of the Project site would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby residences. The modeled receptors are illustrated on Exhibit 2-C.

Worker Exposure Scenario³:

The worker receptor land use with the greatest potential exposure to Project operational-source DPM emissions is Location R11, which represents the potential worker receptor located approximately 42 feet west of the Project site. At the MEIW, the maximum incremental cancer risk impact is 0.11 in one million, which is less than the SCAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Because all other modeled worker receptors are located at a greater distance than the MEIW analyzed herein, and DPM dissipates with distance from the source, all other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the

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

Project will not cause a significant human health or cancer risk to adjacent workers. The modeled receptors are illustrated on Exhibit 2-C.

School Child Exposure Scenario:

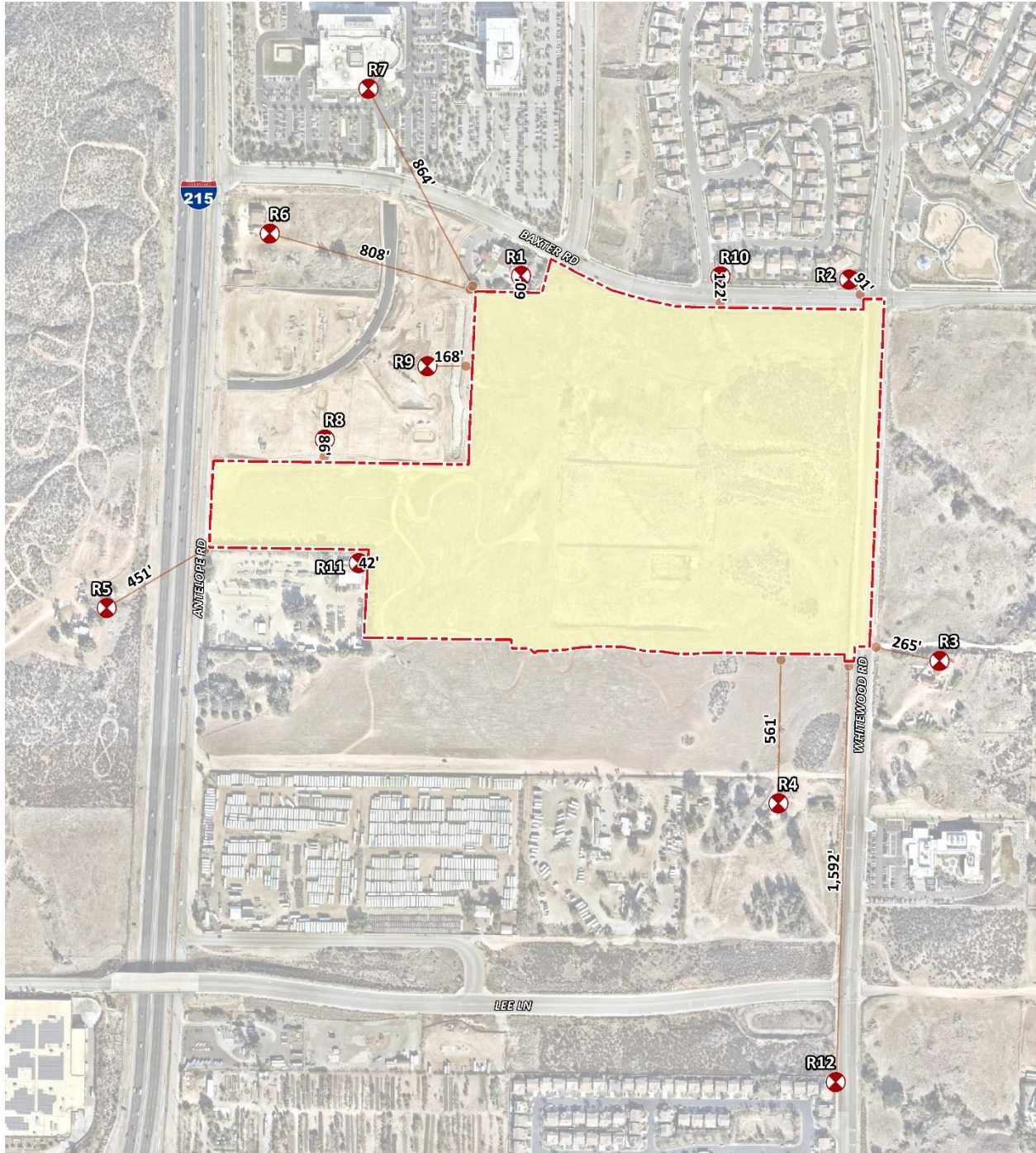
The nearest school is Vista Murrieta High School, located approximately 4,100 feet south of the Project site. At the MEISC, the maximum incremental cancer risk impact attributable to the Project is calculated to be 0.04 in one million, which is less than the significance threshold of 10 in one million. At this same location, non-cancer risks attributable to the Project were calculated to be <0.01, which would not exceed the applicable significance threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to nearby school children.

CONSTRUCTION AND OPERATIONAL IMPACTS

The land use with the greatest potential exposure to Project construction-source and operational-source DPM emissions is Location R10, which is located approximately 122 feet north of the Project site at an existing residence located at 28327 Cottage Way. At the MEIR, the maximum incremental cancer risk attributable to Project construction-source and operational-source DPM emissions is estimated at 8.71 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction and operational activity. All other receptors during construction and operational activity would experience less risk than what is identified for this location. The modeled receptors are illustrated on Exhibit 2-C.

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

EXHIBIT 2-C: RECEPTOR LOCATIONS



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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.
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3. **Urban Crossroads, Inc.** *Discovery Village Air Quality Impact Analysis.* 2023.
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5. **California Department of Transportation.** EMFAC Software. [Online]
<http://www.dot.ca.gov/hq/env/air/pages/emfac.htm>.
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9. **Environmental Protection Agency.** User's Guide for the AMS/EPA Regulatory Model (AERMOD). [Online] June 2022.
https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_userguide.pdf.
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<https://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod>.
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https://gaftp.epa.gov/Air/aqmg/SCRAM/models/related/aermap/aermap_userguide_v18081.pdf.
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<https://oehha.ca.gov/chemicals>.

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4 CERTIFICATIONS

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

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EDUCATION

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

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

PROFESSIONAL AFFILIATIONS

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

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June 2013
Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 2.1:
EMFAC EMISSIONS SUMMARY

**AVERAGE EMISSION FACTOR
RIVERSIDE COUNTY 2027**

| Speed | LHD1 | LHD2 | MHD | HHD |
|-------|----------|----------|----------|---------|
| 0 | 0.361914 | 0.585047 | 0.035313 | 0.01154 |
| 5 | 0.040744 | 0.060852 | 0.021792 | 0.01152 |
| 25 | 0.019137 | 0.029672 | 0.00591 | 0.00569 |

| Speed | Weighted Average Emissions |
|-----------|----------------------------|
| 0 | 0.08748 |
| 5 | 0.01965 |
| 25 | 0.00854 |

| 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 - Bldg 1A/1B | 14 | | | 0.0875 | 0.30 | 3.443E-06 |
| On-Site Idling - Bldg 2A/2B | 19 | | | 0.0875 | 0.42 | 4.840E-06 |
| On-Site Idling - Bldg 2C/2D | 19 | | | 0.0875 | 0.41 | 4.704E-06 |
| On-Site Idling - Bldg 3A/3B | 5 | | | 0.0875 | 0.12 | 1.366E-06 |
| On-Site Idling - Bldg 4A/4B | 5 | | | 0.0875 | 0.12 | 1.342E-06 |
| On-Site Travel - Bldg 1A/1B | 27 | 1.77 | 0.0197 | | 0.03 | 4.033E-07 |
| On-Site Travel - Bldg 2A/2B | 38 | 8.41 | 0.0197 | | 0.17 | 1.914E-06 |
| On-Site Travel - Bldg 2C/2D | 37 | 4.22 | 0.0197 | | 0.08 | 9.592E-07 |
| On-Site Travel - Bldg 3A/3B | 11 | 0.47 | 0.0197 | | 0.01 | 1.079E-07 |
| On-Site Travel - Bldg 4A/4B | 11 | 0.54 | 0.0197 | | 0.01 | 1.235E-07 |
| Off-Site Travel - Antelope Road 22% Inbound/Outbound | 27 | 14.35 | 0.0085 | | 0.12 | 1.418E-06 |
| Off-Site Travel - Linnel Lane 22% Inbound/Outbound | 27 | 7.11 | 0.0085 | | 0.06 | 7.030E-07 |
| Off-Site Travel - Warm Springs Road 9% Inbound/Outbound | 11 | 0.71 | 0.0085 | | 0.01 | 7.027E-08 |
| Off-Site Travel - Warm Springs Road 17% Inbound/Outbound | 21 | 2.48 | 0.0085 | | 0.02 | 2.451E-07 |
| Off-Site Travel - Running Rabbit Road 78% Inbound/Outbound | 97 | 22.60 | 0.0085 | | 0.19 | 2.234E-06 |
| Off-Site Travel - Whitewood Road 78% Inbound/Outbound | 97 | 23.81 | 0.0085 | | 0.20 | 2.353E-06 |
| Off-Site Travel - Whitewood Road 100% Inbound/Outbound | 124 | 155.73 | 0.0085 | | 1.33 | 1.539E-05 |

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

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

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

| calendar_y | season_m | sub_area | vehicle_class | fuel | temperatur | relative_hu | process | speed_tim | pollutant | emission_rate |
|------------|----------|-----------|---------------|------|------------|-------------|---------|-----------|-----------|---------------|
| 2027 | Annual | Riverside | (HHDT | Dsl | 60 | 70 | RUNEX | 5 | PM10 | 0.012147 |
| 2027 | Annual | Riverside | (HHDT | Dsl | 60 | 70 | RUNEX | 25 | PM10 | 0.006001 |
| 2027 | Annual | Riverside | (HHDT | Dsl | | | IDLEX | | PM10 | 0.01216 |
| 2027 | Annual | Riverside | (LHDT1 | Dsl | 60 | 70 | RUNEX | 5 | PM10 | 0.088669 |
| 2027 | Annual | Riverside | (LHDT1 | Dsl | 60 | 70 | RUNEX | 25 | PM10 | 0.041647 |
| 2027 | Annual | Riverside | (LHDT1 | Dsl | | | IDLEX | | PM10 | 0.787613 |
| 2027 | Annual | Riverside | (LHDT2 | Dsl | 60 | 70 | RUNEX | 5 | PM10 | 0.082516 |
| 2027 | Annual | Riverside | (LHDT2 | Dsl | 60 | 70 | RUNEX | 25 | PM10 | 0.040236 |
| 2027 | Annual | Riverside | (LHDT2 | Dsl | | | IDLEX | | PM10 | 0.79333 |
| 2027 | Annual | Riverside | (MHDT | Dsl | 60 | 70 | RUNEX | 5 | PM10 | 0.023664 |
| 2027 | Annual | Riverside | (MHDT | Dsl | 60 | 70 | RUNEX | 25 | PM10 | 0.006417 |
| 2027 | Annual | Riverside | (MHDT | Dsl | | | IDLEX | | PM10 | 0.038346 |

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2027

Season: Annual

Vehicle Classification: EMFAC2007 Categories

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

| Region | Calendar | Vehicle C | Model Year | Speed | Fuel | Population |
|-----------|----------|-----------|------------|-----------|-------------|------------|
| Riverside | 2027 | HHDT | Aggregate | Aggregate | Gasoline | 4.41759 |
| Riverside | 2027 | HHDT | Aggregate | Aggregate | Diesel | 16021.1 |
| Riverside | 2027 | HHDT | Aggregate | Aggregate | Natural Gas | 859.737 |
| Riverside | 2027 | LHDT1 | Aggregate | Aggregate | Gasoline | 17212.1 |
| Riverside | 2027 | LHDT1 | Aggregate | Aggregate | Diesel | 14633.1 |
| Riverside | 2027 | LHDT2 | Aggregate | Aggregate | Gasoline | 2393.26 |
| Riverside | 2027 | LHDT2 | Aggregate | Aggregate | Diesel | 6722.42 |
| Riverside | 2027 | MHDT | Aggregate | Aggregate | Gasoline | 1187.04 |
| Riverside | 2027 | MHDT | Aggregate | Aggregate | Diesel | 13823.9 |
| Riverside | 2027 | MHDT | Aggregate | Aggregate | Natural Gas | 191.186 |

HHDT% GAS/NG 0.05118

HHDT% DSL 0.94882

LHDT1% GAS 0.54049

LHDT1% DSL 0.45951

LHDT2% GAS 0.26254

LHDT2% DSL 0.73746

MHDT% GAS 0.07908

MHDT% DSL 0.92092

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APPENDIX 2.2:
AERMOD MODEL INPUT/OUTPUT

**

**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 1/26/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery Village\14073 Ops\14073 Ops.ADI
**

**
**

** AERMOD Control Pathway

**
**

CO STARTING
TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery Village\14073 O
MODELOPT DFAULT CONC
AVERTIME ANNUAL
URBANOPT 2189641 Riverside_County
POLLUTID DPM
RUNORNOT RUN
ERRORFIL "14073 Ops.err"

CO FINISHED
**

** AERMOD Source Pathway

**
**

SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----

** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC 1A1B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 3.443E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484218.775, 3718921.277, 477.22, 3.49, 4.00
** 484244.954, 3718921.277, 476.16, 3.49, 4.00
** -----

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000493 | VOLUME | 484223.070 | 3718921.277 | 476.58 |
| LOCATION L0000494 | VOLUME | 484231.660 | 3718921.277 | 476.30 |
| LOCATION L0000495 | VOLUME | 484240.250 | 3718921.277 | 476.01 |

** End of LINE VOLUME Source ID = SLINE1
** -----

** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE2
** DESCRSRC 2A2B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 4.84E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484395.648, 3718894.487, 470.38, 3.49, 4.00
** 484429.494, 3718894.088, 469.13, 3.49, 4.00


```

** -----
LOCATION L0000496      VOLUME  484399.943 3718894.436 469.82
LOCATION L0000497      VOLUME  484408.532 3718894.335 469.47
LOCATION L0000498      VOLUME  484417.121 3718894.234 469.12
LOCATION L0000499      VOLUME  484425.711 3718894.133 469.00
** End of LINE VOLUME Source ID = SLINE2
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC 2C2D Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 4.704E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484394.652, 3718846.903, 469.02, 3.49, 4.00
** 484428.498, 3718846.505, 469.00, 3.49, 4.00
** -----
LOCATION L0000500      VOLUME  484398.947 3718846.853 469.00
LOCATION L0000501      VOLUME  484407.536 3718846.752 469.00
LOCATION L0000502      VOLUME  484416.126 3718846.650 469.00
LOCATION L0000503      VOLUME  484424.715 3718846.549 469.00
** End of LINE VOLUME Source ID = SLINE3
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE4
** DESCRSRC 3A3B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 1.366E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484484.244, 3718983.282, 467.84, 3.49, 4.00
** 484485.041, 3719000.803, 467.90, 3.49, 4.00
** -----
LOCATION L0000504      VOLUME  484484.440 3718987.573 467.79
LOCATION L0000505      VOLUME  484484.830 3718996.154 467.67
** End of LINE VOLUME Source ID = SLINE4
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE5
** DESCRSRC 4A4B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 1.342E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484491.014, 3719105.725, 464.67, 3.49, 4.00
** 484491.810, 3719123.245, 464.76, 3.49, 4.00
** -----
LOCATION L0000506      VOLUME  484491.209 3719110.015 464.50
LOCATION L0000507      VOLUME  484491.599 3719118.597 464.70
** End of LINE VOLUME Source ID = SLINE5
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE6
** DESCRSRC 1A1B Onsite
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent

```

** Emission Rate = 4.033E-07
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484151.434, 3718897.591, 480.86, 3.49, 4.00
** 484256.373, 3718897.591, 475.05, 3.49, 4.00

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000508 | VOLUME | 484155.729 | 3718897.591 | 480.34 |
| LOCATION L0000509 | VOLUME | 484164.319 | 3718897.591 | 479.77 |
| LOCATION L0000510 | VOLUME | 484172.909 | 3718897.591 | 479.19 |
| LOCATION L0000511 | VOLUME | 484181.499 | 3718897.591 | 478.59 |
| LOCATION L0000512 | VOLUME | 484190.089 | 3718897.591 | 477.81 |
| LOCATION L0000513 | VOLUME | 484198.679 | 3718897.591 | 477.03 |
| LOCATION L0000514 | VOLUME | 484207.269 | 3718897.591 | 476.25 |
| LOCATION L0000515 | VOLUME | 484215.859 | 3718897.591 | 475.81 |
| LOCATION L0000516 | VOLUME | 484224.449 | 3718897.591 | 475.52 |
| LOCATION L0000517 | VOLUME | 484233.039 | 3718897.591 | 475.23 |
| LOCATION L0000518 | VOLUME | 484241.629 | 3718897.591 | 474.98 |
| LOCATION L0000519 | VOLUME | 484250.219 | 3718897.591 | 474.90 |

** End of LINE VOLUME Source ID = SLINE6

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE7

** DESCRSRC 2A2B Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.914E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 8

** 484509.032, 3718977.103, 467.74, 3.49, 4.00
** 484459.749, 3718976.779, 468.91, 3.49, 4.00
** 484451.319, 3718972.240, 469.03, 3.49, 4.00
** 484441.268, 3718966.079, 469.22, 3.49, 4.00
** 484426.353, 3718964.782, 470.97, 3.49, 4.00
** 484345.943, 3718965.755, 475.92, 3.49, 4.00
** 484343.998, 3718870.431, 471.61, 3.49, 4.00
** 484436.728, 3718869.458, 469.00, 3.49, 4.00

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000520 | VOLUME | 484504.737 | 3718977.075 | 467.39 |
| LOCATION L0000521 | VOLUME | 484496.147 | 3718977.019 | 467.60 |
| LOCATION L0000522 | VOLUME | 484487.558 | 3718976.962 | 467.82 |
| LOCATION L0000523 | VOLUME | 484478.968 | 3718976.905 | 468.04 |
| LOCATION L0000524 | VOLUME | 484470.378 | 3718976.849 | 468.32 |
| LOCATION L0000525 | VOLUME | 484461.788 | 3718976.792 | 468.61 |
| LOCATION L0000526 | VOLUME | 484453.981 | 3718973.673 | 468.87 |
| LOCATION L0000527 | VOLUME | 484446.573 | 3718969.331 | 469.24 |
| LOCATION L0000528 | VOLUME | 484438.909 | 3718965.874 | 469.74 |
| LOCATION L0000529 | VOLUME | 484430.351 | 3718965.130 | 470.29 |
| LOCATION L0000530 | VOLUME | 484421.777 | 3718964.838 | 470.85 |
| LOCATION L0000531 | VOLUME | 484413.187 | 3718964.942 | 472.10 |
| LOCATION L0000532 | VOLUME | 484404.598 | 3718965.046 | 473.52 |
| LOCATION L0000533 | VOLUME | 484396.009 | 3718965.150 | 474.95 |
| LOCATION L0000534 | VOLUME | 484387.419 | 3718965.253 | 475.95 |
| LOCATION L0000535 | VOLUME | 484378.830 | 3718965.357 | 475.97 |
| LOCATION L0000536 | VOLUME | 484370.241 | 3718965.461 | 475.98 |
| LOCATION L0000537 | VOLUME | 484361.651 | 3718965.565 | 475.98 |
| LOCATION L0000538 | VOLUME | 484353.062 | 3718965.669 | 475.99 |
| LOCATION L0000539 | VOLUME | 484345.913 | 3718964.284 | 475.94 |
| LOCATION L0000540 | VOLUME | 484345.738 | 3718955.696 | 475.66 |
| LOCATION L0000541 | VOLUME | 484345.563 | 3718947.108 | 475.37 |
| LOCATION L0000542 | VOLUME | 484345.388 | 3718938.520 | 475.08 |
| LOCATION L0000543 | VOLUME | 484345.212 | 3718929.932 | 474.70 |
| LOCATION L0000544 | VOLUME | 484345.037 | 3718921.343 | 474.27 |
| LOCATION L0000545 | VOLUME | 484344.862 | 3718912.755 | 473.84 |

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000546 | VOLUME | 484344.686 | 3718904.167 | 473.39 |
| LOCATION | L0000547 | VOLUME | 484344.511 | 3718895.579 | 472.82 |
| LOCATION | L0000548 | VOLUME | 484344.336 | 3718886.991 | 472.26 |
| LOCATION | L0000549 | VOLUME | 484344.161 | 3718878.402 | 471.69 |
| LOCATION | L0000550 | VOLUME | 484344.615 | 3718870.425 | 471.33 |
| LOCATION | L0000551 | VOLUME | 484353.204 | 3718870.334 | 471.04 |
| LOCATION | L0000552 | VOLUME | 484361.794 | 3718870.244 | 470.70 |
| LOCATION | L0000553 | VOLUME | 484370.384 | 3718870.154 | 470.18 |
| LOCATION | L0000554 | VOLUME | 484378.973 | 3718870.064 | 469.66 |
| LOCATION | L0000555 | VOLUME | 484387.563 | 3718869.974 | 469.15 |
| LOCATION | L0000556 | VOLUME | 484396.152 | 3718869.884 | 469.00 |
| LOCATION | L0000557 | VOLUME | 484404.742 | 3718869.794 | 469.00 |
| LOCATION | L0000558 | VOLUME | 484413.331 | 3718869.704 | 469.00 |
| LOCATION | L0000559 | VOLUME | 484421.921 | 3718869.614 | 469.00 |
| LOCATION | L0000560 | VOLUME | 484430.510 | 3718869.524 | 469.00 |

** End of LINE VOLUME Source ID = SLINE7

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE8

** DESCRSRC 2C2D Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 9.592E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 4

** 484396.600, 3718870.414, 469.08, 3.49, 4.00

** 484484.468, 3718869.441, 469.00, 3.49, 4.00

** 484482.199, 3718795.515, 469.00, 3.49, 4.00

** 484502.950, 3718794.867, 469.00, 3.49, 4.00

**

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000561 | VOLUME | 484400.894 | 3718870.367 | 469.00 |
| LOCATION | L0000562 | VOLUME | 484409.484 | 3718870.272 | 469.00 |
| LOCATION | L0000563 | VOLUME | 484418.073 | 3718870.176 | 469.00 |
| LOCATION | L0000564 | VOLUME | 484426.663 | 3718870.081 | 469.00 |
| LOCATION | L0000565 | VOLUME | 484435.252 | 3718869.986 | 469.00 |
| LOCATION | L0000566 | VOLUME | 484443.842 | 3718869.891 | 469.00 |
| LOCATION | L0000567 | VOLUME | 484452.431 | 3718869.796 | 469.00 |
| LOCATION | L0000568 | VOLUME | 484461.021 | 3718869.701 | 469.00 |
| LOCATION | L0000569 | VOLUME | 484469.610 | 3718869.606 | 469.00 |
| LOCATION | L0000570 | VOLUME | 484478.200 | 3718869.511 | 469.00 |
| LOCATION | L0000571 | VOLUME | 484484.397 | 3718867.122 | 469.00 |
| LOCATION | L0000572 | VOLUME | 484484.133 | 3718858.536 | 469.00 |
| LOCATION | L0000573 | VOLUME | 484483.870 | 3718849.950 | 469.00 |
| LOCATION | L0000574 | VOLUME | 484483.606 | 3718841.364 | 468.98 |
| LOCATION | L0000575 | VOLUME | 484483.343 | 3718832.778 | 468.95 |
| LOCATION | L0000576 | VOLUME | 484483.079 | 3718824.192 | 468.93 |
| LOCATION | L0000577 | VOLUME | 484482.815 | 3718815.606 | 468.91 |
| LOCATION | L0000578 | VOLUME | 484482.552 | 3718807.020 | 468.94 |
| LOCATION | L0000579 | VOLUME | 484482.288 | 3718798.434 | 468.97 |
| LOCATION | L0000580 | VOLUME | 484487.866 | 3718795.338 | 468.92 |
| LOCATION | L0000581 | VOLUME | 484496.451 | 3718795.070 | 468.83 |

** End of LINE VOLUME Source ID = SLINE8

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE9

** DESCRSRC 3A3B Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.079E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 3

** 484461.992, 3718999.520, 468.88, 3.49, 4.00

** 484462.191, 3718976.024, 468.82, 3.49, 4.00
** 484509.384, 3718977.019, 467.74, 3.49, 4.00

** -----
LOCATION L0000582 VOLUME 484462.029 3718995.226 468.60
LOCATION L0000583 VOLUME 484462.101 3718986.636 468.60
LOCATION L0000584 VOLUME 484462.174 3718978.046 468.59
LOCATION L0000585 VOLUME 484468.757 3718976.162 468.38
LOCATION L0000586 VOLUME 484477.345 3718976.343 468.09
LOCATION L0000587 VOLUME 484485.933 3718976.525 467.86
LOCATION L0000588 VOLUME 484494.521 3718976.706 467.65
LOCATION L0000589 VOLUME 484503.110 3718976.887 467.44

** End of LINE VOLUME Source ID = SLINE9

** -----
** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE10

** DESCRSRC 4A4B Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.235E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 3

** 484467.552, 3719121.585, 465.79, 3.49, 4.00

** 484467.277, 3719086.031, 465.17, 3.49, 4.00

** 484514.130, 3719085.756, 463.96, 3.49, 4.00

** -----
LOCATION L0000590 VOLUME 484467.519 3719117.290 465.88
LOCATION L0000591 VOLUME 484467.452 3719108.700 465.59
LOCATION L0000592 VOLUME 484467.386 3719100.111 465.31
LOCATION L0000593 VOLUME 484467.319 3719091.521 465.03
LOCATION L0000594 VOLUME 484470.377 3719086.013 464.64
LOCATION L0000595 VOLUME 484478.967 3719085.963 464.07
LOCATION L0000596 VOLUME 484487.557 3719085.912 464.00
LOCATION L0000597 VOLUME 484496.146 3719085.862 464.00
LOCATION L0000598 VOLUME 484504.736 3719085.811 463.99
LOCATION L0000599 VOLUME 484513.326 3719085.760 463.88

** End of LINE VOLUME Source ID = SLINE10

** -----
** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE11

** DESCRSRC 1A1B Antelope Offsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.418E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 12

** 484139.332, 3718898.546, 481.64, 3.49, 4.00

** 484134.468, 3718788.277, 479.08, 3.49, 4.00

** 484124.089, 3718558.009, 474.86, 3.49, 4.00

** 484121.495, 3718434.767, 472.94, 3.49, 4.00

** 484180.521, 3718432.497, 471.00, 3.49, 4.00

** 484375.114, 3718432.497, 468.00, 3.49, 4.00

** 484419.221, 3718432.173, 468.04, 3.49, 4.00

** 484439.654, 3718430.551, 468.69, 3.49, 4.00

** 484451.329, 3718421.794, 468.95, 3.49, 4.00

** 484455.545, 3718410.119, 468.48, 3.49, 4.00

** 484456.843, 3718392.930, 467.94, 3.49, 4.00

** 484456.194, 3718370.876, 466.87, 3.49, 4.00

** -----
LOCATION L0000600 VOLUME 484139.143 3718894.255 481.19
LOCATION L0000601 VOLUME 484138.764 3718885.674 480.82
LOCATION L0000602 VOLUME 484138.386 3718877.092 480.44
LOCATION L0000603 VOLUME 484138.007 3718868.510 480.25

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000604 | VOLUME | 484137.629 | 3718859.929 | 480.10 |
| LOCATION | L0000605 | VOLUME | 484137.250 | 3718851.347 | 479.95 |
| LOCATION | L0000606 | VOLUME | 484136.871 | 3718842.765 | 479.77 |
| LOCATION | L0000607 | VOLUME | 484136.493 | 3718834.184 | 479.51 |
| LOCATION | L0000608 | VOLUME | 484136.114 | 3718825.602 | 479.25 |
| LOCATION | L0000609 | VOLUME | 484135.736 | 3718817.020 | 478.99 |
| LOCATION | L0000610 | VOLUME | 484135.357 | 3718808.439 | 478.98 |
| LOCATION | L0000611 | VOLUME | 484134.978 | 3718799.857 | 479.00 |
| LOCATION | L0000612 | VOLUME | 484134.600 | 3718791.276 | 479.03 |
| LOCATION | L0000613 | VOLUME | 484134.216 | 3718782.694 | 478.83 |
| LOCATION | L0000614 | VOLUME | 484133.829 | 3718774.113 | 478.29 |
| LOCATION | L0000615 | VOLUME | 484133.442 | 3718765.532 | 477.74 |
| LOCATION | L0000616 | VOLUME | 484133.056 | 3718756.950 | 477.19 |
| LOCATION | L0000617 | VOLUME | 484132.669 | 3718748.369 | 476.75 |
| LOCATION | L0000618 | VOLUME | 484132.282 | 3718739.788 | 476.32 |
| LOCATION | L0000619 | VOLUME | 484131.895 | 3718731.206 | 475.88 |
| LOCATION | L0000620 | VOLUME | 484131.509 | 3718722.625 | 475.62 |
| LOCATION | L0000621 | VOLUME | 484131.122 | 3718714.044 | 475.63 |
| LOCATION | L0000622 | VOLUME | 484130.735 | 3718705.463 | 475.64 |
| LOCATION | L0000623 | VOLUME | 484130.348 | 3718696.881 | 475.66 |
| LOCATION | L0000624 | VOLUME | 484129.962 | 3718688.300 | 475.67 |
| LOCATION | L0000625 | VOLUME | 484129.575 | 3718679.719 | 475.68 |
| LOCATION | L0000626 | VOLUME | 484129.188 | 3718671.137 | 475.69 |
| LOCATION | L0000627 | VOLUME | 484128.801 | 3718662.556 | 475.59 |
| LOCATION | L0000628 | VOLUME | 484128.415 | 3718653.975 | 475.32 |
| LOCATION | L0000629 | VOLUME | 484128.028 | 3718645.393 | 475.05 |
| LOCATION | L0000630 | VOLUME | 484127.641 | 3718636.812 | 474.77 |
| LOCATION | L0000631 | VOLUME | 484127.254 | 3718628.231 | 474.56 |
| LOCATION | L0000632 | VOLUME | 484126.867 | 3718619.650 | 474.35 |
| LOCATION | L0000633 | VOLUME | 484126.481 | 3718611.068 | 474.13 |
| LOCATION | L0000634 | VOLUME | 484126.094 | 3718602.487 | 474.00 |
| LOCATION | L0000635 | VOLUME | 484125.707 | 3718593.906 | 474.00 |
| LOCATION | L0000636 | VOLUME | 484125.320 | 3718585.324 | 474.00 |
| LOCATION | L0000637 | VOLUME | 484124.934 | 3718576.743 | 474.00 |
| LOCATION | L0000638 | VOLUME | 484124.547 | 3718568.162 | 474.22 |
| LOCATION | L0000639 | VOLUME | 484124.160 | 3718559.581 | 474.47 |
| LOCATION | L0000640 | VOLUME | 484123.942 | 3718550.994 | 474.72 |
| LOCATION | L0000641 | VOLUME | 484123.761 | 3718542.406 | 474.87 |
| LOCATION | L0000642 | VOLUME | 484123.580 | 3718533.818 | 474.88 |
| LOCATION | L0000643 | VOLUME | 484123.399 | 3718525.229 | 474.89 |
| LOCATION | L0000644 | VOLUME | 484123.218 | 3718516.641 | 474.89 |
| LOCATION | L0000645 | VOLUME | 484123.038 | 3718508.053 | 474.63 |
| LOCATION | L0000646 | VOLUME | 484122.857 | 3718499.465 | 474.35 |
| LOCATION | L0000647 | VOLUME | 484122.676 | 3718490.877 | 474.07 |
| LOCATION | L0000648 | VOLUME | 484122.495 | 3718482.289 | 473.91 |
| LOCATION | L0000649 | VOLUME | 484122.314 | 3718473.701 | 473.89 |
| LOCATION | L0000650 | VOLUME | 484122.134 | 3718465.113 | 473.88 |
| LOCATION | L0000651 | VOLUME | 484121.953 | 3718456.525 | 473.87 |
| LOCATION | L0000652 | VOLUME | 484121.772 | 3718447.937 | 473.63 |
| LOCATION | L0000653 | VOLUME | 484121.591 | 3718439.348 | 473.37 |
| LOCATION | L0000654 | VOLUME | 484125.499 | 3718434.613 | 473.05 |
| LOCATION | L0000655 | VOLUME | 484134.083 | 3718434.283 | 472.68 |
| LOCATION | L0000656 | VOLUME | 484142.667 | 3718433.953 | 472.31 |
| LOCATION | L0000657 | VOLUME | 484151.250 | 3718433.623 | 471.97 |
| LOCATION | L0000658 | VOLUME | 484159.834 | 3718433.293 | 471.75 |
| LOCATION | L0000659 | VOLUME | 484168.418 | 3718432.963 | 471.53 |
| LOCATION | L0000660 | VOLUME | 484177.001 | 3718432.632 | 471.30 |
| LOCATION | L0000661 | VOLUME | 484185.589 | 3718432.497 | 470.99 |
| LOCATION | L0000662 | VOLUME | 484194.179 | 3718432.497 | 470.64 |
| LOCATION | L0000663 | VOLUME | 484202.769 | 3718432.497 | 470.29 |
| LOCATION | L0000664 | VOLUME | 484211.359 | 3718432.497 | 470.00 |
| LOCATION | L0000665 | VOLUME | 484219.949 | 3718432.497 | 470.00 |
| LOCATION | L0000666 | VOLUME | 484228.539 | 3718432.497 | 470.00 |
| LOCATION | L0000667 | VOLUME | 484237.129 | 3718432.497 | 470.00 |
| LOCATION | L0000668 | VOLUME | 484245.719 | 3718432.497 | 469.81 |
| LOCATION | L0000669 | VOLUME | 484254.309 | 3718432.497 | 469.52 |

| LOCATION | VOLUME | | | | |
|----------|------------|-------------|--------|--|--|
| L0000670 | 484262.899 | 3718432.497 | 469.24 | | |
| L0000671 | 484271.489 | 3718432.497 | 469.00 | | |
| L0000672 | 484280.079 | 3718432.497 | 469.00 | | |
| L0000673 | 484288.669 | 3718432.497 | 469.00 | | |
| L0000674 | 484297.259 | 3718432.497 | 469.00 | | |
| L0000675 | 484305.849 | 3718432.497 | 468.85 | | |
| L0000676 | 484314.439 | 3718432.497 | 468.62 | | |
| L0000677 | 484323.029 | 3718432.497 | 468.40 | | |
| L0000678 | 484331.619 | 3718432.497 | 468.21 | | |
| L0000679 | 484340.209 | 3718432.497 | 468.14 | | |
| L0000680 | 484348.799 | 3718432.497 | 468.08 | | |
| L0000681 | 484357.389 | 3718432.497 | 468.02 | | |
| L0000682 | 484365.979 | 3718432.497 | 468.00 | | |
| L0000683 | 484374.569 | 3718432.497 | 468.00 | | |
| L0000684 | 484383.159 | 3718432.438 | 468.00 | | |
| L0000685 | 484391.748 | 3718432.375 | 468.00 | | |
| L0000686 | 484400.338 | 3718432.312 | 468.00 | | |
| L0000687 | 484408.928 | 3718432.248 | 468.00 | | |
| L0000688 | 484417.518 | 3718432.185 | 468.00 | | |
| L0000689 | 484426.086 | 3718431.628 | 468.20 | | |
| L0000690 | 484434.649 | 3718430.948 | 468.49 | | |
| L0000691 | 484442.509 | 3718428.409 | 468.75 | | |
| L0000692 | 484449.381 | 3718423.255 | 468.89 | | |
| L0000693 | 484453.420 | 3718416.005 | 468.67 | | |
| L0000694 | 484455.721 | 3718407.794 | 468.39 | | |
| L0000695 | 484456.367 | 3718399.228 | 468.11 | | |
| L0000696 | 484456.776 | 3718390.657 | 467.78 | | |
| L0000697 | 484456.523 | 3718382.071 | 467.44 | | |
| L0000698 | 484456.271 | 3718373.484 | 467.09 | | |

** End of LINE VOLUME Source ID = SLINE11

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE12

** DESCRSRC 1A1B Offsite Linnel

** PREFIX

** Length of Side = 14.00

** Configuration = Adjacent

** Emission Rate = 7.03E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 7

** 484457.167, 3718361.146, 466.81, 3.49, 6.51

** 484632.949, 3718359.849, 461.98, 3.49, 6.51

** 484653.381, 3718360.498, 460.93, 3.49, 6.51

** 484669.921, 3718362.768, 460.60, 3.49, 6.51

** 484788.623, 3718376.714, 457.93, 3.49, 6.51

** 484820.731, 3718379.633, 457.63, 3.49, 6.51

** 484876.838, 3718380.281, 456.64, 3.49, 6.51

| LOCATION | VOLUME | | | | |
|----------|------------|-------------|--------|--|--|
| L0000699 | 484464.167 | 3718361.095 | 466.44 | | |
| L0000700 | 484478.166 | 3718360.991 | 466.05 | | |
| L0000701 | 484492.166 | 3718360.888 | 465.93 | | |
| L0000702 | 484506.166 | 3718360.785 | 465.85 | | |
| L0000703 | 484520.165 | 3718360.681 | 465.48 | | |
| L0000704 | 484534.165 | 3718360.578 | 465.01 | | |
| L0000705 | 484548.164 | 3718360.475 | 464.59 | | |
| L0000706 | 484562.164 | 3718360.371 | 464.21 | | |
| L0000707 | 484576.164 | 3718360.268 | 463.80 | | |
| L0000708 | 484590.163 | 3718360.165 | 463.33 | | |
| L0000709 | 484604.163 | 3718360.062 | 462.86 | | |
| L0000710 | 484618.163 | 3718359.958 | 462.40 | | |
| L0000711 | 484632.162 | 3718359.855 | 461.91 | | |
| L0000712 | 484646.155 | 3718360.268 | 461.36 | | |
| L0000713 | 484660.089 | 3718361.418 | 460.84 | | |
| L0000714 | 484673.969 | 3718363.244 | 459.98 | | |
| L0000715 | 484687.873 | 3718364.877 | 459.11 | | |

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000716 | VOLUME | 484701.778 | 3718366.511 | 458.64 |
| LOCATION L0000717 | VOLUME | 484715.682 | 3718368.144 | 458.23 |
| LOCATION L0000718 | VOLUME | 484729.586 | 3718369.778 | 458.09 |
| LOCATION L0000719 | VOLUME | 484743.491 | 3718371.411 | 458.04 |
| LOCATION L0000720 | VOLUME | 484757.395 | 3718373.045 | 458.06 |
| LOCATION L0000721 | VOLUME | 484771.299 | 3718374.679 | 458.21 |
| LOCATION L0000722 | VOLUME | 484785.204 | 3718376.312 | 458.28 |
| LOCATION L0000723 | VOLUME | 484799.137 | 3718377.670 | 458.14 |
| LOCATION L0000724 | VOLUME | 484813.079 | 3718378.937 | 457.94 |
| LOCATION L0000725 | VOLUME | 484827.048 | 3718379.706 | 457.69 |
| LOCATION L0000726 | VOLUME | 484841.047 | 3718379.868 | 457.43 |
| LOCATION L0000727 | VOLUME | 484855.046 | 3718380.029 | 456.97 |
| LOCATION L0000728 | VOLUME | 484869.045 | 3718380.191 | 456.51 |

** End of LINE VOLUME Source ID = SLINE12

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE13

** DESCRSRC 4A4B Offsite Warm Springs

** PREFIX

** Length of Side = 14.00

** Configuration = Adjacent

** Emission Rate = 7.027E-08

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 4

** 484529.828, 3719083.722, 463.22, 3.49, 6.51

** 484527.584, 3719049.605, 463.24, 3.49, 6.51

** 484525.788, 3719013.244, 465.31, 3.49, 6.51

** 484523.993, 3718975.985, 466.84, 3.49, 6.51

**

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000729 | VOLUME | 484529.369 | 3719076.737 | 463.25 |
| LOCATION L0000730 | VOLUME | 484528.450 | 3719062.768 | 463.09 |
| LOCATION L0000731 | VOLUME | 484527.544 | 3719048.797 | 463.48 |
| LOCATION L0000732 | VOLUME | 484526.854 | 3719034.814 | 464.41 |
| LOCATION L0000733 | VOLUME | 484526.163 | 3719020.831 | 465.08 |
| LOCATION L0000734 | VOLUME | 484525.480 | 3719006.848 | 465.31 |
| LOCATION L0000735 | VOLUME | 484524.806 | 3718992.864 | 465.61 |
| LOCATION L0000736 | VOLUME | 484524.132 | 3718978.880 | 466.13 |

** End of LINE VOLUME Source ID = SLINE13

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE14

** DESCRSRC 4A4B 3A3B Offsite Warm Springs

** PREFIX

** Length of Side = 14.00

** Configuration = Adjacent

** Emission Rate = 2.451E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 2

** 484523.544, 3718977.332, 466.89, 3.49, 6.51

** 484514.117, 3718791.036, 469.00, 3.49, 6.51

**

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000737 | VOLUME | 484523.190 | 3718970.341 | 466.52 |
| LOCATION L0000738 | VOLUME | 484522.483 | 3718956.359 | 467.29 |
| LOCATION L0000739 | VOLUME | 484521.775 | 3718942.376 | 468.06 |
| LOCATION L0000740 | VOLUME | 484521.067 | 3718928.394 | 468.53 |
| LOCATION L0000741 | VOLUME | 484520.360 | 3718914.412 | 468.82 |
| LOCATION L0000742 | VOLUME | 484519.652 | 3718900.430 | 469.00 |
| LOCATION L0000743 | VOLUME | 484518.945 | 3718886.448 | 469.00 |
| LOCATION L0000744 | VOLUME | 484518.237 | 3718872.466 | 469.00 |
| LOCATION L0000745 | VOLUME | 484517.530 | 3718858.484 | 469.00 |
| LOCATION L0000746 | VOLUME | 484516.822 | 3718844.502 | 468.95 |
| LOCATION L0000747 | VOLUME | 484516.115 | 3718830.520 | 468.48 |
| LOCATION L0000748 | VOLUME | 484515.407 | 3718816.537 | 468.02 |
| LOCATION L0000749 | VOLUME | 484514.700 | 3718802.555 | 468.45 |

** End of LINE VOLUME Source ID = SLINE14

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE15

** DESCRSRC 2-4 Running Rabbit Offsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 2.234E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 3

** 484514.117, 3718780.711, 469.00, 3.49, 4.00

** 484593.573, 3718779.364, 467.28, 3.49, 4.00

** 484889.851, 3718774.875, 457.54, 3.49, 4.00

** -----

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000750 | VOLUME | 484518.411 | 3718780.638 | 469.00 |
| LOCATION L0000751 | VOLUME | 484527.000 | 3718780.493 | 469.00 |
| LOCATION L0000752 | VOLUME | 484535.589 | 3718780.347 | 469.00 |
| LOCATION L0000753 | VOLUME | 484544.177 | 3718780.202 | 469.00 |
| LOCATION L0000754 | VOLUME | 484552.766 | 3718780.056 | 469.00 |
| LOCATION L0000755 | VOLUME | 484561.355 | 3718779.910 | 469.00 |
| LOCATION L0000756 | VOLUME | 484569.944 | 3718779.765 | 469.00 |
| LOCATION L0000757 | VOLUME | 484578.533 | 3718779.619 | 468.49 |
| LOCATION L0000758 | VOLUME | 484587.121 | 3718779.474 | 467.98 |
| LOCATION L0000759 | VOLUME | 484595.710 | 3718779.332 | 467.48 |
| LOCATION L0000760 | VOLUME | 484604.299 | 3718779.202 | 467.05 |
| LOCATION L0000761 | VOLUME | 484612.888 | 3718779.072 | 466.70 |
| LOCATION L0000762 | VOLUME | 484621.477 | 3718778.942 | 466.35 |
| LOCATION L0000763 | VOLUME | 484630.066 | 3718778.811 | 466.00 |
| LOCATION L0000764 | VOLUME | 484638.655 | 3718778.681 | 465.71 |
| LOCATION L0000765 | VOLUME | 484647.244 | 3718778.551 | 465.43 |
| LOCATION L0000766 | VOLUME | 484655.833 | 3718778.421 | 465.14 |
| LOCATION L0000767 | VOLUME | 484664.422 | 3718778.291 | 464.85 |
| LOCATION L0000768 | VOLUME | 484673.011 | 3718778.161 | 464.57 |
| LOCATION L0000769 | VOLUME | 484681.600 | 3718778.031 | 464.28 |
| LOCATION L0000770 | VOLUME | 484690.189 | 3718777.901 | 464.00 |
| LOCATION L0000771 | VOLUME | 484698.778 | 3718777.770 | 464.00 |
| LOCATION L0000772 | VOLUME | 484707.367 | 3718777.640 | 464.00 |
| LOCATION L0000773 | VOLUME | 484715.956 | 3718777.510 | 464.00 |
| LOCATION L0000774 | VOLUME | 484724.545 | 3718777.380 | 464.00 |
| LOCATION L0000775 | VOLUME | 484733.134 | 3718777.250 | 464.00 |
| LOCATION L0000776 | VOLUME | 484741.723 | 3718777.120 | 464.00 |
| LOCATION L0000777 | VOLUME | 484750.312 | 3718776.990 | 464.00 |
| LOCATION L0000778 | VOLUME | 484758.901 | 3718776.859 | 464.00 |
| LOCATION L0000779 | VOLUME | 484767.490 | 3718776.729 | 464.00 |
| LOCATION L0000780 | VOLUME | 484776.079 | 3718776.599 | 464.00 |
| LOCATION L0000781 | VOLUME | 484784.668 | 3718776.469 | 463.85 |
| LOCATION L0000782 | VOLUME | 484793.257 | 3718776.339 | 463.56 |
| LOCATION L0000783 | VOLUME | 484801.846 | 3718776.209 | 463.27 |
| LOCATION L0000784 | VOLUME | 484810.435 | 3718776.079 | 462.96 |
| LOCATION L0000785 | VOLUME | 484819.025 | 3718775.948 | 462.10 |
| LOCATION L0000786 | VOLUME | 484827.614 | 3718775.818 | 461.24 |
| LOCATION L0000787 | VOLUME | 484836.203 | 3718775.688 | 460.38 |
| LOCATION L0000788 | VOLUME | 484844.792 | 3718775.558 | 459.68 |
| LOCATION L0000789 | VOLUME | 484853.381 | 3718775.428 | 459.11 |
| LOCATION L0000790 | VOLUME | 484861.970 | 3718775.298 | 458.54 |
| LOCATION L0000791 | VOLUME | 484870.559 | 3718775.168 | 457.98 |
| LOCATION L0000792 | VOLUME | 484879.148 | 3718775.038 | 457.70 |
| LOCATION L0000793 | VOLUME | 484887.737 | 3718774.907 | 457.41 |

** End of LINE VOLUME Source ID = SLINE15

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** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE16

** DESCRSRC 2-4 Offsite Whitewood

** PREFIX

** Length of Side = 14.00
** Configuration = Adjacent
** Emission Rate = 2.353E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484902.420, 3718775.324, 457.07, 3.49, 6.51
** 484886.708, 3718379.839, 456.55, 3.49, 6.51

LOCATION L0000794 VOLUME 484902.142 3718768.330 457.00
LOCATION L0000795 VOLUME 484901.586 3718754.341 457.05
LOCATION L0000796 VOLUME 484901.031 3718740.352 457.50
LOCATION L0000797 VOLUME 484900.475 3718726.363 457.97
LOCATION L0000798 VOLUME 484899.919 3718712.374 458.00
LOCATION L0000799 VOLUME 484899.363 3718698.385 458.02
LOCATION L0000800 VOLUME 484898.808 3718684.396 458.09
LOCATION L0000801 VOLUME 484898.252 3718670.407 458.21
LOCATION L0000802 VOLUME 484897.696 3718656.418 459.22
LOCATION L0000803 VOLUME 484897.140 3718642.429 460.59
LOCATION L0000804 VOLUME 484896.585 3718628.440 461.23
LOCATION L0000805 VOLUME 484896.029 3718614.451 461.27
LOCATION L0000806 VOLUME 484895.473 3718600.462 461.12
LOCATION L0000807 VOLUME 484894.917 3718586.473 460.69
LOCATION L0000808 VOLUME 484894.362 3718572.484 460.14
LOCATION L0000809 VOLUME 484893.806 3718558.495 459.25
LOCATION L0000810 VOLUME 484893.250 3718544.506 458.43
LOCATION L0000811 VOLUME 484892.694 3718530.517 458.24
LOCATION L0000812 VOLUME 484892.139 3718516.528 458.01
LOCATION L0000813 VOLUME 484891.583 3718502.539 457.68
LOCATION L0000814 VOLUME 484891.027 3718488.550 457.36
LOCATION L0000815 VOLUME 484890.471 3718474.562 457.58
LOCATION L0000816 VOLUME 484889.916 3718460.573 457.90
LOCATION L0000817 VOLUME 484889.360 3718446.584 458.00
LOCATION L0000818 VOLUME 484888.804 3718432.595 458.00
LOCATION L0000819 VOLUME 484888.248 3718418.606 457.75
LOCATION L0000820 VOLUME 484887.693 3718404.617 457.29
LOCATION L0000821 VOLUME 484887.137 3718390.628 456.92

** End of LINE VOLUME Source ID = SLINE16

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE17

** DESCRSRC Offsite Clinton Keith 100%

** PREFIX

** Length of Side = 14.00
** Configuration = Adjacent
** Emission Rate = 0.00001539
** Vertical Dimension = 6.99
** SZINIT = 3.25

** Nodes = 15

** 484886.708, 3718379.839, 456.55, 3.49, 6.51
** 484887.157, 3718180.974, 453.40, 3.49, 6.51
** 484890.299, 3717905.346, 454.11, 3.49, 6.51
** 484892.544, 3717675.057, 451.19, 3.49, 6.51
** 484895.237, 3717577.196, 449.19, 3.49, 6.51
** 484691.434, 3717579.440, 462.18, 3.49, 6.51
** 484367.774, 3717580.338, 462.00, 3.49, 6.51
** 484196.292, 3717582.583, 462.90, 3.49, 6.51
** 484098.879, 3717583.480, 464.75, 3.49, 6.51
** 484060.722, 3717582.583, 465.92, 3.49, 6.51
** 483961.963, 3717608.619, 466.99, 3.49, 6.51
** 483835.372, 3717649.918, 459.36, 3.49, 6.51
** 483785.543, 3717666.079, 457.06, 3.49, 6.51
** 483722.697, 3717683.137, 458.17, 3.49, 6.51
** 483692.171, 3717688.524, 460.32, 3.49, 6.51

LOCATION L0000822 VOLUME 484886.724 3718372.839 456.66

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000823 | VOLUME | 484886.756 | 3718358.839 | 456.42 |
| LOCATION | L0000824 | VOLUME | 484886.787 | 3718344.839 | 456.16 |
| LOCATION | L0000825 | VOLUME | 484886.819 | 3718330.839 | 456.00 |
| LOCATION | L0000826 | VOLUME | 484886.850 | 3718316.839 | 456.00 |
| LOCATION | L0000827 | VOLUME | 484886.882 | 3718302.839 | 456.11 |
| LOCATION | L0000828 | VOLUME | 484886.914 | 3718288.839 | 456.57 |
| LOCATION | L0000829 | VOLUME | 484886.945 | 3718274.839 | 457.00 |
| LOCATION | L0000830 | VOLUME | 484886.977 | 3718260.839 | 457.00 |
| LOCATION | L0000831 | VOLUME | 484887.008 | 3718246.839 | 457.00 |
| LOCATION | L0000832 | VOLUME | 484887.040 | 3718232.839 | 456.50 |
| LOCATION | L0000833 | VOLUME | 484887.072 | 3718218.839 | 455.97 |
| LOCATION | L0000834 | VOLUME | 484887.103 | 3718204.839 | 454.96 |
| LOCATION | L0000835 | VOLUME | 484887.135 | 3718190.839 | 453.82 |
| LOCATION | L0000836 | VOLUME | 484887.204 | 3718176.839 | 453.12 |
| LOCATION | L0000837 | VOLUME | 484887.364 | 3718162.840 | 452.65 |
| LOCATION | L0000838 | VOLUME | 484887.523 | 3718148.841 | 452.75 |
| LOCATION | L0000839 | VOLUME | 484887.683 | 3718134.842 | 453.41 |
| LOCATION | L0000840 | VOLUME | 484887.843 | 3718120.843 | 454.19 |
| LOCATION | L0000841 | VOLUME | 484888.002 | 3718106.844 | 455.21 |
| LOCATION | L0000842 | VOLUME | 484888.162 | 3718092.845 | 456.04 |
| LOCATION | L0000843 | VOLUME | 484888.321 | 3718078.846 | 456.22 |
| LOCATION | L0000844 | VOLUME | 484888.481 | 3718064.847 | 456.38 |
| LOCATION | L0000845 | VOLUME | 484888.641 | 3718050.848 | 456.38 |
| LOCATION | L0000846 | VOLUME | 484888.800 | 3718036.848 | 456.37 |
| LOCATION | L0000847 | VOLUME | 484888.960 | 3718022.849 | 456.37 |
| LOCATION | L0000848 | VOLUME | 484889.119 | 3718008.850 | 456.36 |
| LOCATION | L0000849 | VOLUME | 484889.279 | 3717994.851 | 456.23 |
| LOCATION | L0000850 | VOLUME | 484889.439 | 3717980.852 | 456.06 |
| LOCATION | L0000851 | VOLUME | 484889.598 | 3717966.853 | 455.80 |
| LOCATION | L0000852 | VOLUME | 484889.758 | 3717952.854 | 455.49 |
| LOCATION | L0000853 | VOLUME | 484889.917 | 3717938.855 | 455.18 |
| LOCATION | L0000854 | VOLUME | 484890.077 | 3717924.856 | 454.86 |
| LOCATION | L0000855 | VOLUME | 484890.237 | 3717910.857 | 454.48 |
| LOCATION | L0000856 | VOLUME | 484890.382 | 3717896.857 | 454.00 |
| LOCATION | L0000857 | VOLUME | 484890.519 | 3717882.858 | 453.50 |
| LOCATION | L0000858 | VOLUME | 484890.655 | 3717868.859 | 452.87 |
| LOCATION | L0000859 | VOLUME | 484890.792 | 3717854.859 | 452.30 |
| LOCATION | L0000860 | VOLUME | 484890.928 | 3717840.860 | 452.15 |
| LOCATION | L0000861 | VOLUME | 484891.064 | 3717826.861 | 452.01 |
| LOCATION | L0000862 | VOLUME | 484891.201 | 3717812.861 | 451.56 |
| LOCATION | L0000863 | VOLUME | 484891.337 | 3717798.862 | 451.10 |
| LOCATION | L0000864 | VOLUME | 484891.474 | 3717784.863 | 450.73 |
| LOCATION | L0000865 | VOLUME | 484891.610 | 3717770.863 | 450.40 |
| LOCATION | L0000866 | VOLUME | 484891.747 | 3717756.864 | 450.97 |
| LOCATION | L0000867 | VOLUME | 484891.883 | 3717742.865 | 452.02 |
| LOCATION | L0000868 | VOLUME | 484892.020 | 3717728.865 | 452.66 |
| LOCATION | L0000869 | VOLUME | 484892.156 | 3717714.866 | 452.89 |
| LOCATION | L0000870 | VOLUME | 484892.292 | 3717700.867 | 452.82 |
| LOCATION | L0000871 | VOLUME | 484892.429 | 3717686.867 | 452.21 |
| LOCATION | L0000872 | VOLUME | 484892.604 | 3717672.869 | 451.61 |
| LOCATION | L0000873 | VOLUME | 484892.989 | 3717658.874 | 451.00 |
| LOCATION | L0000874 | VOLUME | 484893.375 | 3717644.879 | 450.40 |
| LOCATION | L0000875 | VOLUME | 484893.760 | 3717630.885 | 449.81 |
| LOCATION | L0000876 | VOLUME | 484894.145 | 3717616.890 | 449.23 |
| LOCATION | L0000877 | VOLUME | 484894.530 | 3717602.895 | 449.26 |
| LOCATION | L0000878 | VOLUME | 484894.915 | 3717588.901 | 449.32 |
| LOCATION | L0000879 | VOLUME | 484892.947 | 3717577.221 | 449.47 |
| LOCATION | L0000880 | VOLUME | 484878.948 | 3717577.375 | 450.40 |
| LOCATION | L0000881 | VOLUME | 484864.949 | 3717577.529 | 451.34 |
| LOCATION | L0000882 | VOLUME | 484850.949 | 3717577.684 | 452.27 |
| LOCATION | L0000883 | VOLUME | 484836.950 | 3717577.838 | 453.31 |
| LOCATION | L0000884 | VOLUME | 484822.951 | 3717577.992 | 454.71 |
| LOCATION | L0000885 | VOLUME | 484808.952 | 3717578.146 | 456.13 |
| LOCATION | L0000886 | VOLUME | 484794.953 | 3717578.300 | 457.89 |
| LOCATION | L0000887 | VOLUME | 484780.954 | 3717578.454 | 459.64 |
| LOCATION | L0000888 | VOLUME | 484766.954 | 3717578.609 | 461.27 |

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000889 | VOLUME | 484752.955 | 3717578.763 | 462.90 |
| LOCATION | L0000890 | VOLUME | 484738.956 | 3717578.917 | 463.24 |
| LOCATION | L0000891 | VOLUME | 484724.957 | 3717579.071 | 463.23 |
| LOCATION | L0000892 | VOLUME | 484710.958 | 3717579.225 | 462.99 |
| LOCATION | L0000893 | VOLUME | 484696.959 | 3717579.380 | 462.62 |
| LOCATION | L0000894 | VOLUME | 484682.959 | 3717579.464 | 462.38 |
| LOCATION | L0000895 | VOLUME | 484668.959 | 3717579.503 | 462.28 |
| LOCATION | L0000896 | VOLUME | 484654.959 | 3717579.542 | 462.22 |
| LOCATION | L0000897 | VOLUME | 484640.959 | 3717579.580 | 462.21 |
| LOCATION | L0000898 | VOLUME | 484626.959 | 3717579.619 | 462.11 |
| LOCATION | L0000899 | VOLUME | 484612.959 | 3717579.658 | 461.64 |
| LOCATION | L0000900 | VOLUME | 484598.959 | 3717579.697 | 461.21 |
| LOCATION | L0000901 | VOLUME | 484584.959 | 3717579.736 | 461.21 |
| LOCATION | L0000902 | VOLUME | 484570.960 | 3717579.775 | 461.21 |
| LOCATION | L0000903 | VOLUME | 484556.960 | 3717579.813 | 460.86 |
| LOCATION | L0000904 | VOLUME | 484542.960 | 3717579.852 | 460.49 |
| LOCATION | L0000905 | VOLUME | 484528.960 | 3717579.891 | 460.63 |
| LOCATION | L0000906 | VOLUME | 484514.960 | 3717579.930 | 460.90 |
| LOCATION | L0000907 | VOLUME | 484500.960 | 3717579.969 | 461.06 |
| LOCATION | L0000908 | VOLUME | 484486.960 | 3717580.008 | 461.15 |
| LOCATION | L0000909 | VOLUME | 484472.960 | 3717580.046 | 461.20 |
| LOCATION | L0000910 | VOLUME | 484458.960 | 3717580.085 | 461.20 |
| LOCATION | L0000911 | VOLUME | 484444.960 | 3717580.124 | 461.33 |
| LOCATION | L0000912 | VOLUME | 484430.960 | 3717580.163 | 461.71 |
| LOCATION | L0000913 | VOLUME | 484416.960 | 3717580.202 | 462.00 |
| LOCATION | L0000914 | VOLUME | 484402.960 | 3717580.241 | 462.00 |
| LOCATION | L0000915 | VOLUME | 484388.960 | 3717580.279 | 462.00 |
| LOCATION | L0000916 | VOLUME | 484374.960 | 3717580.318 | 462.00 |
| LOCATION | L0000917 | VOLUME | 484360.961 | 3717580.427 | 462.00 |
| LOCATION | L0000918 | VOLUME | 484346.962 | 3717580.611 | 462.00 |
| LOCATION | L0000919 | VOLUME | 484332.963 | 3717580.794 | 462.00 |
| LOCATION | L0000920 | VOLUME | 484318.964 | 3717580.977 | 462.00 |
| LOCATION | L0000921 | VOLUME | 484304.966 | 3717581.160 | 462.00 |
| LOCATION | L0000922 | VOLUME | 484290.967 | 3717581.343 | 462.00 |
| LOCATION | L0000923 | VOLUME | 484276.968 | 3717581.527 | 462.00 |
| LOCATION | L0000924 | VOLUME | 484262.969 | 3717581.710 | 462.20 |
| LOCATION | L0000925 | VOLUME | 484248.970 | 3717581.893 | 462.61 |
| LOCATION | L0000926 | VOLUME | 484234.972 | 3717582.076 | 462.87 |
| LOCATION | L0000927 | VOLUME | 484220.973 | 3717582.260 | 462.88 |
| LOCATION | L0000928 | VOLUME | 484206.974 | 3717582.443 | 462.88 |
| LOCATION | L0000929 | VOLUME | 484192.975 | 3717582.613 | 462.89 |
| LOCATION | L0000930 | VOLUME | 484178.976 | 3717582.742 | 462.89 |
| LOCATION | L0000931 | VOLUME | 484164.976 | 3717582.871 | 462.90 |
| LOCATION | L0000932 | VOLUME | 484150.977 | 3717583.000 | 462.90 |
| LOCATION | L0000933 | VOLUME | 484136.977 | 3717583.129 | 463.30 |
| LOCATION | L0000934 | VOLUME | 484122.978 | 3717583.258 | 463.73 |
| LOCATION | L0000935 | VOLUME | 484108.979 | 3717583.387 | 464.19 |
| LOCATION | L0000936 | VOLUME | 484094.980 | 3717583.389 | 464.66 |
| LOCATION | L0000937 | VOLUME | 484080.984 | 3717583.059 | 465.08 |
| LOCATION | L0000938 | VOLUME | 484066.988 | 3717582.730 | 465.47 |
| LOCATION | L0000939 | VOLUME | 484053.245 | 3717584.554 | 465.64 |
| LOCATION | L0000940 | VOLUME | 484039.708 | 3717588.123 | 465.47 |
| LOCATION | L0000941 | VOLUME | 484026.170 | 3717591.692 | 465.30 |
| LOCATION | L0000942 | VOLUME | 484012.633 | 3717595.261 | 465.40 |
| LOCATION | L0000943 | VOLUME | 483999.095 | 3717598.830 | 465.73 |
| LOCATION | L0000944 | VOLUME | 483985.558 | 3717602.399 | 466.41 |
| LOCATION | L0000945 | VOLUME | 483972.020 | 3717605.968 | 466.97 |
| LOCATION | L0000946 | VOLUME | 483958.542 | 3717609.735 | 466.16 |
| LOCATION | L0000947 | VOLUME | 483945.232 | 3717614.078 | 464.72 |
| LOCATION | L0000948 | VOLUME | 483931.922 | 3717618.420 | 463.79 |
| LOCATION | L0000949 | VOLUME | 483918.613 | 3717622.762 | 463.35 |
| LOCATION | L0000950 | VOLUME | 483905.303 | 3717627.104 | 462.79 |
| LOCATION | L0000951 | VOLUME | 483891.994 | 3717631.446 | 462.09 |
| LOCATION | L0000952 | VOLUME | 483878.684 | 3717635.788 | 461.28 |
| LOCATION | L0000953 | VOLUME | 483865.374 | 3717640.130 | 460.61 |
| LOCATION | L0000954 | VOLUME | 483852.065 | 3717644.473 | 460.07 |

| LOCATION | VOLUME | | | | |
|-------------------|--------|------------|-------------|--------|--|
| LOCATION L0000955 | VOLUME | 483838.755 | 3717648.815 | 459.59 | |
| LOCATION L0000956 | VOLUME | 483825.440 | 3717653.140 | 458.99 | |
| LOCATION L0000957 | VOLUME | 483812.123 | 3717657.459 | 458.19 | |
| LOCATION L0000958 | VOLUME | 483798.806 | 3717661.778 | 457.43 | |
| LOCATION L0000959 | VOLUME | 483785.488 | 3717666.094 | 457.00 | |
| LOCATION L0000960 | VOLUME | 483771.977 | 3717669.761 | 457.00 | |
| LOCATION L0000961 | VOLUME | 483758.465 | 3717673.429 | 457.05 | |
| LOCATION L0000962 | VOLUME | 483744.954 | 3717677.096 | 457.56 | |
| LOCATION L0000963 | VOLUME | 483731.443 | 3717680.763 | 458.26 | |
| LOCATION L0000964 | VOLUME | 483717.835 | 3717683.995 | 459.34 | |
| LOCATION L0000965 | VOLUME | 483704.048 | 3717686.428 | 460.43 | |

** End of LINE VOLUME Source ID = SLINE17

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000493 | 0.000001148 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000494 | 0.000001148 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000495 | 0.000001148 | 3.49 | 4.00 | 3.25 |

**

** LINE VOLUME Source ID = SLINE2

| | | | | |
|-------------------|------------|------|------|------|
| SRCPARAM L0000496 | 0.00000121 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000497 | 0.00000121 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000498 | 0.00000121 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000499 | 0.00000121 | 3.49 | 4.00 | 3.25 |

**

** LINE VOLUME Source ID = SLINE3

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000500 | 0.000001176 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000501 | 0.000001176 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000502 | 0.000001176 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000503 | 0.000001176 | 3.49 | 4.00 | 3.25 |

**

** LINE VOLUME Source ID = SLINE4

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000504 | 0.000000683 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000505 | 0.000000683 | 3.49 | 4.00 | 3.25 |

**

** LINE VOLUME Source ID = SLINE5

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000506 | 0.000000671 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000507 | 0.000000671 | 3.49 | 4.00 | 3.25 |

**

** LINE VOLUME Source ID = SLINE6

| | | | | |
|-------------------|---------------|------|------|------|
| SRCPARAM L0000508 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000509 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000510 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000511 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000512 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000513 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000514 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000515 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000516 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000517 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000518 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000519 | 0.00000003361 | 3.49 | 4.00 | 3.25 |

**

** LINE VOLUME Source ID = SLINE7

| | | | | |
|-------------------|---------------|------|------|------|
| SRCPARAM L0000520 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000521 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000522 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000523 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000524 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000525 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000526 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000527 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000528 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000529 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000530 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000531 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000532 | 0.00000004668 | 3.49 | 4.00 | 3.25 |


```
**
RE STARTING
  INCLUDED "14073 Ops.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE ELSI_V9_ADJU\ELSI_v9.SFC
  PROFFILE ELSI_V9_ADJU\ELSI_v9.PFL
  SURFDATA 3171 2012
  UAIRDATA 3190 2012
  SITEDATA 99999 2012
  PROFBASE 406.0 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
** Auto-Generated Plotfiles
  PLOTFILE ANNUAL ALL "14073 Ops.AD\AN00GALL.PLT" 31
  SUMMFILE "14073 Ops.sum"
OU FINISHED
**
*****
** Project Parameters
*****
** PROJCTN CoordinateSystemUTM
** DESCPTN UTM: Universal Transverse Mercator
** DATUM North American Datum 1983
** DTMRGN CONUS
** UNITS m
** ZONE 11
** ZONEINX 0
**
```

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 1/26/2023
** File: C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery Village\14073 Ops\14073 Ops.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery Village\14073 O
  MODELOPT DFAULT CONC
  AVERTIME ANNUAL
  URBANOPT 2189641 Riverside_County
  POLLUTID DPM
  RUNORNOT RUN
  ERRORFIL "14073 Ops.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC 1A1B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 3.443E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484218.775, 3718921.277, 477.22, 3.49, 4.00
** 484244.954, 3718921.277, 476.16, 3.49, 4.00
** -----
** LOCATION L0000493      VOLUME  484223.070 3718921.277 476.58
** LOCATION L0000494      VOLUME  484231.660 3718921.277 476.30
** LOCATION L0000495      VOLUME  484240.250 3718921.277 476.01
** End of LINE VOLUME Source ID = SLINE1
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE2
** DESCRSRC 2A2B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 4.84E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484395.648, 3718894.487, 470.38, 3.49, 4.00

```

```

** 484429.494, 3718894.088, 469.13, 3.49, 4.00
** -----
LOCATION L0000496      VOLUME  484399.943 3718894.436 469.82
LOCATION L0000497      VOLUME  484408.532 3718894.335 469.47
LOCATION L0000498      VOLUME  484417.121 3718894.234 469.12
LOCATION L0000499      VOLUME  484425.711 3718894.133 469.00
** End of LINE VOLUME Source ID = SLINE2
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC 2C2D Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 4.704E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484394.652, 3718846.903, 469.02, 3.49, 4.00
** 484428.498, 3718846.505, 469.00, 3.49, 4.00
** -----
LOCATION L0000500      VOLUME  484398.947 3718846.853 469.00
LOCATION L0000501      VOLUME  484407.536 3718846.752 469.00
LOCATION L0000502      VOLUME  484416.126 3718846.650 469.00
LOCATION L0000503      VOLUME  484424.715 3718846.549 469.00
** End of LINE VOLUME Source ID = SLINE3
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE4
** DESCRSRC 3A3B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 1.366E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484484.244, 3718983.282, 467.84, 3.49, 4.00
** 484485.041, 3719000.803, 467.90, 3.49, 4.00
** -----
LOCATION L0000504      VOLUME  484484.440 3718987.573 467.79
LOCATION L0000505      VOLUME  484484.830 3718996.154 467.67
** End of LINE VOLUME Source ID = SLINE4
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE5
** DESCRSRC 4A4B Idle
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 1.342E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484491.014, 3719105.725, 464.67, 3.49, 4.00
** 484491.810, 3719123.245, 464.76, 3.49, 4.00
** -----
LOCATION L0000506      VOLUME  484491.209 3719110.015 464.50
LOCATION L0000507      VOLUME  484491.599 3719118.597 464.70
** End of LINE VOLUME Source ID = SLINE5
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE6
** DESCRSRC 1A1B Onsite
** PREFIX
** Length of Side = 8.59

```

** Configuration = Adjacent
** Emission Rate = 4.033E-07
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484151.434, 3718897.591, 480.86, 3.49, 4.00
** 484256.373, 3718897.591, 475.05, 3.49, 4.00

LOCATION L0000508 VOLUME 484155.729 3718897.591 480.34
LOCATION L0000509 VOLUME 484164.319 3718897.591 479.77
LOCATION L0000510 VOLUME 484172.909 3718897.591 479.19
LOCATION L0000511 VOLUME 484181.499 3718897.591 478.59
LOCATION L0000512 VOLUME 484190.089 3718897.591 477.81
LOCATION L0000513 VOLUME 484198.679 3718897.591 477.03
LOCATION L0000514 VOLUME 484207.269 3718897.591 476.25
LOCATION L0000515 VOLUME 484215.859 3718897.591 475.81
LOCATION L0000516 VOLUME 484224.449 3718897.591 475.52
LOCATION L0000517 VOLUME 484233.039 3718897.591 475.23
LOCATION L0000518 VOLUME 484241.629 3718897.591 474.98
LOCATION L0000519 VOLUME 484250.219 3718897.591 474.90

** End of LINE VOLUME Source ID = SLINE6

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE7

** DESCRSRC 2A2B Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.914E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 8

** 484509.032, 3718977.103, 467.74, 3.49, 4.00
** 484459.749, 3718976.779, 468.91, 3.49, 4.00
** 484451.319, 3718972.240, 469.03, 3.49, 4.00
** 484441.268, 3718966.079, 469.22, 3.49, 4.00
** 484426.353, 3718964.782, 470.97, 3.49, 4.00
** 484345.943, 3718965.755, 475.92, 3.49, 4.00
** 484343.998, 3718870.431, 471.61, 3.49, 4.00
** 484436.728, 3718869.458, 469.00, 3.49, 4.00

LOCATION L0000520 VOLUME 484504.737 3718977.075 467.39
LOCATION L0000521 VOLUME 484496.147 3718977.019 467.60
LOCATION L0000522 VOLUME 484487.558 3718976.962 467.82
LOCATION L0000523 VOLUME 484478.968 3718976.905 468.04
LOCATION L0000524 VOLUME 484470.378 3718976.849 468.32
LOCATION L0000525 VOLUME 484461.788 3718976.792 468.61
LOCATION L0000526 VOLUME 484453.981 3718973.673 468.87
LOCATION L0000527 VOLUME 484446.573 3718969.331 469.24
LOCATION L0000528 VOLUME 484438.909 3718965.874 469.74
LOCATION L0000529 VOLUME 484430.351 3718965.130 470.29
LOCATION L0000530 VOLUME 484421.777 3718964.838 470.85
LOCATION L0000531 VOLUME 484413.187 3718964.942 472.10
LOCATION L0000532 VOLUME 484404.598 3718965.046 473.52
LOCATION L0000533 VOLUME 484396.009 3718965.150 474.95
LOCATION L0000534 VOLUME 484387.419 3718965.253 475.95
LOCATION L0000535 VOLUME 484378.830 3718965.357 475.97
LOCATION L0000536 VOLUME 484370.241 3718965.461 475.98
LOCATION L0000537 VOLUME 484361.651 3718965.565 475.98
LOCATION L0000538 VOLUME 484353.062 3718965.669 475.99
LOCATION L0000539 VOLUME 484345.913 3718964.284 475.94
LOCATION L0000540 VOLUME 484345.738 3718955.696 475.66
LOCATION L0000541 VOLUME 484345.563 3718947.108 475.37
LOCATION L0000542 VOLUME 484345.388 3718938.520 475.08
LOCATION L0000543 VOLUME 484345.212 3718929.932 474.70
LOCATION L0000544 VOLUME 484345.037 3718921.343 474.27

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000545 | VOLUME | 484344.862 | 3718912.755 | 473.84 |
| LOCATION | L0000546 | VOLUME | 484344.686 | 3718904.167 | 473.39 |
| LOCATION | L0000547 | VOLUME | 484344.511 | 3718895.579 | 472.82 |
| LOCATION | L0000548 | VOLUME | 484344.336 | 3718886.991 | 472.26 |
| LOCATION | L0000549 | VOLUME | 484344.161 | 3718878.402 | 471.69 |
| LOCATION | L0000550 | VOLUME | 484344.615 | 3718870.425 | 471.33 |
| LOCATION | L0000551 | VOLUME | 484353.204 | 3718870.334 | 471.04 |
| LOCATION | L0000552 | VOLUME | 484361.794 | 3718870.244 | 470.70 |
| LOCATION | L0000553 | VOLUME | 484370.384 | 3718870.154 | 470.18 |
| LOCATION | L0000554 | VOLUME | 484378.973 | 3718870.064 | 469.66 |
| LOCATION | L0000555 | VOLUME | 484387.563 | 3718869.974 | 469.15 |
| LOCATION | L0000556 | VOLUME | 484396.152 | 3718869.884 | 469.00 |
| LOCATION | L0000557 | VOLUME | 484404.742 | 3718869.794 | 469.00 |
| LOCATION | L0000558 | VOLUME | 484413.331 | 3718869.704 | 469.00 |
| LOCATION | L0000559 | VOLUME | 484421.921 | 3718869.614 | 469.00 |
| LOCATION | L0000560 | VOLUME | 484430.510 | 3718869.524 | 469.00 |

** End of LINE VOLUME Source ID = SLINE7

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE8

** DESCRSRC 2C2D Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 9.592E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 4

** 484396.600, 3718870.414, 469.08, 3.49, 4.00

** 484484.468, 3718869.441, 469.00, 3.49, 4.00

** 484482.199, 3718795.515, 469.00, 3.49, 4.00

** 484502.950, 3718794.867, 469.00, 3.49, 4.00

**

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000561 | VOLUME | 484400.894 | 3718870.367 | 469.00 |
| LOCATION | L0000562 | VOLUME | 484409.484 | 3718870.272 | 469.00 |
| LOCATION | L0000563 | VOLUME | 484418.073 | 3718870.176 | 469.00 |
| LOCATION | L0000564 | VOLUME | 484426.663 | 3718870.081 | 469.00 |
| LOCATION | L0000565 | VOLUME | 484435.252 | 3718869.986 | 469.00 |
| LOCATION | L0000566 | VOLUME | 484443.842 | 3718869.891 | 469.00 |
| LOCATION | L0000567 | VOLUME | 484452.431 | 3718869.796 | 469.00 |
| LOCATION | L0000568 | VOLUME | 484461.021 | 3718869.701 | 469.00 |
| LOCATION | L0000569 | VOLUME | 484469.610 | 3718869.606 | 469.00 |
| LOCATION | L0000570 | VOLUME | 484478.200 | 3718869.511 | 469.00 |
| LOCATION | L0000571 | VOLUME | 484484.397 | 3718867.122 | 469.00 |
| LOCATION | L0000572 | VOLUME | 484484.133 | 3718858.536 | 469.00 |
| LOCATION | L0000573 | VOLUME | 484483.870 | 3718849.950 | 469.00 |
| LOCATION | L0000574 | VOLUME | 484483.606 | 3718841.364 | 468.98 |
| LOCATION | L0000575 | VOLUME | 484483.343 | 3718832.778 | 468.95 |
| LOCATION | L0000576 | VOLUME | 484483.079 | 3718824.192 | 468.93 |
| LOCATION | L0000577 | VOLUME | 484482.815 | 3718815.606 | 468.91 |
| LOCATION | L0000578 | VOLUME | 484482.552 | 3718807.020 | 468.94 |
| LOCATION | L0000579 | VOLUME | 484482.288 | 3718798.434 | 468.97 |
| LOCATION | L0000580 | VOLUME | 484487.866 | 3718795.338 | 468.92 |
| LOCATION | L0000581 | VOLUME | 484496.451 | 3718795.070 | 468.83 |

** End of LINE VOLUME Source ID = SLINE8

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE9

** DESCRSRC 3A3B Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.079E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 3

** 484461.992, 3718999.520, 468.88, 3.49, 4.00
** 484462.191, 3718976.024, 468.82, 3.49, 4.00
** 484509.384, 3718977.019, 467.74, 3.49, 4.00

LOCATION L0000582 VOLUME 484462.029 3718995.226 468.60
LOCATION L0000583 VOLUME 484462.101 3718986.636 468.60
LOCATION L0000584 VOLUME 484462.174 3718978.046 468.59
LOCATION L0000585 VOLUME 484468.757 3718976.162 468.38
LOCATION L0000586 VOLUME 484477.345 3718976.343 468.09
LOCATION L0000587 VOLUME 484485.933 3718976.525 467.86
LOCATION L0000588 VOLUME 484494.521 3718976.706 467.65
LOCATION L0000589 VOLUME 484503.110 3718976.887 467.44

** End of LINE VOLUME Source ID = SLINE9

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE10

** DESCRSRC 4A4B Onsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.235E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 3

** 484467.552, 3719121.585, 465.79, 3.49, 4.00

** 484467.277, 3719086.031, 465.17, 3.49, 4.00

** 484514.130, 3719085.756, 463.96, 3.49, 4.00

LOCATION L0000590 VOLUME 484467.519 3719117.290 465.88
LOCATION L0000591 VOLUME 484467.452 3719108.700 465.59
LOCATION L0000592 VOLUME 484467.386 3719100.111 465.31
LOCATION L0000593 VOLUME 484467.319 3719091.521 465.03
LOCATION L0000594 VOLUME 484470.377 3719086.013 464.64
LOCATION L0000595 VOLUME 484478.967 3719085.963 464.07
LOCATION L0000596 VOLUME 484487.557 3719085.912 464.00
LOCATION L0000597 VOLUME 484496.146 3719085.862 464.00
LOCATION L0000598 VOLUME 484504.736 3719085.811 463.99
LOCATION L0000599 VOLUME 484513.326 3719085.760 463.88

** End of LINE VOLUME Source ID = SLINE10

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE11

** DESCRSRC 1A1B Antelope Offsite

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 1.418E-06

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 12

** 484139.332, 3718898.546, 481.64, 3.49, 4.00

** 484134.468, 3718788.277, 479.08, 3.49, 4.00

** 484124.089, 3718558.009, 474.86, 3.49, 4.00

** 484121.495, 3718434.767, 472.94, 3.49, 4.00

** 484180.521, 3718432.497, 471.00, 3.49, 4.00

** 484375.114, 3718432.497, 468.00, 3.49, 4.00

** 484419.221, 3718432.173, 468.04, 3.49, 4.00

** 484439.654, 3718430.551, 468.69, 3.49, 4.00

** 484451.329, 3718421.794, 468.95, 3.49, 4.00

** 484455.545, 3718410.119, 468.48, 3.49, 4.00

** 484456.843, 3718392.930, 467.94, 3.49, 4.00

** 484456.194, 3718370.876, 466.87, 3.49, 4.00

LOCATION L0000600 VOLUME 484139.143 3718894.255 481.19
LOCATION L0000601 VOLUME 484138.764 3718885.674 480.82
LOCATION L0000602 VOLUME 484138.386 3718877.092 480.44

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000603 | VOLUME | 484138.007 | 3718868.510 | 480.25 |
| LOCATION | L0000604 | VOLUME | 484137.629 | 3718859.929 | 480.10 |
| LOCATION | L0000605 | VOLUME | 484137.250 | 3718851.347 | 479.95 |
| LOCATION | L0000606 | VOLUME | 484136.871 | 3718842.765 | 479.77 |
| LOCATION | L0000607 | VOLUME | 484136.493 | 3718834.184 | 479.51 |
| LOCATION | L0000608 | VOLUME | 484136.114 | 3718825.602 | 479.25 |
| LOCATION | L0000609 | VOLUME | 484135.736 | 3718817.020 | 478.99 |
| LOCATION | L0000610 | VOLUME | 484135.357 | 3718808.439 | 478.98 |
| LOCATION | L0000611 | VOLUME | 484134.978 | 3718799.857 | 479.00 |
| LOCATION | L0000612 | VOLUME | 484134.600 | 3718791.276 | 479.03 |
| LOCATION | L0000613 | VOLUME | 484134.216 | 3718782.694 | 478.83 |
| LOCATION | L0000614 | VOLUME | 484133.829 | 3718774.113 | 478.29 |
| LOCATION | L0000615 | VOLUME | 484133.442 | 3718765.532 | 477.74 |
| LOCATION | L0000616 | VOLUME | 484133.056 | 3718756.950 | 477.19 |
| LOCATION | L0000617 | VOLUME | 484132.669 | 3718748.369 | 476.75 |
| LOCATION | L0000618 | VOLUME | 484132.282 | 3718739.788 | 476.32 |
| LOCATION | L0000619 | VOLUME | 484131.895 | 3718731.206 | 475.88 |
| LOCATION | L0000620 | VOLUME | 484131.509 | 3718722.625 | 475.62 |
| LOCATION | L0000621 | VOLUME | 484131.122 | 3718714.044 | 475.63 |
| LOCATION | L0000622 | VOLUME | 484130.735 | 3718705.463 | 475.64 |
| LOCATION | L0000623 | VOLUME | 484130.348 | 3718696.881 | 475.66 |
| LOCATION | L0000624 | VOLUME | 484129.962 | 3718688.300 | 475.67 |
| LOCATION | L0000625 | VOLUME | 484129.575 | 3718679.719 | 475.68 |
| LOCATION | L0000626 | VOLUME | 484129.188 | 3718671.137 | 475.69 |
| LOCATION | L0000627 | VOLUME | 484128.801 | 3718662.556 | 475.59 |
| LOCATION | L0000628 | VOLUME | 484128.415 | 3718653.975 | 475.32 |
| LOCATION | L0000629 | VOLUME | 484128.028 | 3718645.393 | 475.05 |
| LOCATION | L0000630 | VOLUME | 484127.641 | 3718636.812 | 474.77 |
| LOCATION | L0000631 | VOLUME | 484127.254 | 3718628.231 | 474.56 |
| LOCATION | L0000632 | VOLUME | 484126.867 | 3718619.650 | 474.35 |
| LOCATION | L0000633 | VOLUME | 484126.481 | 3718611.068 | 474.13 |
| LOCATION | L0000634 | VOLUME | 484126.094 | 3718602.487 | 474.00 |
| LOCATION | L0000635 | VOLUME | 484125.707 | 3718593.906 | 474.00 |
| LOCATION | L0000636 | VOLUME | 484125.320 | 3718585.324 | 474.00 |
| LOCATION | L0000637 | VOLUME | 484124.934 | 3718576.743 | 474.00 |
| LOCATION | L0000638 | VOLUME | 484124.547 | 3718568.162 | 474.22 |
| LOCATION | L0000639 | VOLUME | 484124.160 | 3718559.581 | 474.47 |
| LOCATION | L0000640 | VOLUME | 484123.942 | 3718550.994 | 474.72 |
| LOCATION | L0000641 | VOLUME | 484123.761 | 3718542.406 | 474.87 |
| LOCATION | L0000642 | VOLUME | 484123.580 | 3718533.818 | 474.88 |
| LOCATION | L0000643 | VOLUME | 484123.399 | 3718525.229 | 474.89 |
| LOCATION | L0000644 | VOLUME | 484123.218 | 3718516.641 | 474.89 |
| LOCATION | L0000645 | VOLUME | 484123.038 | 3718508.053 | 474.63 |
| LOCATION | L0000646 | VOLUME | 484122.857 | 3718499.465 | 474.35 |
| LOCATION | L0000647 | VOLUME | 484122.676 | 3718490.877 | 474.07 |
| LOCATION | L0000648 | VOLUME | 484122.495 | 3718482.289 | 473.91 |
| LOCATION | L0000649 | VOLUME | 484122.314 | 3718473.701 | 473.89 |
| LOCATION | L0000650 | VOLUME | 484122.134 | 3718465.113 | 473.88 |
| LOCATION | L0000651 | VOLUME | 484121.953 | 3718456.525 | 473.87 |
| LOCATION | L0000652 | VOLUME | 484121.772 | 3718447.937 | 473.63 |
| LOCATION | L0000653 | VOLUME | 484121.591 | 3718439.348 | 473.37 |
| LOCATION | L0000654 | VOLUME | 484125.499 | 3718434.613 | 473.05 |
| LOCATION | L0000655 | VOLUME | 484134.083 | 3718434.283 | 472.68 |
| LOCATION | L0000656 | VOLUME | 484142.667 | 3718433.953 | 472.31 |
| LOCATION | L0000657 | VOLUME | 484151.250 | 3718433.623 | 471.97 |
| LOCATION | L0000658 | VOLUME | 484159.834 | 3718433.293 | 471.75 |
| LOCATION | L0000659 | VOLUME | 484168.418 | 3718432.963 | 471.53 |
| LOCATION | L0000660 | VOLUME | 484177.001 | 3718432.632 | 471.30 |
| LOCATION | L0000661 | VOLUME | 484185.589 | 3718432.497 | 470.99 |
| LOCATION | L0000662 | VOLUME | 484194.179 | 3718432.497 | 470.64 |
| LOCATION | L0000663 | VOLUME | 484202.769 | 3718432.497 | 470.29 |
| LOCATION | L0000664 | VOLUME | 484211.359 | 3718432.497 | 470.00 |
| LOCATION | L0000665 | VOLUME | 484219.949 | 3718432.497 | 470.00 |
| LOCATION | L0000666 | VOLUME | 484228.539 | 3718432.497 | 470.00 |
| LOCATION | L0000667 | VOLUME | 484237.129 | 3718432.497 | 470.00 |
| LOCATION | L0000668 | VOLUME | 484245.719 | 3718432.497 | 469.81 |

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|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000669 | VOLUME | 484254.309 | 3718432.497 | 469.52 |
| LOCATION | L0000670 | VOLUME | 484262.899 | 3718432.497 | 469.24 |
| LOCATION | L0000671 | VOLUME | 484271.489 | 3718432.497 | 469.00 |
| LOCATION | L0000672 | VOLUME | 484280.079 | 3718432.497 | 469.00 |
| LOCATION | L0000673 | VOLUME | 484288.669 | 3718432.497 | 469.00 |
| LOCATION | L0000674 | VOLUME | 484297.259 | 3718432.497 | 469.00 |
| LOCATION | L0000675 | VOLUME | 484305.849 | 3718432.497 | 468.85 |
| LOCATION | L0000676 | VOLUME | 484314.439 | 3718432.497 | 468.62 |
| LOCATION | L0000677 | VOLUME | 484323.029 | 3718432.497 | 468.40 |
| LOCATION | L0000678 | VOLUME | 484331.619 | 3718432.497 | 468.21 |
| LOCATION | L0000679 | VOLUME | 484340.209 | 3718432.497 | 468.14 |
| LOCATION | L0000680 | VOLUME | 484348.799 | 3718432.497 | 468.08 |
| LOCATION | L0000681 | VOLUME | 484357.389 | 3718432.497 | 468.02 |
| LOCATION | L0000682 | VOLUME | 484365.979 | 3718432.497 | 468.00 |
| LOCATION | L0000683 | VOLUME | 484374.569 | 3718432.497 | 468.00 |
| LOCATION | L0000684 | VOLUME | 484383.159 | 3718432.438 | 468.00 |
| LOCATION | L0000685 | VOLUME | 484391.748 | 3718432.375 | 468.00 |
| LOCATION | L0000686 | VOLUME | 484400.338 | 3718432.312 | 468.00 |
| LOCATION | L0000687 | VOLUME | 484408.928 | 3718432.248 | 468.00 |
| LOCATION | L0000688 | VOLUME | 484417.518 | 3718432.185 | 468.00 |
| LOCATION | L0000689 | VOLUME | 484426.086 | 3718431.628 | 468.20 |
| LOCATION | L0000690 | VOLUME | 484434.649 | 3718430.948 | 468.49 |
| LOCATION | L0000691 | VOLUME | 484442.509 | 3718428.409 | 468.75 |
| LOCATION | L0000692 | VOLUME | 484449.381 | 3718423.255 | 468.89 |
| LOCATION | L0000693 | VOLUME | 484453.420 | 3718416.005 | 468.67 |
| LOCATION | L0000694 | VOLUME | 484455.721 | 3718407.794 | 468.39 |
| LOCATION | L0000695 | VOLUME | 484456.367 | 3718399.228 | 468.11 |
| LOCATION | L0000696 | VOLUME | 484456.776 | 3718390.657 | 467.78 |
| LOCATION | L0000697 | VOLUME | 484456.523 | 3718382.071 | 467.44 |
| LOCATION | L0000698 | VOLUME | 484456.271 | 3718373.484 | 467.09 |

** End of LINE VOLUME Source ID = SLINE11

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE12

** DESCRSRC 1A1B Offsite Linnel

** PREFIX

** Length of Side = 14.00

** Configuration = Adjacent

** Emission Rate = 7.03E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 7

** 484457.167, 3718361.146, 466.81, 3.49, 6.51

** 484632.949, 3718359.849, 461.98, 3.49, 6.51

** 484653.381, 3718360.498, 460.93, 3.49, 6.51

** 484669.921, 3718362.768, 460.60, 3.49, 6.51

** 484788.623, 3718376.714, 457.93, 3.49, 6.51

** 484820.731, 3718379.633, 457.63, 3.49, 6.51

** 484876.838, 3718380.281, 456.64, 3.49, 6.51

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| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000699 | VOLUME | 484464.167 | 3718361.095 | 466.44 |
| LOCATION | L0000700 | VOLUME | 484478.166 | 3718360.991 | 466.05 |
| LOCATION | L0000701 | VOLUME | 484492.166 | 3718360.888 | 465.93 |
| LOCATION | L0000702 | VOLUME | 484506.166 | 3718360.785 | 465.85 |
| LOCATION | L0000703 | VOLUME | 484520.165 | 3718360.681 | 465.48 |
| LOCATION | L0000704 | VOLUME | 484534.165 | 3718360.578 | 465.01 |
| LOCATION | L0000705 | VOLUME | 484548.164 | 3718360.475 | 464.59 |
| LOCATION | L0000706 | VOLUME | 484562.164 | 3718360.371 | 464.21 |
| LOCATION | L0000707 | VOLUME | 484576.164 | 3718360.268 | 463.80 |
| LOCATION | L0000708 | VOLUME | 484590.163 | 3718360.165 | 463.33 |
| LOCATION | L0000709 | VOLUME | 484604.163 | 3718360.062 | 462.86 |
| LOCATION | L0000710 | VOLUME | 484618.163 | 3718359.958 | 462.40 |
| LOCATION | L0000711 | VOLUME | 484632.162 | 3718359.855 | 461.91 |
| LOCATION | L0000712 | VOLUME | 484646.155 | 3718360.268 | 461.36 |
| LOCATION | L0000713 | VOLUME | 484660.089 | 3718361.418 | 460.84 |
| LOCATION | L0000714 | VOLUME | 484673.969 | 3718363.244 | 459.98 |

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000715 | VOLUME | 484687.873 | 3718364.877 | 459.11 |
| LOCATION L0000716 | VOLUME | 484701.778 | 3718366.511 | 458.64 |
| LOCATION L0000717 | VOLUME | 484715.682 | 3718368.144 | 458.23 |
| LOCATION L0000718 | VOLUME | 484729.586 | 3718369.778 | 458.09 |
| LOCATION L0000719 | VOLUME | 484743.491 | 3718371.411 | 458.04 |
| LOCATION L0000720 | VOLUME | 484757.395 | 3718373.045 | 458.06 |
| LOCATION L0000721 | VOLUME | 484771.299 | 3718374.679 | 458.21 |
| LOCATION L0000722 | VOLUME | 484785.204 | 3718376.312 | 458.28 |
| LOCATION L0000723 | VOLUME | 484799.137 | 3718377.670 | 458.14 |
| LOCATION L0000724 | VOLUME | 484813.079 | 3718378.937 | 457.94 |
| LOCATION L0000725 | VOLUME | 484827.048 | 3718379.706 | 457.69 |
| LOCATION L0000726 | VOLUME | 484841.047 | 3718379.868 | 457.43 |
| LOCATION L0000727 | VOLUME | 484855.046 | 3718380.029 | 456.97 |
| LOCATION L0000728 | VOLUME | 484869.045 | 3718380.191 | 456.51 |

** End of LINE VOLUME Source ID = SLINE12

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE13

** DESCRSRC 4A4B Offsite Warm Springs

** PREFIX

** Length of Side = 14.00

** Configuration = Adjacent

** Emission Rate = 7.027E-08

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 4

** 484529.828, 3719083.722, 463.22, 3.49, 6.51

** 484527.584, 3719049.605, 463.24, 3.49, 6.51

** 484525.788, 3719013.244, 465.31, 3.49, 6.51

** 484523.993, 3718975.985, 466.84, 3.49, 6.51

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| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000729 | VOLUME | 484529.369 | 3719076.737 | 463.25 |
| LOCATION L0000730 | VOLUME | 484528.450 | 3719062.768 | 463.09 |
| LOCATION L0000731 | VOLUME | 484527.544 | 3719048.797 | 463.48 |
| LOCATION L0000732 | VOLUME | 484526.854 | 3719034.814 | 464.41 |
| LOCATION L0000733 | VOLUME | 484526.163 | 3719020.831 | 465.08 |
| LOCATION L0000734 | VOLUME | 484525.480 | 3719006.848 | 465.31 |
| LOCATION L0000735 | VOLUME | 484524.806 | 3718992.864 | 465.61 |
| LOCATION L0000736 | VOLUME | 484524.132 | 3718978.880 | 466.13 |

** End of LINE VOLUME Source ID = SLINE13

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE14

** DESCRSRC 4A4B 3A3B Offsite Warm Springs

** PREFIX

** Length of Side = 14.00

** Configuration = Adjacent

** Emission Rate = 2.451E-07

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 2

** 484523.544, 3718977.332, 466.89, 3.49, 6.51

** 484514.117, 3718791.036, 469.00, 3.49, 6.51

** -----

| | | | | |
|-------------------|--------|------------|-------------|--------|
| LOCATION L0000737 | VOLUME | 484523.190 | 3718970.341 | 466.52 |
| LOCATION L0000738 | VOLUME | 484522.483 | 3718956.359 | 467.29 |
| LOCATION L0000739 | VOLUME | 484521.775 | 3718942.376 | 468.06 |
| LOCATION L0000740 | VOLUME | 484521.067 | 3718928.394 | 468.53 |
| LOCATION L0000741 | VOLUME | 484520.360 | 3718914.412 | 468.82 |
| LOCATION L0000742 | VOLUME | 484519.652 | 3718900.430 | 469.00 |
| LOCATION L0000743 | VOLUME | 484518.945 | 3718886.448 | 469.00 |
| LOCATION L0000744 | VOLUME | 484518.237 | 3718872.466 | 469.00 |
| LOCATION L0000745 | VOLUME | 484517.530 | 3718858.484 | 469.00 |
| LOCATION L0000746 | VOLUME | 484516.822 | 3718844.502 | 468.95 |
| LOCATION L0000747 | VOLUME | 484516.115 | 3718830.520 | 468.48 |
| LOCATION L0000748 | VOLUME | 484515.407 | 3718816.537 | 468.02 |

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LOCATION L0000749      VOLUME  484514.700 3718802.555 468.45
** End of LINE VOLUME Source ID = SLINE14
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE15
** DESCRSRC 2-4 Running Rabbit Offsite
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 2.234E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 3
** 484514.117, 3718780.711, 469.00, 3.49, 4.00
** 484593.573, 3718779.364, 467.28, 3.49, 4.00
** 484889.851, 3718774.875, 457.54, 3.49, 4.00
** -----
LOCATION L0000750      VOLUME  484518.411 3718780.638 469.00
LOCATION L0000751      VOLUME  484527.000 3718780.493 469.00
LOCATION L0000752      VOLUME  484535.589 3718780.347 469.00
LOCATION L0000753      VOLUME  484544.177 3718780.202 469.00
LOCATION L0000754      VOLUME  484552.766 3718780.056 469.00
LOCATION L0000755      VOLUME  484561.355 3718779.910 469.00
LOCATION L0000756      VOLUME  484569.944 3718779.765 469.00
LOCATION L0000757      VOLUME  484578.533 3718779.619 468.49
LOCATION L0000758      VOLUME  484587.121 3718779.474 467.98
LOCATION L0000759      VOLUME  484595.710 3718779.332 467.48
LOCATION L0000760      VOLUME  484604.299 3718779.202 467.05
LOCATION L0000761      VOLUME  484612.888 3718779.072 466.70
LOCATION L0000762      VOLUME  484621.477 3718778.942 466.35
LOCATION L0000763      VOLUME  484630.066 3718778.811 466.00
LOCATION L0000764      VOLUME  484638.655 3718778.681 465.71
LOCATION L0000765      VOLUME  484647.244 3718778.551 465.43
LOCATION L0000766      VOLUME  484655.833 3718778.421 465.14
LOCATION L0000767      VOLUME  484664.422 3718778.291 464.85
LOCATION L0000768      VOLUME  484673.011 3718778.161 464.57
LOCATION L0000769      VOLUME  484681.600 3718778.031 464.28
LOCATION L0000770      VOLUME  484690.189 3718777.901 464.00
LOCATION L0000771      VOLUME  484698.778 3718777.770 464.00
LOCATION L0000772      VOLUME  484707.367 3718777.640 464.00
LOCATION L0000773      VOLUME  484715.956 3718777.510 464.00
LOCATION L0000774      VOLUME  484724.545 3718777.380 464.00
LOCATION L0000775      VOLUME  484733.134 3718777.250 464.00
LOCATION L0000776      VOLUME  484741.723 3718777.120 464.00
LOCATION L0000777      VOLUME  484750.312 3718776.990 464.00
LOCATION L0000778      VOLUME  484758.901 3718776.859 464.00
LOCATION L0000779      VOLUME  484767.490 3718776.729 464.00
LOCATION L0000780      VOLUME  484776.079 3718776.599 464.00
LOCATION L0000781      VOLUME  484784.668 3718776.469 463.85
LOCATION L0000782      VOLUME  484793.257 3718776.339 463.56
LOCATION L0000783      VOLUME  484801.846 3718776.209 463.27
LOCATION L0000784      VOLUME  484810.435 3718776.079 462.96
LOCATION L0000785      VOLUME  484819.025 3718775.948 462.10
LOCATION L0000786      VOLUME  484827.614 3718775.818 461.24
LOCATION L0000787      VOLUME  484836.203 3718775.688 460.38
LOCATION L0000788      VOLUME  484844.792 3718775.558 459.68
LOCATION L0000789      VOLUME  484853.381 3718775.428 459.11
LOCATION L0000790      VOLUME  484861.970 3718775.298 458.54
LOCATION L0000791      VOLUME  484870.559 3718775.168 457.98
LOCATION L0000792      VOLUME  484879.148 3718775.038 457.70
LOCATION L0000793      VOLUME  484887.737 3718774.907 457.41
** End of LINE VOLUME Source ID = SLINE15
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE16
** DESCRSRC 2-4 Offsite Whitewood

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** PREFIX
** Length of Side = 14.00
** Configuration = Adjacent
** Emission Rate = 2.353E-06
** Vertical Dimension = 6.99
** SZINIT = 3.25
** Nodes = 2
** 484902.420, 3718775.324, 457.07, 3.49, 6.51
** 484886.708, 3718379.839, 456.55, 3.49, 6.51

** LOCATION L0000794 VOLUME 484902.142 3718768.330 457.00
LOCATION L0000795 VOLUME 484901.586 3718754.341 457.05
LOCATION L0000796 VOLUME 484901.031 3718740.352 457.50
LOCATION L0000797 VOLUME 484900.475 3718726.363 457.97
LOCATION L0000798 VOLUME 484899.919 3718712.374 458.00
LOCATION L0000799 VOLUME 484899.363 3718698.385 458.02
LOCATION L0000800 VOLUME 484898.808 3718684.396 458.09
LOCATION L0000801 VOLUME 484898.252 3718670.407 458.21
LOCATION L0000802 VOLUME 484897.696 3718656.418 459.22
LOCATION L0000803 VOLUME 484897.140 3718642.429 460.59
LOCATION L0000804 VOLUME 484896.585 3718628.440 461.23
LOCATION L0000805 VOLUME 484896.029 3718614.451 461.27
LOCATION L0000806 VOLUME 484895.473 3718600.462 461.12
LOCATION L0000807 VOLUME 484894.917 3718586.473 460.69
LOCATION L0000808 VOLUME 484894.362 3718572.484 460.14
LOCATION L0000809 VOLUME 484893.806 3718558.495 459.25
LOCATION L0000810 VOLUME 484893.250 3718544.506 458.43
LOCATION L0000811 VOLUME 484892.694 3718530.517 458.24
LOCATION L0000812 VOLUME 484892.139 3718516.528 458.01
LOCATION L0000813 VOLUME 484891.583 3718502.539 457.68
LOCATION L0000814 VOLUME 484891.027 3718488.550 457.36
LOCATION L0000815 VOLUME 484890.471 3718474.562 457.58
LOCATION L0000816 VOLUME 484889.916 3718460.573 457.90
LOCATION L0000817 VOLUME 484889.360 3718446.584 458.00
LOCATION L0000818 VOLUME 484888.804 3718432.595 458.00
LOCATION L0000819 VOLUME 484888.248 3718418.606 457.75
LOCATION L0000820 VOLUME 484887.693 3718404.617 457.29
LOCATION L0000821 VOLUME 484887.137 3718390.628 456.92

** End of LINE VOLUME Source ID = SLINE16

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE17

** DESCRSRC Offsite Clinton Keith 100%

** PREFIX

** Length of Side = 14.00

** Configuration = Adjacent

** Emission Rate = 0.00001539

** Vertical Dimension = 6.99

** SZINIT = 3.25

** Nodes = 15

** 484886.708, 3718379.839, 456.55, 3.49, 6.51
** 484887.157, 3718180.974, 453.40, 3.49, 6.51
** 484890.299, 3717905.346, 454.11, 3.49, 6.51
** 484892.544, 3717675.057, 451.19, 3.49, 6.51
** 484895.237, 3717577.196, 449.19, 3.49, 6.51
** 484691.434, 3717579.440, 462.18, 3.49, 6.51
** 484367.774, 3717580.338, 462.00, 3.49, 6.51
** 484196.292, 3717582.583, 462.90, 3.49, 6.51
** 484098.879, 3717583.480, 464.75, 3.49, 6.51
** 484060.722, 3717582.583, 465.92, 3.49, 6.51
** 483961.963, 3717608.619, 466.99, 3.49, 6.51
** 483835.372, 3717649.918, 459.36, 3.49, 6.51
** 483785.543, 3717666.079, 457.06, 3.49, 6.51
** 483722.697, 3717683.137, 458.17, 3.49, 6.51
** 483692.171, 3717688.524, 460.32, 3.49, 6.51

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000822 | VOLUME | 484886.724 | 3718372.839 | 456.66 |
| LOCATION | L0000823 | VOLUME | 484886.756 | 3718358.839 | 456.42 |
| LOCATION | L0000824 | VOLUME | 484886.787 | 3718344.839 | 456.16 |
| LOCATION | L0000825 | VOLUME | 484886.819 | 3718330.839 | 456.00 |
| LOCATION | L0000826 | VOLUME | 484886.850 | 3718316.839 | 456.00 |
| LOCATION | L0000827 | VOLUME | 484886.882 | 3718302.839 | 456.11 |
| LOCATION | L0000828 | VOLUME | 484886.914 | 3718288.839 | 456.57 |
| LOCATION | L0000829 | VOLUME | 484886.945 | 3718274.839 | 457.00 |
| LOCATION | L0000830 | VOLUME | 484886.977 | 3718260.839 | 457.00 |
| LOCATION | L0000831 | VOLUME | 484887.008 | 3718246.839 | 457.00 |
| LOCATION | L0000832 | VOLUME | 484887.040 | 3718232.839 | 456.50 |
| LOCATION | L0000833 | VOLUME | 484887.072 | 3718218.839 | 455.97 |
| LOCATION | L0000834 | VOLUME | 484887.103 | 3718204.839 | 454.96 |
| LOCATION | L0000835 | VOLUME | 484887.135 | 3718190.839 | 453.82 |
| LOCATION | L0000836 | VOLUME | 484887.204 | 3718176.839 | 453.12 |
| LOCATION | L0000837 | VOLUME | 484887.364 | 3718162.840 | 452.65 |
| LOCATION | L0000838 | VOLUME | 484887.523 | 3718148.841 | 452.75 |
| LOCATION | L0000839 | VOLUME | 484887.683 | 3718134.842 | 453.41 |
| LOCATION | L0000840 | VOLUME | 484887.843 | 3718120.843 | 454.19 |
| LOCATION | L0000841 | VOLUME | 484888.002 | 3718106.844 | 455.21 |
| LOCATION | L0000842 | VOLUME | 484888.162 | 3718092.845 | 456.04 |
| LOCATION | L0000843 | VOLUME | 484888.321 | 3718078.846 | 456.22 |
| LOCATION | L0000844 | VOLUME | 484888.481 | 3718064.847 | 456.38 |
| LOCATION | L0000845 | VOLUME | 484888.641 | 3718050.848 | 456.38 |
| LOCATION | L0000846 | VOLUME | 484888.800 | 3718036.848 | 456.37 |
| LOCATION | L0000847 | VOLUME | 484888.960 | 3718022.849 | 456.37 |
| LOCATION | L0000848 | VOLUME | 484889.119 | 3718008.850 | 456.36 |
| LOCATION | L0000849 | VOLUME | 484889.279 | 3717994.851 | 456.23 |
| LOCATION | L0000850 | VOLUME | 484889.439 | 3717980.852 | 456.06 |
| LOCATION | L0000851 | VOLUME | 484889.598 | 3717966.853 | 455.80 |
| LOCATION | L0000852 | VOLUME | 484889.758 | 3717952.854 | 455.49 |
| LOCATION | L0000853 | VOLUME | 484889.917 | 3717938.855 | 455.18 |
| LOCATION | L0000854 | VOLUME | 484890.077 | 3717924.856 | 454.86 |
| LOCATION | L0000855 | VOLUME | 484890.237 | 3717910.857 | 454.48 |
| LOCATION | L0000856 | VOLUME | 484890.382 | 3717896.857 | 454.00 |
| LOCATION | L0000857 | VOLUME | 484890.519 | 3717882.858 | 453.50 |
| LOCATION | L0000858 | VOLUME | 484890.655 | 3717868.859 | 452.87 |
| LOCATION | L0000859 | VOLUME | 484890.792 | 3717854.859 | 452.30 |
| LOCATION | L0000860 | VOLUME | 484890.928 | 3717840.860 | 452.15 |
| LOCATION | L0000861 | VOLUME | 484891.064 | 3717826.861 | 452.01 |
| LOCATION | L0000862 | VOLUME | 484891.201 | 3717812.861 | 451.56 |
| LOCATION | L0000863 | VOLUME | 484891.337 | 3717798.862 | 451.10 |
| LOCATION | L0000864 | VOLUME | 484891.474 | 3717784.863 | 450.73 |
| LOCATION | L0000865 | VOLUME | 484891.610 | 3717770.863 | 450.40 |
| LOCATION | L0000866 | VOLUME | 484891.747 | 3717756.864 | 450.97 |
| LOCATION | L0000867 | VOLUME | 484891.883 | 3717742.865 | 452.02 |
| LOCATION | L0000868 | VOLUME | 484892.020 | 3717728.865 | 452.66 |
| LOCATION | L0000869 | VOLUME | 484892.156 | 3717714.866 | 452.89 |
| LOCATION | L0000870 | VOLUME | 484892.292 | 3717700.867 | 452.82 |
| LOCATION | L0000871 | VOLUME | 484892.429 | 3717686.867 | 452.21 |
| LOCATION | L0000872 | VOLUME | 484892.604 | 3717672.869 | 451.61 |
| LOCATION | L0000873 | VOLUME | 484892.989 | 3717658.874 | 451.00 |
| LOCATION | L0000874 | VOLUME | 484893.375 | 3717644.879 | 450.40 |
| LOCATION | L0000875 | VOLUME | 484893.760 | 3717630.885 | 449.81 |
| LOCATION | L0000876 | VOLUME | 484894.145 | 3717616.890 | 449.23 |
| LOCATION | L0000877 | VOLUME | 484894.530 | 3717602.895 | 449.26 |
| LOCATION | L0000878 | VOLUME | 484894.915 | 3717588.901 | 449.32 |
| LOCATION | L0000879 | VOLUME | 484892.947 | 3717577.221 | 449.47 |
| LOCATION | L0000880 | VOLUME | 484878.948 | 3717577.375 | 450.40 |
| LOCATION | L0000881 | VOLUME | 484864.949 | 3717577.529 | 451.34 |
| LOCATION | L0000882 | VOLUME | 484850.949 | 3717577.684 | 452.27 |
| LOCATION | L0000883 | VOLUME | 484836.950 | 3717577.838 | 453.31 |
| LOCATION | L0000884 | VOLUME | 484822.951 | 3717577.992 | 454.71 |
| LOCATION | L0000885 | VOLUME | 484808.952 | 3717578.146 | 456.13 |
| LOCATION | L0000886 | VOLUME | 484794.953 | 3717578.300 | 457.89 |
| LOCATION | L0000887 | VOLUME | 484780.954 | 3717578.454 | 459.64 |

| | | | | | |
|----------|----------|--------|------------|-------------|--------|
| LOCATION | L0000888 | VOLUME | 484766.954 | 3717578.609 | 461.27 |
| LOCATION | L0000889 | VOLUME | 484752.955 | 3717578.763 | 462.90 |
| LOCATION | L0000890 | VOLUME | 484738.956 | 3717578.917 | 463.24 |
| LOCATION | L0000891 | VOLUME | 484724.957 | 3717579.071 | 463.23 |
| LOCATION | L0000892 | VOLUME | 484710.958 | 3717579.225 | 462.99 |
| LOCATION | L0000893 | VOLUME | 484696.959 | 3717579.380 | 462.62 |
| LOCATION | L0000894 | VOLUME | 484682.959 | 3717579.464 | 462.38 |
| LOCATION | L0000895 | VOLUME | 484668.959 | 3717579.503 | 462.28 |
| LOCATION | L0000896 | VOLUME | 484654.959 | 3717579.542 | 462.22 |
| LOCATION | L0000897 | VOLUME | 484640.959 | 3717579.580 | 462.21 |
| LOCATION | L0000898 | VOLUME | 484626.959 | 3717579.619 | 462.11 |
| LOCATION | L0000899 | VOLUME | 484612.959 | 3717579.658 | 461.64 |
| LOCATION | L0000900 | VOLUME | 484598.959 | 3717579.697 | 461.21 |
| LOCATION | L0000901 | VOLUME | 484584.959 | 3717579.736 | 461.21 |
| LOCATION | L0000902 | VOLUME | 484570.960 | 3717579.775 | 461.21 |
| LOCATION | L0000903 | VOLUME | 484556.960 | 3717579.813 | 460.86 |
| LOCATION | L0000904 | VOLUME | 484542.960 | 3717579.852 | 460.49 |
| LOCATION | L0000905 | VOLUME | 484528.960 | 3717579.891 | 460.63 |
| LOCATION | L0000906 | VOLUME | 484514.960 | 3717579.930 | 460.90 |
| LOCATION | L0000907 | VOLUME | 484500.960 | 3717579.969 | 461.06 |
| LOCATION | L0000908 | VOLUME | 484486.960 | 3717580.008 | 461.15 |
| LOCATION | L0000909 | VOLUME | 484472.960 | 3717580.046 | 461.20 |
| LOCATION | L0000910 | VOLUME | 484458.960 | 3717580.085 | 461.20 |
| LOCATION | L0000911 | VOLUME | 484444.960 | 3717580.124 | 461.33 |
| LOCATION | L0000912 | VOLUME | 484430.960 | 3717580.163 | 461.71 |
| LOCATION | L0000913 | VOLUME | 484416.960 | 3717580.202 | 462.00 |
| LOCATION | L0000914 | VOLUME | 484402.960 | 3717580.241 | 462.00 |
| LOCATION | L0000915 | VOLUME | 484388.960 | 3717580.279 | 462.00 |
| LOCATION | L0000916 | VOLUME | 484374.960 | 3717580.318 | 462.00 |
| LOCATION | L0000917 | VOLUME | 484360.961 | 3717580.427 | 462.00 |
| LOCATION | L0000918 | VOLUME | 484346.962 | 3717580.611 | 462.00 |
| LOCATION | L0000919 | VOLUME | 484332.963 | 3717580.794 | 462.00 |
| LOCATION | L0000920 | VOLUME | 484318.964 | 3717580.977 | 462.00 |
| LOCATION | L0000921 | VOLUME | 484304.966 | 3717581.160 | 462.00 |
| LOCATION | L0000922 | VOLUME | 484290.967 | 3717581.343 | 462.00 |
| LOCATION | L0000923 | VOLUME | 484276.968 | 3717581.527 | 462.00 |
| LOCATION | L0000924 | VOLUME | 484262.969 | 3717581.710 | 462.20 |
| LOCATION | L0000925 | VOLUME | 484248.970 | 3717581.893 | 462.61 |
| LOCATION | L0000926 | VOLUME | 484234.972 | 3717582.076 | 462.87 |
| LOCATION | L0000927 | VOLUME | 484220.973 | 3717582.260 | 462.88 |
| LOCATION | L0000928 | VOLUME | 484206.974 | 3717582.443 | 462.88 |
| LOCATION | L0000929 | VOLUME | 484192.975 | 3717582.613 | 462.89 |
| LOCATION | L0000930 | VOLUME | 484178.976 | 3717582.742 | 462.89 |
| LOCATION | L0000931 | VOLUME | 484164.976 | 3717582.871 | 462.90 |
| LOCATION | L0000932 | VOLUME | 484150.977 | 3717583.000 | 462.90 |
| LOCATION | L0000933 | VOLUME | 484136.977 | 3717583.129 | 463.30 |
| LOCATION | L0000934 | VOLUME | 484122.978 | 3717583.258 | 463.73 |
| LOCATION | L0000935 | VOLUME | 484108.979 | 3717583.387 | 464.19 |
| LOCATION | L0000936 | VOLUME | 484094.980 | 3717583.389 | 464.66 |
| LOCATION | L0000937 | VOLUME | 484080.984 | 3717583.059 | 465.08 |
| LOCATION | L0000938 | VOLUME | 484066.988 | 3717582.730 | 465.47 |
| LOCATION | L0000939 | VOLUME | 484053.245 | 3717584.554 | 465.64 |
| LOCATION | L0000940 | VOLUME | 484039.708 | 3717588.123 | 465.47 |
| LOCATION | L0000941 | VOLUME | 484026.170 | 3717591.692 | 465.30 |
| LOCATION | L0000942 | VOLUME | 484012.633 | 3717595.261 | 465.40 |
| LOCATION | L0000943 | VOLUME | 483999.095 | 3717598.830 | 465.73 |
| LOCATION | L0000944 | VOLUME | 483985.558 | 3717602.399 | 466.41 |
| LOCATION | L0000945 | VOLUME | 483972.020 | 3717605.968 | 466.97 |
| LOCATION | L0000946 | VOLUME | 483958.542 | 3717609.735 | 466.16 |
| LOCATION | L0000947 | VOLUME | 483945.232 | 3717614.078 | 464.72 |
| LOCATION | L0000948 | VOLUME | 483931.922 | 3717618.420 | 463.79 |
| LOCATION | L0000949 | VOLUME | 483918.613 | 3717622.762 | 463.35 |
| LOCATION | L0000950 | VOLUME | 483905.303 | 3717627.104 | 462.79 |
| LOCATION | L0000951 | VOLUME | 483891.994 | 3717631.446 | 462.09 |
| LOCATION | L0000952 | VOLUME | 483878.684 | 3717635.788 | 461.28 |
| LOCATION | L0000953 | VOLUME | 483865.374 | 3717640.130 | 460.61 |

| LOCATION | VOLUME | | | | |
|-------------------|--------|------------|-------------|--------|--|
| LOCATION L0000954 | VOLUME | 483852.065 | 3717644.473 | 460.07 | |
| LOCATION L0000955 | VOLUME | 483838.755 | 3717648.815 | 459.59 | |
| LOCATION L0000956 | VOLUME | 483825.440 | 3717653.140 | 458.99 | |
| LOCATION L0000957 | VOLUME | 483812.123 | 3717657.459 | 458.19 | |
| LOCATION L0000958 | VOLUME | 483798.806 | 3717661.778 | 457.43 | |
| LOCATION L0000959 | VOLUME | 483785.488 | 3717666.094 | 457.00 | |
| LOCATION L0000960 | VOLUME | 483771.977 | 3717669.761 | 457.00 | |
| LOCATION L0000961 | VOLUME | 483758.465 | 3717673.429 | 457.05 | |
| LOCATION L0000962 | VOLUME | 483744.954 | 3717677.096 | 457.56 | |
| LOCATION L0000963 | VOLUME | 483731.443 | 3717680.763 | 458.26 | |
| LOCATION L0000964 | VOLUME | 483717.835 | 3717683.995 | 459.34 | |
| LOCATION L0000965 | VOLUME | 483704.048 | 3717686.428 | 460.43 | |

** End of LINE VOLUME Source ID = SLINE17

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000493 | 0.000001148 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000494 | 0.000001148 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000495 | 0.000001148 | 3.49 | 4.00 | 3.25 |

** -----

** LINE VOLUME Source ID = SLINE2

| | | | | |
|-------------------|------------|------|------|------|
| SRCPARAM L0000496 | 0.00000121 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000497 | 0.00000121 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000498 | 0.00000121 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000499 | 0.00000121 | 3.49 | 4.00 | 3.25 |

** -----

** LINE VOLUME Source ID = SLINE3

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000500 | 0.000001176 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000501 | 0.000001176 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000502 | 0.000001176 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000503 | 0.000001176 | 3.49 | 4.00 | 3.25 |

** -----

** LINE VOLUME Source ID = SLINE4

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000504 | 0.000000683 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000505 | 0.000000683 | 3.49 | 4.00 | 3.25 |

** -----

** LINE VOLUME Source ID = SLINE5

| | | | | |
|-------------------|-------------|------|------|------|
| SRCPARAM L0000506 | 0.000000671 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000507 | 0.000000671 | 3.49 | 4.00 | 3.25 |

** -----

** LINE VOLUME Source ID = SLINE6

| | | | | |
|-------------------|---------------|------|------|------|
| SRCPARAM L0000508 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000509 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000510 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000511 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000512 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000513 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000514 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000515 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000516 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000517 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000518 | 0.00000003361 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000519 | 0.00000003361 | 3.49 | 4.00 | 3.25 |

** -----

** LINE VOLUME Source ID = SLINE7

| | | | | |
|-------------------|---------------|------|------|------|
| SRCPARAM L0000520 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000521 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000522 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000523 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000524 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000525 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000526 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000527 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000528 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000529 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000530 | 0.00000004668 | 3.49 | 4.00 | 3.25 |
| SRCPARAM L0000531 | 0.00000004668 | 3.49 | 4.00 | 3.25 |

**
**
RE STARTING
INCLUDED "14073 Ops.rou"
RE FINISHED
**

** AERMOD Meteorology Pathway

**
**

ME STARTING
SURFFILE ELSI_V9_ADJU\ELSI_v9.SFC
PROFFILE ELSI_V9_ADJU\ELSI_v9.PFL
SURFDATA 3171 2012
UAIRDATA 3190 2012
SITEDATA 99999 2012
PROFBASE 406.0 METERS
ME FINISHED
**

** AERMOD Output Pathway

**
**
OU STARTING
** Auto-Generated Plotfiles
PLOTFILE ANNUAL ALL "14073 Ops.AD\AN00GALL.PLT" 31
SUMMFILE "14073 Ops.sum"
OU FINISHED

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

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

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

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

***** WARNING MESSAGES *****
ME W186 1338 MEOpen: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 1338 MEOpen: ADJ_U* Option for Stable Low Winds used in AERMET

*** SETUP Finishes Successfully ***

*** AERMOD - VERSION 22112 *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
Village\14073 O *** 01/26/23
*** AERMET - VERSION 16216 ***
*** 14:21:32

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

*** MODEL SETUP OPTIONS SUMMARY ***

** Model Options Selected:

* Model Uses Regulatory DEFAULT Options
* Model Is Setup For Calculation of Average CONCentration Values.
* NO GAS DEPOSITION Data Provided.
* NO PARTICLE DEPOSITION Data Provided.
* Model Uses NO DRY DEPLETION. DDPLETE = F
* Model Uses NO WET DEPLETION. WETDPLT = F
* Stack-tip Downwash.
* Model Accounts for ELEVated Terrain Effects.
* Use Calms Processing Routine.
* Use Missing Data Processing Routine.
* No Exponential Decay.
* Model Uses URBAN Dispersion Algorithm for the SBL for 473 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2189641.0 ; Urban Roughness Length = 1.000 m
* Urban Roughness Length of 1.0 Meter Used.
* ADJ_U* - Use ADJ_U* option for SBL in AERMET
* CCVR_Sub - Meteorological data includes CCVR substitutions
* TEMP_Sub - Meteorological data includes TEMP substitutions
* Model Assumes No FLAGPOLE Receptor Heights.
* The User Specified a Pollutant Type of: DPM

**Model Calculates ANNUAL Averages Only

**This Run Includes: 473 Source(s); 1 Source Group(s); and 99 Receptor(s)
with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 473 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

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

**The AERMET Input Meteorological Data Version Date: 16216

**Output Options Selected:

Model Outputs Tables of 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) = 406.00 ; Decay Coef. =
0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate
Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.7 MB of RAM.

**Input Runstream File:

aermod.inp

**Output Print File:

aermod.out

**Detailed Error/Message File: 14073

Ops.err

**File for Summary of Results: 14073

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | NUMBER | EMISSION | RATE | | | BASE | RELEASE | INIT. | INIT. |
|----------|--------|-------------|------|----------|-----------|----------|----------|----------|-------|
| SOURCE | PART. | EMISSION | RATE | X | Y | ELEV. | HEIGHT | SY | SZ |
| ID | CATS. | (GRAMS/SEC) | BY | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | |
| (METERS) | | | | | | | | | |
| L0000493 | 0 | 0.11480E-05 | | 484223.1 | 3718921.3 | 476.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000494 | 0 | 0.11480E-05 | | 484231.7 | 3718921.3 | 476.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000495 | 0 | 0.11480E-05 | | 484240.2 | 3718921.3 | 476.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000496 | 0 | 0.12100E-05 | | 484399.9 | 3718894.4 | 469.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000497 | 0 | 0.12100E-05 | | 484408.5 | 3718894.3 | 469.5 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000498 | 0 | 0.12100E-05 | | 484417.1 | 3718894.2 | 469.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000499 | 0 | 0.12100E-05 | | 484425.7 | 3718894.1 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000500 | 0 | 0.11760E-05 | | 484398.9 | 3718846.9 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000501 | 0 | 0.11760E-05 | | 484407.5 | 3718846.8 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000502 | 0 | 0.11760E-05 | | 484416.1 | 3718846.6 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000503 | 0 | 0.11760E-05 | | 484424.7 | 3718846.5 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000504 | 0 | 0.68300E-06 | | 484484.4 | 3718987.6 | 467.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000505 | 0 | 0.68300E-06 | | 484484.8 | 3718996.2 | 467.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000506 | 0 | 0.67100E-06 | | 484491.2 | 3719110.0 | 464.5 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000507 | 0 | 0.67100E-06 | | 484491.6 | 3719118.6 | 464.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000508 | 0 | 0.33610E-07 | | 484155.7 | 3718897.6 | 480.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000509 | 0 | 0.33610E-07 | | 484164.3 | 3718897.6 | 479.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000510 | 0 | 0.33610E-07 | | 484172.9 | 3718897.6 | 479.2 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000511 | 0 | 0.33610E-07 | | 484181.5 | 3718897.6 | 478.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000512 | 0 | 0.33610E-07 | | 484190.1 | 3718897.6 | 477.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000513 | 0 | 0.33610E-07 | | 484198.7 | 3718897.6 | 477.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000514 | 0 | 0.33610E-07 | | 484207.3 | 3718897.6 | 476.2 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | | |
| L0000515 | 0 | 0.33610E-07 | | 484215.9 | 3718897.6 | 475.8 | 3.49 | 4.00 | 3.25 |

| | | | | | | | | | |
|-----|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | L0000516 | 0 | 0.33610E-07 | 484224.4 | 3718897.6 | 475.5 | 3.49 | 4.00 | 3.25 |
| YES | L0000517 | 0 | 0.33610E-07 | 484233.0 | 3718897.6 | 475.2 | 3.49 | 4.00 | 3.25 |
| YES | L0000518 | 0 | 0.33610E-07 | 484241.6 | 3718897.6 | 475.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000519 | 0 | 0.33610E-07 | 484250.2 | 3718897.6 | 474.9 | 3.49 | 4.00 | 3.25 |
| YES | L0000520 | 0 | 0.46680E-07 | 484504.7 | 3718977.1 | 467.4 | 3.49 | 4.00 | 3.25 |
| YES | L0000521 | 0 | 0.46680E-07 | 484496.1 | 3718977.0 | 467.6 | 3.49 | 4.00 | 3.25 |
| YES | L0000522 | 0 | 0.46680E-07 | 484487.6 | 3718977.0 | 467.8 | 3.49 | 4.00 | 3.25 |
| YES | L0000523 | 0 | 0.46680E-07 | 484479.0 | 3718976.9 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000524 | 0 | 0.46680E-07 | 484470.4 | 3718976.8 | 468.3 | 3.49 | 4.00 | 3.25 |
| YES | L0000525 | 0 | 0.46680E-07 | 484461.8 | 3718976.8 | 468.6 | 3.49 | 4.00 | 3.25 |
| YES | L0000526 | 0 | 0.46680E-07 | 484454.0 | 3718973.7 | 468.9 | 3.49 | 4.00 | 3.25 |
| YES | L0000527 | 0 | 0.46680E-07 | 484446.6 | 3718969.3 | 469.2 | 3.49 | 4.00 | 3.25 |
| YES | L0000528 | 0 | 0.46680E-07 | 484438.9 | 3718965.9 | 469.7 | 3.49 | 4.00 | 3.25 |
| YES | L0000529 | 0 | 0.46680E-07 | 484430.4 | 3718965.1 | 470.3 | 3.49 | 4.00 | 3.25 |
| YES | L0000530 | 0 | 0.46680E-07 | 484421.8 | 3718964.8 | 470.9 | 3.49 | 4.00 | 3.25 |
| YES | L0000531 | 0 | 0.46680E-07 | 484413.2 | 3718964.9 | 472.1 | 3.49 | 4.00 | 3.25 |
| YES | L0000532 | 0 | 0.46680E-07 | 484404.6 | 3718965.0 | 473.5 | 3.49 | 4.00 | 3.25 |

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*** AERMOD - VERSION 22112 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
Village\14073 O ***                    01/26/23
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | NUMBER | EMISSION | RATE | | BASE | RELEASE | INIT. | INIT. |
|----------|-------------|-------------|----------|-----------|----------|----------|----------|----------|
| SOURCE | URBAN | EMISSION | | X | ELEV. | HEIGHT | SY | SZ |
| ID | PART. | (GRAMS/SEC) | | | (METERS) | (METERS) | (METERS) | (METERS) |
| (METERS) | SCALAR VARY | | BY | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| | CATS. | | | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| L0000533 | 0 | 0.46680E-07 | 484396.0 | 3718965.1 | 474.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000534 | 0 | 0.46680E-07 | 484387.4 | 3718965.3 | 475.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000535 | 0 | 0.46680E-07 | 484378.8 | 3718965.4 | 476.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000536 | 0 | 0.46680E-07 | 484370.2 | 3718965.5 | 476.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000537 | 0 | 0.46680E-07 | 484361.7 | 3718965.6 | 476.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000538 | 0 | 0.46680E-07 | 484353.1 | 3718965.7 | 476.0 | 3.49 | 4.00 | 3.25 |

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | | | | | | | | |
| L0000539 | 0 | 0.46680E-07 | 484345.9 | 3718964.3 | 475.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000540 | 0 | 0.46680E-07 | 484345.7 | 3718955.7 | 475.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000541 | 0 | 0.46680E-07 | 484345.6 | 3718947.1 | 475.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000542 | 0 | 0.46680E-07 | 484345.4 | 3718938.5 | 475.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000543 | 0 | 0.46680E-07 | 484345.2 | 3718929.9 | 474.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000544 | 0 | 0.46680E-07 | 484345.0 | 3718921.3 | 474.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000545 | 0 | 0.46680E-07 | 484344.9 | 3718912.8 | 473.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000546 | 0 | 0.46680E-07 | 484344.7 | 3718904.2 | 473.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000547 | 0 | 0.46680E-07 | 484344.5 | 3718895.6 | 472.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000548 | 0 | 0.46680E-07 | 484344.3 | 3718887.0 | 472.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000549 | 0 | 0.46680E-07 | 484344.2 | 3718878.4 | 471.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000550 | 0 | 0.46680E-07 | 484344.6 | 3718870.4 | 471.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000551 | 0 | 0.46680E-07 | 484353.2 | 3718870.3 | 471.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000552 | 0 | 0.46680E-07 | 484361.8 | 3718870.2 | 470.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000553 | 0 | 0.46680E-07 | 484370.4 | 3718870.2 | 470.2 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000554 | 0 | 0.46680E-07 | 484379.0 | 3718870.1 | 469.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000555 | 0 | 0.46680E-07 | 484387.6 | 3718870.0 | 469.2 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000556 | 0 | 0.46680E-07 | 484396.2 | 3718869.9 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000557 | 0 | 0.46680E-07 | 484404.7 | 3718869.8 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000558 | 0 | 0.46680E-07 | 484413.3 | 3718869.7 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000559 | 0 | 0.46680E-07 | 484421.9 | 3718869.6 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000560 | 0 | 0.46680E-07 | 484430.5 | 3718869.5 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000561 | 0 | 0.45680E-07 | 484400.9 | 3718870.4 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000562 | 0 | 0.45680E-07 | 484409.5 | 3718870.3 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000563 | 0 | 0.45680E-07 | 484418.1 | 3718870.2 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000564 | 0 | 0.45680E-07 | 484426.7 | 3718870.1 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000565 | 0 | 0.45680E-07 | 484435.3 | 3718870.0 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000566 | 0 | 0.45680E-07 | 484443.8 | 3718869.9 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000567 | 0 | 0.45680E-07 | 484452.4 | 3718869.8 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000568 | 0 | 0.45680E-07 | 484461.0 | 3718869.7 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000569 | 0 | 0.45680E-07 | 484469.6 | 3718869.6 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000570 | 0 | 0.45680E-07 | 484478.2 | 3718869.5 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000571 | 0 | 0.45680E-07 | 484484.4 | 3718867.1 | 469.0 | 3.49 | 4.00 | 3.25 |

YES
L0000572 0 0.45680E-07 484484.1 3718858.5 469.0 3.49 4.00 3.25

YES

*** AERMOD - VERSION 22112 *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| L0000573 | 0 | 0.45680E-07 | 484483.9 | 3718849.9 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000574 | 0 | 0.45680E-07 | 484483.6 | 3718841.4 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000575 | 0 | 0.45680E-07 | 484483.3 | 3718832.8 | 468.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000576 | 0 | 0.45680E-07 | 484483.1 | 3718824.2 | 468.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000577 | 0 | 0.45680E-07 | 484482.8 | 3718815.6 | 468.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000578 | 0 | 0.45680E-07 | 484482.6 | 3718807.0 | 468.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000579 | 0 | 0.45680E-07 | 484482.3 | 3718798.4 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000580 | 0 | 0.45680E-07 | 484487.9 | 3718795.3 | 468.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000581 | 0 | 0.45680E-07 | 484496.5 | 3718795.1 | 468.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000582 | 0 | 0.13490E-07 | 484462.0 | 3718995.2 | 468.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000583 | 0 | 0.13490E-07 | 484462.1 | 3718986.6 | 468.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000584 | 0 | 0.13490E-07 | 484462.2 | 3718978.0 | 468.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000585 | 0 | 0.13490E-07 | 484468.8 | 3718976.2 | 468.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000586 | 0 | 0.13490E-07 | 484477.3 | 3718976.3 | 468.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000587 | 0 | 0.13490E-07 | 484485.9 | 3718976.5 | 467.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000588 | 0 | 0.13490E-07 | 484494.5 | 3718976.7 | 467.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000589 | 0 | 0.13490E-07 | 484503.1 | 3718976.9 | 467.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000590 | 0 | 0.12350E-07 | 484467.5 | 3719117.3 | 465.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000591 | 0 | 0.12350E-07 | 484467.5 | 3719108.7 | 465.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000592 | 0 | 0.12350E-07 | 484467.4 | 3719100.1 | 465.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000593 | 0 | 0.12350E-07 | 484467.3 | 3719091.5 | 465.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000594 | 0 | 0.12350E-07 | 484470.4 | 3719086.0 | 464.6 | 3.49 | 4.00 | 3.25 |

```

YES
L0000595      0    0.12350E-07  484479.0  3719086.0  464.1    3.49    4.00    3.25
YES
L0000596      0    0.12350E-07  484487.6  3719085.9  464.0    3.49    4.00    3.25
YES
L0000597      0    0.12350E-07  484496.1  3719085.9  464.0    3.49    4.00    3.25
YES
L0000598      0    0.12350E-07  484504.7  3719085.8  464.0    3.49    4.00    3.25
YES
L0000599      0    0.12350E-07  484513.3  3719085.8  463.9    3.49    4.00    3.25
YES
L0000600      0    0.14320E-07  484139.1  3718894.3  481.2    3.49    4.00    3.25
YES
L0000601      0    0.14320E-07  484138.8  3718885.7  480.8    3.49    4.00    3.25
YES
L0000602      0    0.14320E-07  484138.4  3718877.1  480.4    3.49    4.00    3.25
YES
L0000603      0    0.14320E-07  484138.0  3718868.5  480.2    3.49    4.00    3.25
YES
L0000604      0    0.14320E-07  484137.6  3718859.9  480.1    3.49    4.00    3.25
YES
L0000605      0    0.14320E-07  484137.2  3718851.3  479.9    3.49    4.00    3.25
YES
L0000606      0    0.14320E-07  484136.9  3718842.8  479.8    3.49    4.00    3.25
YES
L0000607      0    0.14320E-07  484136.5  3718834.2  479.5    3.49    4.00    3.25
YES
L0000608      0    0.14320E-07  484136.1  3718825.6  479.2    3.49    4.00    3.25
YES
L0000609      0    0.14320E-07  484135.7  3718817.0  479.0    3.49    4.00    3.25
YES
L0000610      0    0.14320E-07  484135.4  3718808.4  479.0    3.49    4.00    3.25
YES
L0000611      0    0.14320E-07  484135.0  3718799.9  479.0    3.49    4.00    3.25
YES
L0000612      0    0.14320E-07  484134.6  3718791.3  479.0    3.49    4.00    3.25
YES

```

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*** AERMOD - VERSION 22112 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
Village\14073 O ***      01/26/23
*** AERMET - VERSION 16216 ***
***                                     ***      14:21:32

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | NUMBER | EMISSION | RATE | | BASE | RELEASE | INIT. | INIT. |
|----------|--------|-------------|----------|-----------|----------|----------|----------|----------|
| SOURCE | URBAN | EMISSION | RATE | | ELEV. | HEIGHT | SY | SZ |
| ID | PART. | (GRAMS/SEC) | | X | (METERS) | (METERS) | (METERS) | (METERS) |
| (METERS) | SCALAR | VARY | | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| | CATS. | | BY | | | | | |
| L0000613 | 0 | 0.14320E-07 | 484134.2 | 3718782.7 | 478.8 | 3.49 | 4.00 | 3.25 |
| L0000614 | 0 | 0.14320E-07 | 484133.8 | 3718774.1 | 478.3 | 3.49 | 4.00 | 3.25 |
| L0000615 | 0 | 0.14320E-07 | 484133.4 | 3718765.5 | 477.7 | 3.49 | 4.00 | 3.25 |
| L0000616 | 0 | 0.14320E-07 | 484133.1 | 3718756.9 | 477.2 | 3.49 | 4.00 | 3.25 |
| L0000617 | 0 | 0.14320E-07 | 484132.7 | 3718748.4 | 476.8 | 3.49 | 4.00 | 3.25 |

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | | | | | | | | |
| L0000618 | 0 | 0.14320E-07 | 484132.3 | 3718739.8 | 476.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000619 | 0 | 0.14320E-07 | 484131.9 | 3718731.2 | 475.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000620 | 0 | 0.14320E-07 | 484131.5 | 3718722.6 | 475.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000621 | 0 | 0.14320E-07 | 484131.1 | 3718714.0 | 475.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000622 | 0 | 0.14320E-07 | 484130.7 | 3718705.5 | 475.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000623 | 0 | 0.14320E-07 | 484130.3 | 3718696.9 | 475.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000624 | 0 | 0.14320E-07 | 484130.0 | 3718688.3 | 475.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000625 | 0 | 0.14320E-07 | 484129.6 | 3718679.7 | 475.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000626 | 0 | 0.14320E-07 | 484129.2 | 3718671.1 | 475.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000627 | 0 | 0.14320E-07 | 484128.8 | 3718662.6 | 475.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000628 | 0 | 0.14320E-07 | 484128.4 | 3718654.0 | 475.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000629 | 0 | 0.14320E-07 | 484128.0 | 3718645.4 | 475.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000630 | 0 | 0.14320E-07 | 484127.6 | 3718636.8 | 474.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000631 | 0 | 0.14320E-07 | 484127.3 | 3718628.2 | 474.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000632 | 0 | 0.14320E-07 | 484126.9 | 3718619.6 | 474.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000633 | 0 | 0.14320E-07 | 484126.5 | 3718611.1 | 474.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000634 | 0 | 0.14320E-07 | 484126.1 | 3718602.5 | 474.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000635 | 0 | 0.14320E-07 | 484125.7 | 3718593.9 | 474.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000636 | 0 | 0.14320E-07 | 484125.3 | 3718585.3 | 474.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000637 | 0 | 0.14320E-07 | 484124.9 | 3718576.7 | 474.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000638 | 0 | 0.14320E-07 | 484124.5 | 3718568.2 | 474.2 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000639 | 0 | 0.14320E-07 | 484124.2 | 3718559.6 | 474.5 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000640 | 0 | 0.14320E-07 | 484123.9 | 3718551.0 | 474.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000641 | 0 | 0.14320E-07 | 484123.8 | 3718542.4 | 474.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000642 | 0 | 0.14320E-07 | 484123.6 | 3718533.8 | 474.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000643 | 0 | 0.14320E-07 | 484123.4 | 3718525.2 | 474.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000644 | 0 | 0.14320E-07 | 484123.2 | 3718516.6 | 474.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000645 | 0 | 0.14320E-07 | 484123.0 | 3718508.1 | 474.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000646 | 0 | 0.14320E-07 | 484122.9 | 3718499.5 | 474.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000647 | 0 | 0.14320E-07 | 484122.7 | 3718490.9 | 474.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000648 | 0 | 0.14320E-07 | 484122.5 | 3718482.3 | 473.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000649 | 0 | 0.14320E-07 | 484122.3 | 3718473.7 | 473.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000650 | 0 | 0.14320E-07 | 484122.1 | 3718465.1 | 473.9 | 3.49 | 4.00 | 3.25 |


```

YES
L0000651      0  0.14320E-07  484122.0 3718456.5  473.9   3.49   4.00   3.25
YES
L0000652      0  0.14320E-07  484121.8 3718447.9  473.6   3.49   4.00   3.25
YES
*** AERMOD - VERSION 22112 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
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*** AERMET - VERSION 16216 ***
***
***

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | NUMBER | EMISSION | RATE | | BASE | RELEASE | INIT. | INIT. |
|----------|--------|-------------|----------|-----------|----------|----------|----------|----------|
| SOURCE | URBAN | EMISSION | RATE | | ELEV. | HEIGHT | SY | SZ |
| ID | PART. | (GRAMS/SEC) | | X | | | | |
| (METERS) | CATS. | BY | | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| L0000653 | 0 | 0.14320E-07 | 484121.6 | 3718439.3 | 473.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000654 | 0 | 0.14320E-07 | 484125.5 | 3718434.6 | 473.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000655 | 0 | 0.14320E-07 | 484134.1 | 3718434.3 | 472.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000656 | 0 | 0.14320E-07 | 484142.7 | 3718434.0 | 472.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000657 | 0 | 0.14320E-07 | 484151.2 | 3718433.6 | 472.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000658 | 0 | 0.14320E-07 | 484159.8 | 3718433.3 | 471.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000659 | 0 | 0.14320E-07 | 484168.4 | 3718433.0 | 471.5 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000660 | 0 | 0.14320E-07 | 484177.0 | 3718432.6 | 471.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000661 | 0 | 0.14320E-07 | 484185.6 | 3718432.5 | 471.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000662 | 0 | 0.14320E-07 | 484194.2 | 3718432.5 | 470.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000663 | 0 | 0.14320E-07 | 484202.8 | 3718432.5 | 470.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000664 | 0 | 0.14320E-07 | 484211.4 | 3718432.5 | 470.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000665 | 0 | 0.14320E-07 | 484219.9 | 3718432.5 | 470.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000666 | 0 | 0.14320E-07 | 484228.5 | 3718432.5 | 470.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000667 | 0 | 0.14320E-07 | 484237.1 | 3718432.5 | 470.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000668 | 0 | 0.14320E-07 | 484245.7 | 3718432.5 | 469.8 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000669 | 0 | 0.14320E-07 | 484254.3 | 3718432.5 | 469.5 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000670 | 0 | 0.14320E-07 | 484262.9 | 3718432.5 | 469.2 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000671 | 0 | 0.14320E-07 | 484271.5 | 3718432.5 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000672 | 0 | 0.14320E-07 | 484280.1 | 3718432.5 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000673 | 0 | 0.14320E-07 | 484288.7 | 3718432.5 | 469.0 | 3.49 | 4.00 | 3.25 |

| | | | | | | | | | |
|-----|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | L0000674 | 0 | 0.14320E-07 | 484297.3 | 3718432.5 | 469.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000675 | 0 | 0.14320E-07 | 484305.8 | 3718432.5 | 468.9 | 3.49 | 4.00 | 3.25 |
| YES | L0000676 | 0 | 0.14320E-07 | 484314.4 | 3718432.5 | 468.6 | 3.49 | 4.00 | 3.25 |
| YES | L0000677 | 0 | 0.14320E-07 | 484323.0 | 3718432.5 | 468.4 | 3.49 | 4.00 | 3.25 |
| YES | L0000678 | 0 | 0.14320E-07 | 484331.6 | 3718432.5 | 468.2 | 3.49 | 4.00 | 3.25 |
| YES | L0000679 | 0 | 0.14320E-07 | 484340.2 | 3718432.5 | 468.1 | 3.49 | 4.00 | 3.25 |
| YES | L0000680 | 0 | 0.14320E-07 | 484348.8 | 3718432.5 | 468.1 | 3.49 | 4.00 | 3.25 |
| YES | L0000681 | 0 | 0.14320E-07 | 484357.4 | 3718432.5 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000682 | 0 | 0.14320E-07 | 484366.0 | 3718432.5 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000683 | 0 | 0.14320E-07 | 484374.6 | 3718432.5 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000684 | 0 | 0.14320E-07 | 484383.2 | 3718432.4 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000685 | 0 | 0.14320E-07 | 484391.7 | 3718432.4 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000686 | 0 | 0.14320E-07 | 484400.3 | 3718432.3 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000687 | 0 | 0.14320E-07 | 484408.9 | 3718432.2 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000688 | 0 | 0.14320E-07 | 484417.5 | 3718432.2 | 468.0 | 3.49 | 4.00 | 3.25 |
| YES | L0000689 | 0 | 0.14320E-07 | 484426.1 | 3718431.6 | 468.2 | 3.49 | 4.00 | 3.25 |
| YES | L0000690 | 0 | 0.14320E-07 | 484434.6 | 3718430.9 | 468.5 | 3.49 | 4.00 | 3.25 |
| YES | L0000691 | 0 | 0.14320E-07 | 484442.5 | 3718428.4 | 468.8 | 3.49 | 4.00 | 3.25 |
| YES | L0000692 | 0 | 0.14320E-07 | 484449.4 | 3718423.3 | 468.9 | 3.49 | 4.00 | 3.25 |

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | NUMBER | EMISSION | RATE | | | BASE | RELEASE | INIT. | INIT. |
|----------|--------|-------------|----------|-----------|----------|----------|----------|----------|----------|
| SOURCE | PART. | (GRAMS/SEC) | X | Y | ELEV. | HEIGHT | SY | SZ | |
| ID | SCALAR | VARY | | | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| (METERS) | CATS. | BY | | | | | | | |
| L0000693 | 0 | 0.14320E-07 | 484453.4 | 3718416.0 | 468.7 | 3.49 | 4.00 | 3.25 | |
| YES | | | | | | | | | |
| L0000694 | 0 | 0.14320E-07 | 484455.7 | 3718407.8 | 468.4 | 3.49 | 4.00 | 3.25 | |
| YES | | | | | | | | | |
| L0000695 | 0 | 0.14320E-07 | 484456.4 | 3718399.2 | 468.1 | 3.49 | 4.00 | 3.25 | |
| YES | | | | | | | | | |
| L0000696 | 0 | 0.14320E-07 | 484456.8 | 3718390.7 | 467.8 | 3.49 | 4.00 | 3.25 | |

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | | | | | | | | |
| L0000697 | 0 | 0.14320E-07 | 484456.5 | 3718382.1 | 467.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000698 | 0 | 0.14320E-07 | 484456.3 | 3718373.5 | 467.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000699 | 0 | 0.23430E-07 | 484464.2 | 3718361.1 | 466.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000700 | 0 | 0.23430E-07 | 484478.2 | 3718361.0 | 466.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000701 | 0 | 0.23430E-07 | 484492.2 | 3718360.9 | 465.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000702 | 0 | 0.23430E-07 | 484506.2 | 3718360.8 | 465.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000703 | 0 | 0.23430E-07 | 484520.2 | 3718360.7 | 465.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000704 | 0 | 0.23430E-07 | 484534.2 | 3718360.6 | 465.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000705 | 0 | 0.23430E-07 | 484548.2 | 3718360.5 | 464.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000706 | 0 | 0.23430E-07 | 484562.2 | 3718360.4 | 464.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000707 | 0 | 0.23430E-07 | 484576.2 | 3718360.3 | 463.8 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000708 | 0 | 0.23430E-07 | 484590.2 | 3718360.2 | 463.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000709 | 0 | 0.23430E-07 | 484604.2 | 3718360.1 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000710 | 0 | 0.23430E-07 | 484618.2 | 3718360.0 | 462.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000711 | 0 | 0.23430E-07 | 484632.2 | 3718359.9 | 461.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000712 | 0 | 0.23430E-07 | 484646.2 | 3718360.3 | 461.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000713 | 0 | 0.23430E-07 | 484660.1 | 3718361.4 | 460.8 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000714 | 0 | 0.23430E-07 | 484674.0 | 3718363.2 | 460.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000715 | 0 | 0.23430E-07 | 484687.9 | 3718364.9 | 459.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000716 | 0 | 0.23430E-07 | 484701.8 | 3718366.5 | 458.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000717 | 0 | 0.23430E-07 | 484715.7 | 3718368.1 | 458.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000718 | 0 | 0.23430E-07 | 484729.6 | 3718369.8 | 458.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000719 | 0 | 0.23430E-07 | 484743.5 | 3718371.4 | 458.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000720 | 0 | 0.23430E-07 | 484757.4 | 3718373.0 | 458.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000721 | 0 | 0.23430E-07 | 484771.3 | 3718374.7 | 458.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000722 | 0 | 0.23430E-07 | 484785.2 | 3718376.3 | 458.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000723 | 0 | 0.23430E-07 | 484799.1 | 3718377.7 | 458.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000724 | 0 | 0.23430E-07 | 484813.1 | 3718378.9 | 457.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000725 | 0 | 0.23430E-07 | 484827.0 | 3718379.7 | 457.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000726 | 0 | 0.23430E-07 | 484841.0 | 3718379.9 | 457.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000727 | 0 | 0.23430E-07 | 484855.0 | 3718380.0 | 457.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000728 | 0 | 0.23430E-07 | 484869.0 | 3718380.2 | 456.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000729 | 0 | 0.87840E-08 | 484529.4 | 3719076.7 | 463.2 | 3.49 | 6.51 | 3.25 |

YES
L0000730 0 0.87840E-08 484528.5 3719062.8 463.1 3.49 6.51 3.25
YES
L0000731 0 0.87840E-08 484527.5 3719048.8 463.5 3.49 6.51 3.25
YES
L0000732 0 0.87840E-08 484526.9 3719034.8 464.4 3.49 6.51 3.25
YES

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | SOURCE | ID | SCALAR | PART. | VARY | CATS. | EMISSION RATE | | X | Y | BASE | RELEASE | INIT. | INIT. |
|----------|----------|----------|--------|-------|------|-------------|---------------|----------|-----------|----------|----------|----------|----------|----------|
| | | | | | | | (GRAMS/SEC) | BY | | | | | | |
| (METERS) | (METERS) | (METERS) | | | | | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| L0000733 | | | | 0 | | 0.87840E-08 | | 484526.2 | 3719020.8 | 465.1 | 3.49 | 6.51 | 3.25 | YES |
| L0000734 | | | | 0 | | 0.87840E-08 | | 484525.5 | 3719006.8 | 465.3 | 3.49 | 6.51 | 3.25 | YES |
| L0000735 | | | | 0 | | 0.87840E-08 | | 484524.8 | 3718992.9 | 465.6 | 3.49 | 6.51 | 3.25 | YES |
| L0000736 | | | | 0 | | 0.87840E-08 | | 484524.1 | 3718978.9 | 466.1 | 3.49 | 6.51 | 3.25 | YES |
| L0000737 | | | | 0 | | 0.18850E-07 | | 484523.2 | 3718970.3 | 466.5 | 3.49 | 6.51 | 3.25 | YES |
| L0000738 | | | | 0 | | 0.18850E-07 | | 484522.5 | 3718956.4 | 467.3 | 3.49 | 6.51 | 3.25 | YES |
| L0000739 | | | | 0 | | 0.18850E-07 | | 484521.8 | 3718942.4 | 468.1 | 3.49 | 6.51 | 3.25 | YES |
| L0000740 | | | | 0 | | 0.18850E-07 | | 484521.1 | 3718928.4 | 468.5 | 3.49 | 6.51 | 3.25 | YES |
| L0000741 | | | | 0 | | 0.18850E-07 | | 484520.4 | 3718914.4 | 468.8 | 3.49 | 6.51 | 3.25 | YES |
| L0000742 | | | | 0 | | 0.18850E-07 | | 484519.7 | 3718900.4 | 469.0 | 3.49 | 6.51 | 3.25 | YES |
| L0000743 | | | | 0 | | 0.18850E-07 | | 484518.9 | 3718886.4 | 469.0 | 3.49 | 6.51 | 3.25 | YES |
| L0000744 | | | | 0 | | 0.18850E-07 | | 484518.2 | 3718872.5 | 469.0 | 3.49 | 6.51 | 3.25 | YES |
| L0000745 | | | | 0 | | 0.18850E-07 | | 484517.5 | 3718858.5 | 469.0 | 3.49 | 6.51 | 3.25 | YES |
| L0000746 | | | | 0 | | 0.18850E-07 | | 484516.8 | 3718844.5 | 468.9 | 3.49 | 6.51 | 3.25 | YES |
| L0000747 | | | | 0 | | 0.18850E-07 | | 484516.1 | 3718830.5 | 468.5 | 3.49 | 6.51 | 3.25 | YES |
| L0000748 | | | | 0 | | 0.18850E-07 | | 484515.4 | 3718816.5 | 468.0 | 3.49 | 6.51 | 3.25 | YES |
| L0000749 | | | | 0 | | 0.18850E-07 | | 484514.7 | 3718802.6 | 468.4 | 3.49 | 6.51 | 3.25 | YES |
| L0000750 | | | | 0 | | 0.50770E-07 | | 484518.4 | 3718780.6 | 469.0 | 3.49 | 4.00 | 3.25 | YES |
| L0000751 | | | | 0 | | 0.50770E-07 | | 484527.0 | 3718780.5 | 469.0 | 3.49 | 4.00 | 3.25 | YES |
| L0000752 | | | | 0 | | 0.50770E-07 | | 484535.6 | 3718780.3 | 469.0 | 3.49 | 4.00 | 3.25 | YES |

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YES
L0000753      0  0.50770E-07  484544.2 3718780.2  469.0    3.49    4.00    3.25
YES
L0000754      0  0.50770E-07  484552.8 3718780.1  469.0    3.49    4.00    3.25
YES
L0000755      0  0.50770E-07  484561.4 3718779.9  469.0    3.49    4.00    3.25
YES
L0000756      0  0.50770E-07  484569.9 3718779.8  469.0    3.49    4.00    3.25
YES
L0000757      0  0.50770E-07  484578.5 3718779.6  468.5    3.49    4.00    3.25
YES
L0000758      0  0.50770E-07  484587.1 3718779.5  468.0    3.49    4.00    3.25
YES
L0000759      0  0.50770E-07  484595.7 3718779.3  467.5    3.49    4.00    3.25
YES
L0000760      0  0.50770E-07  484604.3 3718779.2  467.1    3.49    4.00    3.25
YES
L0000761      0  0.50770E-07  484612.9 3718779.1  466.7    3.49    4.00    3.25
YES
L0000762      0  0.50770E-07  484621.5 3718778.9  466.4    3.49    4.00    3.25
YES
L0000763      0  0.50770E-07  484630.1 3718778.8  466.0    3.49    4.00    3.25
YES
L0000764      0  0.50770E-07  484638.7 3718778.7  465.7    3.49    4.00    3.25
YES
L0000765      0  0.50770E-07  484647.2 3718778.6  465.4    3.49    4.00    3.25
YES
L0000766      0  0.50770E-07  484655.8 3718778.4  465.1    3.49    4.00    3.25
YES
L0000767      0  0.50770E-07  484664.4 3718778.3  464.9    3.49    4.00    3.25
YES
L0000768      0  0.50770E-07  484673.0 3718778.2  464.6    3.49    4.00    3.25
YES
L0000769      0  0.50770E-07  484681.6 3718778.0  464.3    3.49    4.00    3.25
YES
L0000770      0  0.50770E-07  484690.2 3718777.9  464.0    3.49    4.00    3.25
YES
L0000771      0  0.50770E-07  484698.8 3718777.8  464.0    3.49    4.00    3.25
YES
L0000772      0  0.50770E-07  484707.4 3718777.6  464.0    3.49    4.00    3.25
YES

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*** AERMOD - VERSION 22112 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
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*** AERMET - VERSION 16216 ***
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

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L0000773      0  0.50770E-07  484716.0 3718777.5  464.0    3.49    4.00    3.25
YES
L0000774      0  0.50770E-07  484724.5 3718777.4  464.0    3.49    4.00    3.25
YES
L0000775      0  0.50770E-07  484733.1 3718777.2  464.0    3.49    4.00    3.25

```

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | | | | | | | | |
| L0000776 | 0 | 0.50770E-07 | 484741.7 | 3718777.1 | 464.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000777 | 0 | 0.50770E-07 | 484750.3 | 3718777.0 | 464.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000778 | 0 | 0.50770E-07 | 484758.9 | 3718776.9 | 464.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000779 | 0 | 0.50770E-07 | 484767.5 | 3718776.7 | 464.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000780 | 0 | 0.50770E-07 | 484776.1 | 3718776.6 | 464.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000781 | 0 | 0.50770E-07 | 484784.7 | 3718776.5 | 463.9 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000782 | 0 | 0.50770E-07 | 484793.3 | 3718776.3 | 463.6 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000783 | 0 | 0.50770E-07 | 484801.8 | 3718776.2 | 463.3 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000784 | 0 | 0.50770E-07 | 484810.4 | 3718776.1 | 463.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000785 | 0 | 0.50770E-07 | 484819.0 | 3718775.9 | 462.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000786 | 0 | 0.50770E-07 | 484827.6 | 3718775.8 | 461.2 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000787 | 0 | 0.50770E-07 | 484836.2 | 3718775.7 | 460.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000788 | 0 | 0.50770E-07 | 484844.8 | 3718775.6 | 459.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000789 | 0 | 0.50770E-07 | 484853.4 | 3718775.4 | 459.1 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000790 | 0 | 0.50770E-07 | 484862.0 | 3718775.3 | 458.5 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000791 | 0 | 0.50770E-07 | 484870.6 | 3718775.2 | 458.0 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000792 | 0 | 0.50770E-07 | 484879.1 | 3718775.0 | 457.7 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000793 | 0 | 0.50770E-07 | 484887.7 | 3718774.9 | 457.4 | 3.49 | 4.00 | 3.25 |
| YES | | | | | | | | |
| L0000794 | 0 | 0.84040E-07 | 484902.1 | 3718768.3 | 457.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000795 | 0 | 0.84040E-07 | 484901.6 | 3718754.3 | 457.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000796 | 0 | 0.84040E-07 | 484901.0 | 3718740.4 | 457.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000797 | 0 | 0.84040E-07 | 484900.5 | 3718726.4 | 458.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000798 | 0 | 0.84040E-07 | 484899.9 | 3718712.4 | 458.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000799 | 0 | 0.84040E-07 | 484899.4 | 3718698.4 | 458.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000800 | 0 | 0.84040E-07 | 484898.8 | 3718684.4 | 458.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000801 | 0 | 0.84040E-07 | 484898.3 | 3718670.4 | 458.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000802 | 0 | 0.84040E-07 | 484897.7 | 3718656.4 | 459.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000803 | 0 | 0.84040E-07 | 484897.1 | 3718642.4 | 460.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000804 | 0 | 0.84040E-07 | 484896.6 | 3718628.4 | 461.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000805 | 0 | 0.84040E-07 | 484896.0 | 3718614.5 | 461.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000806 | 0 | 0.84040E-07 | 484895.5 | 3718600.5 | 461.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000807 | 0 | 0.84040E-07 | 484894.9 | 3718586.5 | 460.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000808 | 0 | 0.84040E-07 | 484894.4 | 3718572.5 | 460.1 | 3.49 | 6.51 | 3.25 |

| | | | | | | | | | |
|-----|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | L0000809 | 0 | 0.84040E-07 | 484893.8 | 3718558.5 | 459.2 | 3.49 | 6.51 | 3.25 |
| YES | L0000810 | 0 | 0.84040E-07 | 484893.2 | 3718544.5 | 458.4 | 3.49 | 6.51 | 3.25 |
| YES | L0000811 | 0 | 0.84040E-07 | 484892.7 | 3718530.5 | 458.2 | 3.49 | 6.51 | 3.25 |
| YES | L0000812 | 0 | 0.84040E-07 | 484892.1 | 3718516.5 | 458.0 | 3.49 | 6.51 | 3.25 |

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*** AERMOD - VERSION 22112 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | SOURCE | ID | NUMBER | EMISSION | RATE | BASE | RELEASE | INIT. | INIT. |
|-------------|--------|-------------|-------------|-----------|----------|----------|----------|----------|----------|
| | | | | | | | | | |
| SCALAR VARY | | CATS. | (GRAMS/SEC) | | X | Y | (METERS) | (METERS) | (METERS) |
| | | | BY | | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| L0000813 | 0 | 0.84040E-07 | 484891.6 | 3718502.5 | 457.7 | 3.49 | 6.51 | 3.25 | |
| L0000814 | 0 | 0.84040E-07 | 484891.0 | 3718488.5 | 457.4 | 3.49 | 6.51 | 3.25 | |
| L0000815 | 0 | 0.84040E-07 | 484890.5 | 3718474.6 | 457.6 | 3.49 | 6.51 | 3.25 | |
| L0000816 | 0 | 0.84040E-07 | 484889.9 | 3718460.6 | 457.9 | 3.49 | 6.51 | 3.25 | |
| L0000817 | 0 | 0.84040E-07 | 484889.4 | 3718446.6 | 458.0 | 3.49 | 6.51 | 3.25 | |
| L0000818 | 0 | 0.84040E-07 | 484888.8 | 3718432.6 | 458.0 | 3.49 | 6.51 | 3.25 | |
| L0000819 | 0 | 0.84040E-07 | 484888.2 | 3718418.6 | 457.8 | 3.49 | 6.51 | 3.25 | |
| L0000820 | 0 | 0.84040E-07 | 484887.7 | 3718404.6 | 457.3 | 3.49 | 6.51 | 3.25 | |
| L0000821 | 0 | 0.84040E-07 | 484887.1 | 3718390.6 | 456.9 | 3.49 | 6.51 | 3.25 | |
| L0000822 | 0 | 0.10690E-06 | 484886.7 | 3718372.8 | 456.7 | 3.49 | 6.51 | 3.25 | |
| L0000823 | 0 | 0.10690E-06 | 484886.8 | 3718358.8 | 456.4 | 3.49 | 6.51 | 3.25 | |
| L0000824 | 0 | 0.10690E-06 | 484886.8 | 3718344.8 | 456.2 | 3.49 | 6.51 | 3.25 | |
| L0000825 | 0 | 0.10690E-06 | 484886.8 | 3718330.8 | 456.0 | 3.49 | 6.51 | 3.25 | |
| L0000826 | 0 | 0.10690E-06 | 484886.8 | 3718316.8 | 456.0 | 3.49 | 6.51 | 3.25 | |
| L0000827 | 0 | 0.10690E-06 | 484886.9 | 3718302.8 | 456.1 | 3.49 | 6.51 | 3.25 | |
| L0000828 | 0 | 0.10690E-06 | 484886.9 | 3718288.8 | 456.6 | 3.49 | 6.51 | 3.25 | |
| L0000829 | 0 | 0.10690E-06 | 484886.9 | 3718274.8 | 457.0 | 3.49 | 6.51 | 3.25 | |
| L0000830 | 0 | 0.10690E-06 | 484887.0 | 3718260.8 | 457.0 | 3.49 | 6.51 | 3.25 | |
| L0000831 | 0 | 0.10690E-06 | 484887.0 | 3718246.8 | 457.0 | 3.49 | 6.51 | 3.25 | |

YES
 L0000832 0 0.10690E-06 484887.0 3718232.8 456.5 3.49 6.51 3.25
 YES
 L0000833 0 0.10690E-06 484887.1 3718218.8 456.0 3.49 6.51 3.25
 YES
 L0000834 0 0.10690E-06 484887.1 3718204.8 455.0 3.49 6.51 3.25
 YES
 L0000835 0 0.10690E-06 484887.1 3718190.8 453.8 3.49 6.51 3.25
 YES
 L0000836 0 0.10690E-06 484887.2 3718176.8 453.1 3.49 6.51 3.25
 YES
 L0000837 0 0.10690E-06 484887.4 3718162.8 452.7 3.49 6.51 3.25
 YES
 L0000838 0 0.10690E-06 484887.5 3718148.8 452.8 3.49 6.51 3.25
 YES
 L0000839 0 0.10690E-06 484887.7 3718134.8 453.4 3.49 6.51 3.25
 YES
 L0000840 0 0.10690E-06 484887.8 3718120.8 454.2 3.49 6.51 3.25
 YES
 L0000841 0 0.10690E-06 484888.0 3718106.8 455.2 3.49 6.51 3.25
 YES
 L0000842 0 0.10690E-06 484888.2 3718092.8 456.0 3.49 6.51 3.25
 YES
 L0000843 0 0.10690E-06 484888.3 3718078.8 456.2 3.49 6.51 3.25
 YES
 L0000844 0 0.10690E-06 484888.5 3718064.8 456.4 3.49 6.51 3.25
 YES
 L0000845 0 0.10690E-06 484888.6 3718050.8 456.4 3.49 6.51 3.25
 YES
 L0000846 0 0.10690E-06 484888.8 3718036.8 456.4 3.49 6.51 3.25
 YES
 L0000847 0 0.10690E-06 484889.0 3718022.8 456.4 3.49 6.51 3.25
 YES
 L0000848 0 0.10690E-06 484889.1 3718008.8 456.4 3.49 6.51 3.25
 YES
 L0000849 0 0.10690E-06 484889.3 3717994.9 456.2 3.49 6.51 3.25
 YES
 L0000850 0 0.10690E-06 484889.4 3717980.9 456.1 3.49 6.51 3.25
 YES
 L0000851 0 0.10690E-06 484889.6 3717966.9 455.8 3.49 6.51 3.25
 YES
 L0000852 0 0.10690E-06 484889.8 3717952.9 455.5 3.49 6.51 3.25
 YES

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

L0000853 0 0.10690E-06 484889.9 3717938.9 455.2 3.49 6.51 3.25
 YES
 L0000854 0 0.10690E-06 484890.1 3717924.9 454.9 3.49 6.51 3.25

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | | | | | | | | |
| L0000855 | 0 | 0.10690E-06 | 484890.2 | 3717910.9 | 454.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000856 | 0 | 0.10690E-06 | 484890.4 | 3717896.9 | 454.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000857 | 0 | 0.10690E-06 | 484890.5 | 3717882.9 | 453.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000858 | 0 | 0.10690E-06 | 484890.7 | 3717868.9 | 452.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000859 | 0 | 0.10690E-06 | 484890.8 | 3717854.9 | 452.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000860 | 0 | 0.10690E-06 | 484890.9 | 3717840.9 | 452.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000861 | 0 | 0.10690E-06 | 484891.1 | 3717826.9 | 452.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000862 | 0 | 0.10690E-06 | 484891.2 | 3717812.9 | 451.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000863 | 0 | 0.10690E-06 | 484891.3 | 3717798.9 | 451.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000864 | 0 | 0.10690E-06 | 484891.5 | 3717784.9 | 450.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000865 | 0 | 0.10690E-06 | 484891.6 | 3717770.9 | 450.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000866 | 0 | 0.10690E-06 | 484891.7 | 3717756.9 | 451.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000867 | 0 | 0.10690E-06 | 484891.9 | 3717742.9 | 452.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000868 | 0 | 0.10690E-06 | 484892.0 | 3717728.9 | 452.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000869 | 0 | 0.10690E-06 | 484892.2 | 3717714.9 | 452.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000870 | 0 | 0.10690E-06 | 484892.3 | 3717700.9 | 452.8 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000871 | 0 | 0.10690E-06 | 484892.4 | 3717686.9 | 452.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000872 | 0 | 0.10690E-06 | 484892.6 | 3717672.9 | 451.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000873 | 0 | 0.10690E-06 | 484893.0 | 3717658.9 | 451.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000874 | 0 | 0.10690E-06 | 484893.4 | 3717644.9 | 450.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000875 | 0 | 0.10690E-06 | 484893.8 | 3717630.9 | 449.8 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000876 | 0 | 0.10690E-06 | 484894.1 | 3717616.9 | 449.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000877 | 0 | 0.10690E-06 | 484894.5 | 3717602.9 | 449.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000878 | 0 | 0.10690E-06 | 484894.9 | 3717588.9 | 449.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000879 | 0 | 0.10690E-06 | 484892.9 | 3717577.2 | 449.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000880 | 0 | 0.10690E-06 | 484878.9 | 3717577.4 | 450.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000881 | 0 | 0.10690E-06 | 484864.9 | 3717577.5 | 451.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000882 | 0 | 0.10690E-06 | 484850.9 | 3717577.7 | 452.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000883 | 0 | 0.10690E-06 | 484837.0 | 3717577.8 | 453.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000884 | 0 | 0.10690E-06 | 484823.0 | 3717578.0 | 454.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000885 | 0 | 0.10690E-06 | 484809.0 | 3717578.1 | 456.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000886 | 0 | 0.10690E-06 | 484795.0 | 3717578.3 | 457.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000887 | 0 | 0.10690E-06 | 484781.0 | 3717578.5 | 459.6 | 3.49 | 6.51 | 3.25 |

```

YES
L0000888      0   0.10690E-06  484767.0 3717578.6  461.3    3.49    6.51    3.25
YES
L0000889      0   0.10690E-06  484753.0 3717578.8  462.9    3.49    6.51    3.25
YES
L0000890      0   0.10690E-06  484739.0 3717578.9  463.2    3.49    6.51    3.25
YES
L0000891      0   0.10690E-06  484725.0 3717579.1  463.2    3.49    6.51    3.25
YES
L0000892      0   0.10690E-06  484711.0 3717579.2  463.0    3.49    6.51    3.25
YES

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*** AERMOD - VERSION 22112 ***      *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
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*** AERMET - VERSION 16216 ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE | NUMBER | EMISSION | RATE | | BASE | RELEASE | INIT. | INIT. |
|----------|--------|-------------|----------|-----------|----------|----------|----------|----------|
| SOURCE | URBAN | EMISSION | RATE | X | ELEV. | HEIGHT | SY | SZ |
| ID | PART. | (GRAMS/SEC) | | (METERS) | (METERS) | (METERS) | (METERS) | (METERS) |
| (METERS) | SCALAR | BY | | | | | | |
| | CATS. | | | | | | | |
| L0000893 | 0 | 0.10690E-06 | 484697.0 | 3717579.4 | 462.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000894 | 0 | 0.10690E-06 | 484683.0 | 3717579.5 | 462.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000895 | 0 | 0.10690E-06 | 484669.0 | 3717579.5 | 462.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000896 | 0 | 0.10690E-06 | 484655.0 | 3717579.5 | 462.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000897 | 0 | 0.10690E-06 | 484641.0 | 3717579.6 | 462.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000898 | 0 | 0.10690E-06 | 484627.0 | 3717579.6 | 462.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000899 | 0 | 0.10690E-06 | 484613.0 | 3717579.7 | 461.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000900 | 0 | 0.10690E-06 | 484599.0 | 3717579.7 | 461.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000901 | 0 | 0.10690E-06 | 484585.0 | 3717579.7 | 461.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000902 | 0 | 0.10690E-06 | 484571.0 | 3717579.8 | 461.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000903 | 0 | 0.10690E-06 | 484557.0 | 3717579.8 | 460.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000904 | 0 | 0.10690E-06 | 484543.0 | 3717579.9 | 460.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000905 | 0 | 0.10690E-06 | 484529.0 | 3717579.9 | 460.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000906 | 0 | 0.10690E-06 | 484515.0 | 3717579.9 | 460.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000907 | 0 | 0.10690E-06 | 484501.0 | 3717580.0 | 461.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000908 | 0 | 0.10690E-06 | 484487.0 | 3717580.0 | 461.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000909 | 0 | 0.10690E-06 | 484473.0 | 3717580.0 | 461.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000910 | 0 | 0.10690E-06 | 484459.0 | 3717580.1 | 461.2 | 3.49 | 6.51 | 3.25 |

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | | | | | | | | |
| L0000911 | 0 | 0.10690E-06 | 484445.0 | 3717580.1 | 461.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000912 | 0 | 0.10690E-06 | 484431.0 | 3717580.2 | 461.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000913 | 0 | 0.10690E-06 | 484417.0 | 3717580.2 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000914 | 0 | 0.10690E-06 | 484403.0 | 3717580.2 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000915 | 0 | 0.10690E-06 | 484389.0 | 3717580.3 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000916 | 0 | 0.10690E-06 | 484375.0 | 3717580.3 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000917 | 0 | 0.10690E-06 | 484361.0 | 3717580.4 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000918 | 0 | 0.10690E-06 | 484347.0 | 3717580.6 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000919 | 0 | 0.10690E-06 | 484333.0 | 3717580.8 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000920 | 0 | 0.10690E-06 | 484319.0 | 3717581.0 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000921 | 0 | 0.10690E-06 | 484305.0 | 3717581.2 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000922 | 0 | 0.10690E-06 | 484291.0 | 3717581.3 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000923 | 0 | 0.10690E-06 | 484277.0 | 3717581.5 | 462.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000924 | 0 | 0.10690E-06 | 484263.0 | 3717581.7 | 462.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000925 | 0 | 0.10690E-06 | 484249.0 | 3717581.9 | 462.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000926 | 0 | 0.10690E-06 | 484235.0 | 3717582.1 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000927 | 0 | 0.10690E-06 | 484221.0 | 3717582.3 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000928 | 0 | 0.10690E-06 | 484207.0 | 3717582.4 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000929 | 0 | 0.10690E-06 | 484193.0 | 3717582.6 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000930 | 0 | 0.10690E-06 | 484179.0 | 3717582.7 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000931 | 0 | 0.10690E-06 | 484165.0 | 3717582.9 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000932 | 0 | 0.10690E-06 | 484151.0 | 3717583.0 | 462.9 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |


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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

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

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| L0000933 | 0 | 0.10690E-06 | 484137.0 | 3717583.1 | 463.3 | 3.49 | 6.51 | 3.25 |
|----------|---|-------------|----------|-----------|-------|------|------|------|

| | | | | | | | | |
|----------|---|-------------|----------|-----------|-------|------|------|------|
| YES | | | | | | | | |
| L0000934 | 0 | 0.10690E-06 | 484123.0 | 3717583.3 | 463.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000935 | 0 | 0.10690E-06 | 484109.0 | 3717583.4 | 464.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000936 | 0 | 0.10690E-06 | 484095.0 | 3717583.4 | 464.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000937 | 0 | 0.10690E-06 | 484081.0 | 3717583.1 | 465.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000938 | 0 | 0.10690E-06 | 484067.0 | 3717582.7 | 465.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000939 | 0 | 0.10690E-06 | 484053.2 | 3717584.6 | 465.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000940 | 0 | 0.10690E-06 | 484039.7 | 3717588.1 | 465.5 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000941 | 0 | 0.10690E-06 | 484026.2 | 3717591.7 | 465.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000942 | 0 | 0.10690E-06 | 484012.6 | 3717595.3 | 465.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000943 | 0 | 0.10690E-06 | 483999.1 | 3717598.8 | 465.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000944 | 0 | 0.10690E-06 | 483985.6 | 3717602.4 | 466.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000945 | 0 | 0.10690E-06 | 483972.0 | 3717606.0 | 467.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000946 | 0 | 0.10690E-06 | 483958.5 | 3717609.7 | 466.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000947 | 0 | 0.10690E-06 | 483945.2 | 3717614.1 | 464.7 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000948 | 0 | 0.10690E-06 | 483931.9 | 3717618.4 | 463.8 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000949 | 0 | 0.10690E-06 | 483918.6 | 3717622.8 | 463.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000950 | 0 | 0.10690E-06 | 483905.3 | 3717627.1 | 462.8 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000951 | 0 | 0.10690E-06 | 483892.0 | 3717631.4 | 462.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000952 | 0 | 0.10690E-06 | 483878.7 | 3717635.8 | 461.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000953 | 0 | 0.10690E-06 | 483865.4 | 3717640.1 | 460.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000954 | 0 | 0.10690E-06 | 483852.1 | 3717644.5 | 460.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000955 | 0 | 0.10690E-06 | 483838.8 | 3717648.8 | 459.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000956 | 0 | 0.10690E-06 | 483825.4 | 3717653.1 | 459.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000957 | 0 | 0.10690E-06 | 483812.1 | 3717657.5 | 458.2 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000958 | 0 | 0.10690E-06 | 483798.8 | 3717661.8 | 457.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000959 | 0 | 0.10690E-06 | 483785.5 | 3717666.1 | 457.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000960 | 0 | 0.10690E-06 | 483772.0 | 3717669.8 | 457.0 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000961 | 0 | 0.10690E-06 | 483758.5 | 3717673.4 | 457.1 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000962 | 0 | 0.10690E-06 | 483745.0 | 3717677.1 | 457.6 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000963 | 0 | 0.10690E-06 | 483731.4 | 3717680.8 | 458.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000964 | 0 | 0.10690E-06 | 483717.8 | 3717684.0 | 459.3 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |
| L0000965 | 0 | 0.10690E-06 | 483704.0 | 3717686.4 | 460.4 | 3.49 | 6.51 | 3.25 |
| YES | | | | | | | | |

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

| SRCGROUP ID | SOURCE IDs | | | | | | |
|-------------|------------|------------|------------|------------|------------|------------|---|
| ----- | ----- | | | | | | |
| ALL | L0000493 | , L0000494 | , L0000495 | , L0000496 | , L0000497 | , L0000498 | , |
| L0000499 | , L0000500 | , | | | | | |
| | L0000501 | , L0000502 | , L0000503 | , L0000504 | , L0000505 | , L0000506 | , |
| | L0000507 | , L0000508 | , | | | | |
| | L0000509 | , L0000510 | , L0000511 | , L0000512 | , L0000513 | , L0000514 | , |
| | L0000515 | , L0000516 | , | | | | |
| | L0000517 | , L0000518 | , L0000519 | , L0000520 | , L0000521 | , L0000522 | , |
| | L0000523 | , L0000524 | , | | | | |
| | L0000525 | , L0000526 | , L0000527 | , L0000528 | , L0000529 | , L0000530 | , |
| | L0000531 | , L0000532 | , | | | | |
| | L0000533 | , L0000534 | , L0000535 | , L0000536 | , L0000537 | , L0000538 | , |
| | L0000539 | , L0000540 | , | | | | |
| | L0000541 | , L0000542 | , L0000543 | , L0000544 | , L0000545 | , L0000546 | , |
| | L0000547 | , L0000548 | , | | | | |
| | L0000549 | , L0000550 | , L0000551 | , L0000552 | , L0000553 | , L0000554 | , |
| | L0000555 | , L0000556 | , | | | | |
| | L0000557 | , L0000558 | , L0000559 | , L0000560 | , L0000561 | , L0000562 | , |
| | L0000563 | , L0000564 | , | | | | |
| | L0000565 | , L0000566 | , L0000567 | , L0000568 | , L0000569 | , L0000570 | , |
| | L0000571 | , L0000572 | , | | | | |
| | L0000573 | , L0000574 | , L0000575 | , L0000576 | , L0000577 | , L0000578 | , |
| | L0000579 | , L0000580 | , | | | | |
| | L0000581 | , L0000582 | , L0000583 | , L0000584 | , L0000585 | , L0000586 | , |
| | L0000587 | , L0000588 | , | | | | |
| | L0000589 | , L0000590 | , L0000591 | , L0000592 | , L0000593 | , L0000594 | , |
| | L0000595 | , L0000596 | , | | | | |
| | L0000597 | , L0000598 | , L0000599 | , L0000600 | , L0000601 | , L0000602 | , |
| | L0000603 | , L0000604 | , | | | | |
| | L0000605 | , L0000606 | , L0000607 | , L0000608 | , L0000609 | , L0000610 | , |
| | L0000611 | , L0000612 | , | | | | |
| | L0000613 | , L0000614 | , L0000615 | , L0000616 | , L0000617 | , L0000618 | , |
| | L0000619 | , L0000620 | , | | | | |
| | L0000621 | , L0000622 | , L0000623 | , L0000624 | , L0000625 | , L0000626 | , |
| | L0000627 | , L0000628 | , | | | | |
| | L0000629 | , L0000630 | , L0000631 | , L0000632 | , L0000633 | , L0000634 | , |

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L0000635 , L0000636 ,
L0000637 , L0000638 , L0000639 , L0000640 , L0000641 , L0000642 ,
L0000643 , L0000644 ,
L0000645 , L0000646 , L0000647 , L0000648 , L0000649 , L0000650 ,
L0000651 , L0000652 ,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

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

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L0000773 , L0000774 , L0000775 , L0000776 , L0000777 , L0000778 ,
L0000779 , L0000780 ,

L0000781 , L0000782 , L0000783 , L0000784 , L0000785 , L0000786 ,
L0000787 , L0000788 ,

L0000789 , L0000790 , L0000791 , L0000792 , L0000793 , L0000794 ,
L0000795 , L0000796 ,

L0000797 , L0000798 , L0000799 , L0000800 , L0000801 , L0000802 ,
L0000803 , L0000804 ,

L0000805 , L0000806 , L0000807 , L0000808 , L0000809 , L0000810 ,
L0000811 , L0000812 ,

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

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L0000813 , L0000814 , L0000815 , L0000816 , L0000817 , L0000818 ,
L0000819 , L0000820 ,

L0000821 , L0000822 , L0000823 , L0000824 , L0000825 , L0000826 ,
L0000827 , L0000828 ,

L0000829 , L0000830 , L0000831 , L0000832 , L0000833 , L0000834 ,
L0000835 , L0000836 ,

L0000837 , L0000838 , L0000839 , L0000840 , L0000841 , L0000842 ,
L0000843 , L0000844 ,

L0000845 , L0000846 , L0000847 , L0000848 , L0000849 , L0000850 ,
L0000851 , L0000852 ,

L0000853 , L0000854 , L0000855 , L0000856 , L0000857 , L0000858 ,
L0000859 , L0000860 ,

L0000861 , L0000862 , L0000863 , L0000864 , L0000865 , L0000866 ,
L0000867 , L0000868 ,

L0000869 , L0000870 , L0000871 , L0000872 , L0000873 , L0000874 ,
L0000875 , L0000876 ,

L0000877 , L0000878 , L0000879 , L0000880 , L0000881 , L0000882 ,
L0000883 , L0000884 ,

L0000885 , L0000886 , L0000887 , L0000888 , L0000889 , L0000890 ,
L0000891 , L0000892 ,

L0000893 , L0000894 , L0000895 , L0000896 , L0000897 , L0000898 ,
L0000899 , L0000900 ,

L0000901 , L0000902 , L0000903 , L0000904 , L0000905 , L0000906 ,
L0000907 , L0000908 ,

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L0000909 , L0000910 , L0000911 , L0000912 , L0000913 , L0000914 ,
 L0000915 , L0000916 ,

 L0000917 , L0000918 , L0000919 , L0000920 , L0000921 , L0000922 ,
 L0000923 , L0000924 ,

 L0000925 , L0000926 , L0000927 , L0000928 , L0000929 , L0000930 ,
 L0000931 , L0000932 ,

 L0000933 , L0000934 , L0000935 , L0000936 , L0000937 , L0000938 ,
 L0000939 , L0000940 ,

 L0000941 , L0000942 , L0000943 , L0000944 , L0000945 , L0000946 ,
 L0000947 , L0000948 ,

 L0000949 , L0000950 , L0000951 , L0000952 , L0000953 , L0000954 ,
 L0000955 , L0000956 ,

 L0000957 , L0000958 , L0000959 , L0000960 , L0000961 , L0000962 ,
 L0000963 , L0000964 ,

 L0000965 ,

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

| URBAN ID | URBAN POP | SOURCE IDs | | | | | |
|----------|----------------------|--------------------------|------------|------------|------------|------------|---|
| ----- | ----- | ----- | | | | | |
| L0000500 | 2189641. L0000498 | L0000493 , L0000499 | , L0000494 | , L0000495 | , L0000496 | , L0000497 | , |
| | L0000501 L0000507 | , L0000502 , L0000508 | , L0000503 | , L0000504 | , L0000505 | , L0000506 | , |
| | L0000509 L0000515 | , L0000510 , L0000516 | , L0000511 | , L0000512 | , L0000513 | , L0000514 | , |
| | L0000517 L0000523 | , L0000518 , L0000524 | , L0000519 | , L0000520 | , L0000521 | , L0000522 | , |
| | L0000525 L0000531 | , L0000526 , L0000532 | , L0000527 | , L0000528 | , L0000529 | , L0000530 | , |
| | L0000533 L0000539 | , L0000534 , L0000540 | , L0000535 | , L0000536 | , L0000537 | , L0000538 | , |
| | L0000541 L0000547 | , L0000542 , L0000548 | , L0000543 | , L0000544 | , L0000545 | , L0000546 | , |
| | L0000549 L0000555 | , L0000550 , L0000556 | , L0000551 | , L0000552 | , L0000553 | , L0000554 | , |
| | L0000557 L0000563 | , L0000558 , L0000564 | , L0000559 | , L0000560 | , L0000561 | , L0000562 | , |
| | L0000565 | , L0000566 | , L0000567 | , L0000568 | , L0000569 | , L0000570 | , |

L0000571 , L0000572 ,
 L0000573 , L0000574 , L0000575 , L0000576 , L0000577 , L0000578 ,
 L0000579 , L0000580 ,
 L0000581 , L0000582 , L0000583 , L0000584 , L0000585 , L0000586 ,
 L0000587 , L0000588 ,
 L0000589 , L0000590 , L0000591 , L0000592 , L0000593 , L0000594 ,
 L0000595 , L0000596 ,
 L0000597 , L0000598 , L0000599 , L0000600 , L0000601 , L0000602 ,
 L0000603 , L0000604 ,
 L0000605 , L0000606 , L0000607 , L0000608 , L0000609 , L0000610 ,
 L0000611 , L0000612 ,
 L0000613 , L0000614 , L0000615 , L0000616 , L0000617 , L0000618 ,
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 L0000621 , L0000622 , L0000623 , L0000624 , L0000625 , L0000626 ,
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 L0000629 , L0000630 , L0000631 , L0000632 , L0000633 , L0000634 ,
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 L0000637 , L0000638 , L0000639 , L0000640 , L0000641 , L0000642 ,
 L0000643 , L0000644 ,
 L0000645 , L0000646 , L0000647 , L0000648 , L0000649 , L0000650 ,
 L0000651 , L0000652 ,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

| URBAN ID | URBAN POP | SOURCE IDs |
|----------|------------|---|
| ----- | ----- | ----- |
| L0000653 | , L0000654 | , L0000655 , L0000656 , L0000657 , L0000658 , |
| L0000659 | , L0000660 | , |
| L0000661 | , L0000662 | , L0000663 , L0000664 , L0000665 , L0000666 , |
| L0000667 | , L0000668 | , |
| L0000669 | , L0000670 | , L0000671 , L0000672 , L0000673 , L0000674 , |
| L0000675 | , L0000676 | , |
| L0000677 | , L0000678 | , L0000679 , L0000680 , L0000681 , L0000682 , |
| L0000683 | , L0000684 | , |
| L0000685 | , L0000686 | , L0000687 , L0000688 , L0000689 , L0000690 , |
| L0000691 | , L0000692 | , |
| L0000693 | , L0000694 | , L0000695 , L0000696 , L0000697 , L0000698 , |
| L0000699 | , L0000700 | , |
| L0000701 | , L0000702 | , L0000703 , L0000704 , L0000705 , L0000706 , |
| L0000707 | , L0000708 | , |

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L0000709 , L0000710 , L0000711 , L0000712 , L0000713 , L0000714 ,
L0000715 , L0000716 ,

L0000717 , L0000718 , L0000719 , L0000720 , L0000721 , L0000722 ,
L0000723 , L0000724 ,

L0000725 , L0000726 , L0000727 , L0000728 , L0000729 , L0000730 ,
L0000731 , L0000732 ,

L0000733 , L0000734 , L0000735 , L0000736 , L0000737 , L0000738 ,
L0000739 , L0000740 ,

L0000741 , L0000742 , L0000743 , L0000744 , L0000745 , L0000746 ,
L0000747 , L0000748 ,

L0000749 , L0000750 , L0000751 , L0000752 , L0000753 , L0000754 ,
L0000755 , L0000756 ,

L0000757 , L0000758 , L0000759 , L0000760 , L0000761 , L0000762 ,
L0000763 , L0000764 ,

L0000765 , L0000766 , L0000767 , L0000768 , L0000769 , L0000770 ,
L0000771 , L0000772 ,

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L0000779 , L0000780 ,

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L0000787 , L0000788 ,

L0000789 , L0000790 , L0000791 , L0000792 , L0000793 , L0000794 ,
L0000795 , L0000796 ,

L0000797 , L0000798 , L0000799 , L0000800 , L0000801 , L0000802 ,
L0000803 , L0000804 ,

L0000805 , L0000806 , L0000807 , L0000808 , L0000809 , L0000810 ,
L0000811 , L0000812 ,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

| URBAN ID | URBAN POP | SOURCE IDs | | | | | |
|----------|-----------|------------|----------|----------|----------|-------|-------|
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| L0000813 | L0000814 | L0000815 | L0000816 | L0000817 | L0000818 | | |
| L0000819 | L0000820 | | | | | | |
| L0000821 | L0000822 | L0000823 | L0000824 | L0000825 | L0000826 | | |
| L0000827 | L0000828 | | | | | | |
| L0000829 | L0000830 | L0000831 | L0000832 | L0000833 | L0000834 | | |
| L0000835 | L0000836 | | | | | | |
| L0000837 | L0000838 | L0000839 | L0000840 | L0000841 | L0000842 | | |
| L0000843 | L0000844 | | | | | | |

L0000845 , L0000846 , L0000847 , L0000848 , L0000849 , L0000850 ,
L0000851 , L0000852 ,

L0000853 , L0000854 , L0000855 , L0000856 , L0000857 , L0000858 ,
L0000859 , L0000860 ,

L0000861 , L0000862 , L0000863 , L0000864 , L0000865 , L0000866 ,
L0000867 , L0000868 ,

L0000869 , L0000870 , L0000871 , L0000872 , L0000873 , L0000874 ,
L0000875 , L0000876 ,

L0000877 , L0000878 , L0000879 , L0000880 , L0000881 , L0000882 ,
L0000883 , L0000884 ,

L0000885 , L0000886 , L0000887 , L0000888 , L0000889 , L0000890 ,
L0000891 , L0000892 ,

L0000893 , L0000894 , L0000895 , L0000896 , L0000897 , L0000898 ,
L0000899 , L0000900 ,

L0000901 , L0000902 , L0000903 , L0000904 , L0000905 , L0000906 ,
L0000907 , L0000908 ,

L0000909 , L0000910 , L0000911 , L0000912 , L0000913 , L0000914 ,
L0000915 , L0000916 ,

L0000917 , L0000918 , L0000919 , L0000920 , L0000921 , L0000922 ,
L0000923 , L0000924 ,

L0000925 , L0000926 , L0000927 , L0000928 , L0000929 , L0000930 ,
L0000931 , L0000932 ,

L0000933 , L0000934 , L0000935 , L0000936 , L0000937 , L0000938 ,
L0000939 , L0000940 ,

L0000941 , L0000942 , L0000943 , L0000944 , L0000945 , L0000946 ,
L0000947 , L0000948 ,

L0000949 , L0000950 , L0000951 , L0000952 , L0000953 , L0000954 ,
L0000955 , L0000956 ,

L0000957 , L0000958 , L0000959 , L0000960 , L0000961 , L0000962 ,
L0000963 , L0000964 ,

L0000965 ,

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

(484416.4, 3719046.2, 470.5, 618.0, 0.0); (484272.8, 3718988.8,
475.2, 618.0, 0.0);
(484411.2, 3718988.6, 472.6, 618.0, 0.0); (484423.0, 3719169.4,
469.5, 618.0, 0.0);
(484263.4, 3719098.9, 473.9, 618.0, 0.0); (484177.4, 3719088.4,
482.1, 618.0, 0.0);
(484335.6, 3719168.3, 469.7, 618.0, 0.0); (484339.5, 3719182.7,
470.1, 618.0, 0.0);

(484505.8, 3719199.2, 466.2, 618.0, 0.0); (484469.4, 3719214.9, 468.2, 618.0, 0.0);
(484226.7, 3719238.5, 475.0, 618.0, 0.0); (484742.8, 3719204.7, 462.0, 603.0, 0.0);
(484870.9, 3719205.5, 461.9, 601.0, 0.0); (484688.0, 3719294.6, 462.9, 603.0, 0.0);
(484330.1, 3719411.8, 472.0, 618.0, 0.0); (484506.4, 3719415.6, 467.1, 618.0, 0.0);
(484271.3, 3719412.5, 474.0, 618.0, 0.0); (484467.8, 3719417.5, 468.4, 618.0, 0.0);
(484728.9, 3719248.8, 462.6, 603.0, 0.0); (484973.1, 3718737.1, 457.3, 601.0, 0.0);
(484036.2, 3718817.2, 486.6, 618.0, 0.0); (484325.5, 3718869.1, 472.1, 618.0, 0.0);
(484266.7, 3718810.3, 473.1, 618.0, 0.0); (484951.0, 3718554.3, 458.1, 601.0, 0.0);
(484812.1, 3718592.1, 462.0, 601.0, 0.0); (484467.5, 3718461.2, 468.6, 603.0, 0.0);
(484194.2, 3718334.5, 470.5, 603.0, 0.0); (484871.0, 3718279.7, 456.9, 601.0, 0.0);
(484870.0, 3718240.9, 457.0, 601.0, 0.0); (484870.0, 3718171.3, 453.5, 601.0, 0.0);
(484869.7, 3718203.3, 455.7, 455.7, 0.0); (484868.8, 3718120.9, 455.2, 455.2, 0.0);
(484868.5, 3718085.5, 456.4, 456.4, 0.0); (484870.7, 3718055.5, 457.0, 457.0, 0.0);
(484871.7, 3718028.1, 456.9, 456.9, 0.0); (484870.5, 3718000.0, 456.8, 456.8, 0.0);
(484871.7, 3717960.2, 456.0, 456.0, 0.0); (484872.6, 3717943.6, 455.9, 455.9, 0.0);
(484872.6, 3717926.8, 455.9, 455.9, 0.0); (484872.1, 3717911.5, 455.7, 455.7, 0.0);
(484873.1, 3717897.2, 455.2, 455.2, 0.0); (484873.8, 3717867.5, 453.6, 453.6, 0.0);
(484873.6, 3717854.5, 452.8, 452.8, 0.0); (484873.1, 3717843.8, 452.5, 452.5, 0.0);
(484871.3, 3717830.8, 452.2, 452.2, 0.0); (484874.0, 3717818.6, 451.8, 451.8, 0.0);
(484873.8, 3717803.8, 451.3, 463.0, 0.0); (484874.1, 3717793.0, 451.0, 463.0, 0.0);
(484875.0, 3717765.4, 450.9, 464.0, 0.0); (484874.5, 3717753.9, 452.0, 464.0, 0.0);
(484874.1, 3717741.9, 453.2, 464.0, 0.0); (484873.8, 3717729.7, 454.1, 464.0, 0.0);
(484873.5, 3717718.7, 454.8, 464.0, 0.0); (484869.2, 3717668.0, 453.6, 464.0, 0.0);
(484870.4, 3717641.9, 451.7, 464.0, 0.0); (484869.9, 3717618.9, 450.2, 464.0, 0.0);
(484806.6, 3717603.0, 456.2, 464.0, 0.0); (484783.7, 3717602.2, 457.7, 464.0, 0.0);
(484757.6, 3717601.0, 459.9, 463.0, 0.0); (484733.6, 3717602.7, 460.8, 463.0, 0.0);
(484707.7, 3717602.7, 461.4, 461.4, 0.0); (484652.5, 3717603.2, 460.9, 460.9, 0.0);
(484626.9, 3717604.7, 460.7, 460.7, 0.0); (484603.5, 3717603.8, 460.4, 460.4, 0.0);
(484579.3, 3717604.5, 460.4, 460.4, 0.0); (484557.6, 3717606.6, 460.2, 460.2, 0.0);
(484530.9, 3717605.2, 460.1, 460.1, 0.0); (484465.0, 3717664.1, 461.5, 494.0, 0.0);
(484437.6, 3717621.5, 462.1, 462.1, 0.0); (484362.7, 3717615.9, 462.1, 490.0, 0.0);
(484283.3, 3717612.7, 462.9, 518.0, 0.0); (484594.1, 3717519.6, 463.2, 463.2, 0.0);
(484751.8, 3717510.0, 462.3, 469.0, 0.0); (484560.8, 3717519.8, 462.8, 462.8, 0.0);

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( 484720.0, 3717510.2, 464.5, 469.0, 0.0); ( 484299.4, 3717558.5,
462.0, 525.0, 0.0);
( 484052.5, 3717549.2, 462.6, 603.0, 0.0); ( 484022.0, 3717550.6,
462.4, 603.0, 0.0);
( 483948.3, 3717569.9, 463.8, 603.0, 0.0); ( 483640.8, 3717578.4,
455.7, 603.0, 0.0);
( 483673.5, 3717728.4, 463.0, 603.0, 0.0); ( 484027.7, 3718357.9,
473.1, 603.0, 0.0);
( 483523.9, 3718981.1, 557.7, 603.0, 0.0); ( 485148.4, 3719226.1,
454.3, 458.0, 0.0);
( 484929.0, 3717946.4, 454.0, 454.0, 0.0); ( 485179.5, 3718026.5,
451.3, 451.3, 0.0);
( 484925.1, 3717823.4, 451.9, 451.9, 0.0); ( 484758.7, 3719205.2,
462.3, 601.0, 0.0);
( 484778.3, 3719206.5, 462.9, 601.0, 0.0); ( 484796.2, 3719204.0,
462.9, 601.0, 0.0);

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

```

( 484814.2, 3719205.5, 463.0, 601.0, 0.0); ( 484833.5, 3719202.2,
462.9, 601.0, 0.0);
( 484852.8, 3719203.5, 462.5, 601.0, 0.0); ( 484995.9, 3719330.7,
456.2, 598.0, 0.0);
( 485053.4, 3719308.9, 455.8, 598.0, 0.0); ( 485098.3, 3719288.2,
453.4, 598.0, 0.0);
( 485221.9, 3719140.3, 455.7, 458.0, 0.0); ( 485345.6, 3718981.1,
444.9, 452.0, 0.0);
( 485373.8, 3719049.1, 443.8, 458.0,
0.0);

```

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

```

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

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NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS

| | | | | | | | | | | | | | | | |
|------|------|-------|-----|----|--------|--------|--------|--------|-------|-------|----------|------|------|------|--------|
| 12 | 01 | 01 | 1 | 14 | 156.6 | 0.266 | 1.869 | 0.005 | 1446. | 330. | -10.4 | 0.23 | 2.69 | 0.23 | 1.80 |
| 217. | 9.1 | 301.4 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 15 | 104.7 | 0.256 | 1.677 | 0.005 | 1562. | 311. | -13.8 | 0.23 | 2.69 | 0.27 | 1.80 |
| 248. | 9.1 | 302.0 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 16 | 32.7 | 0.319 | 1.147 | 0.005 | 1596. | 433. | -85.9 | 0.23 | 2.69 | 0.36 | 2.70 |
| 235. | 9.1 | 302.0 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 17 | -15.5 | 0.190 | -9.000 | -9.000 | -999. | 208. | 39.6 | 0.23 | 2.69 | 0.63 | 1.80 |
| 46. | 9.1 | 299.2 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 18 | -4.1 | 0.092 | -9.000 | -9.000 | -999. | 73. | 16.2 | 0.23 | 2.69 | 1.00 | 0.90 |
| 107. | 9.1 | 294.9 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 19 | -999.0 | -9.000 | -9.000 | -9.000 | -999. | -999. | -99999.0 | 0.23 | 2.69 | 1.00 | 999.00 |
| 999. | -9.0 | 292.5 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 20 | -4.2 | 0.092 | -9.000 | -9.000 | -999. | 67. | 16.1 | 0.23 | 2.69 | 1.00 | 0.90 |
| 323. | 9.1 | 290.4 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 21 | -8.8 | 0.133 | -9.000 | -9.000 | -999. | 116. | 23.2 | 0.23 | 2.69 | 1.00 | 1.30 |
| 34. | 9.1 | 287.5 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 22 | -1.3 | 0.065 | -9.000 | -9.000 | -999. | 41. | 18.1 | 0.23 | 2.69 | 1.00 | 0.40 |
| 359. | 9.1 | 286.4 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 23 | -1.3 | 0.065 | -9.000 | -9.000 | -999. | 40. | 18.1 | 0.23 | 2.69 | 1.00 | 0.40 |
| 351. | 9.1 | 285.4 | 5.5 | | | | | | | | | | | | |
| 12 | 01 | 01 | 1 | 24 | -4.2 | 0.092 | -9.000 | -9.000 | -999. | 67. | 16.0 | 0.23 | 2.69 | 1.00 | 0.90 |
| 11. | 9.1 | 284.9 | 5.5 | | | | | | | | | | | | |

First hour of profile data

| YR | MO | DY | HR | HEIGHT | F | WDIR | WSPD | AMB_TMP | sigmaA | sigmaW | sigmaV |
|----|----|----|----|--------|---|-------|--------|---------|--------|--------|--------|
| 12 | 01 | 01 | 01 | 5.5 | 0 | -999. | -99.00 | 284.3 | 99.0 | -99.00 | -99.00 |
| 12 | 01 | 01 | 01 | 9.1 | 1 | 78. | 0.40 | -999.0 | 99.0 | -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): L0000493 , L0000494 ,
 L0000495 , L0000496 , L0000497 ,
 L0000498 , L0000499 , L0000500 , L0000501 , L0000502 ,
 L0000503 , L0000504 , L0000505 ,
 L0000506 , L0000507 , L0000508 , L0000509 , L0000510 ,
 L0000511 , L0000512 , L0000513 ,
 L0000514 , L0000515 , L0000516 , L0000517 , L0000518 ,
 L0000519 , L0000520 , . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD |
|-------------|-------------|---------|-------------|---------|
| 484416.44 | 3719046.20 | 0.00086 | 484272.79 | |
| 3718988.85 | 0.00096 | | | |
| 484411.20 | 3718988.57 | 0.00156 | 484423.05 | |
| 3719169.44 | 0.00044 | | | |
| 484263.41 | 3719098.86 | 0.00039 | 484177.39 | |
| 3719088.38 | 0.00032 | | | |
| 484335.65 | 3719168.34 | 0.00032 | 484339.51 | |
| 3719182.68 | 0.00030 | | | |

| | | | |
|------------|------------|---------|-----------|
| 484505.77 | 3719199.22 | 0.00039 | 484469.37 |
| 3719214.93 | 0.00034 | | |
| 484226.67 | 3719238.53 | 0.00020 | 484742.80 |
| 3719204.74 | 0.00017 | | |
| 484870.86 | 3719205.50 | 0.00013 | 484688.05 |
| 3719294.63 | 0.00015 | | |
| 484330.09 | 3719411.78 | 0.00013 | 484506.40 |
| 3719415.60 | 0.00012 | | |
| 484271.32 | 3719412.55 | 0.00012 | 484467.85 |
| 3719417.51 | 0.00012 | | |
| 484728.88 | 3719248.83 | 0.00016 | 484973.12 |
| 3718737.08 | 0.00029 | | |
| 484036.24 | 3718817.22 | 0.00020 | 484325.51 |
| 3718869.12 | 0.00179 | | |
| 484266.74 | 3718810.35 | 0.00078 | 484950.98 |
| 3718554.29 | 0.00036 | | |
| 484812.07 | 3718592.07 | 0.00033 | 484467.47 |
| 3718461.17 | 0.00027 | | |
| 484194.23 | 3718334.48 | 0.00016 | 484871.02 |
| 3718279.73 | 0.00096 | | |
| 484870.03 | 3718240.94 | 0.00092 | 484870.02 |
| 3718171.33 | 0.00090 | | |
| 484869.68 | 3718203.33 | 0.00089 | 484868.83 |
| 3718120.87 | 0.00084 | | |
| 484868.49 | 3718085.47 | 0.00082 | 484870.69 |
| 3718055.50 | 0.00088 | | |
| 484871.71 | 3718028.07 | 0.00090 | 484870.52 |
| 3717999.96 | 0.00085 | | |
| 484871.71 | 3717960.17 | 0.00088 | 484872.56 |
| 3717943.57 | 0.00090 | | |
| 484872.56 | 3717926.81 | 0.00089 | 484872.11 |
| 3717911.55 | 0.00086 | | |
| 484873.12 | 3717897.16 | 0.00089 | 484873.80 |
| 3717867.52 | 0.00091 | | |
| 484873.63 | 3717854.48 | 0.00090 | 484873.12 |
| 3717843.82 | 0.00088 | | |
| 484871.26 | 3717830.78 | 0.00082 | 484873.97 |
| 3717818.58 | 0.00090 | | |
| 484873.80 | 3717803.85 | 0.00089 | 484874.14 |
| 3717793.01 | 0.00090 | | |
| 484874.99 | 3717765.41 | 0.00092 | 484874.48 |
| 3717753.89 | 0.00090 | | |
| 484874.14 | 3717741.87 | 0.00088 | 484873.80 |
| 3717729.68 | 0.00087 | | |
| 484873.46 | 3717718.67 | 0.00085 | 484869.23 |
| 3717668.03 | 0.00076 | | |
| 484870.41 | 3717641.95 | 0.00080 | 484869.91 |
| 3717618.92 | 0.00084 | | |
| 484806.57 | 3717603.00 | 0.00072 | 484783.71 |
| 3717602.16 | 0.00071 | | |
| 484757.63 | 3717600.97 | 0.00073 | 484733.58 |
| 3717602.66 | 0.00070 | | |
| 484707.67 | 3717602.66 | 0.00072 | 484652.46 |
| 3717603.17 | 0.00071 | | |
| 484626.89 | 3717604.70 | 0.00069 | 484603.52 |
| 3717603.85 | 0.00071 | | |
| 484579.31 | 3717604.53 | 0.00070 | 484557.63 |
| 3717606.56 | 0.00066 | | |
| 484530.87 | 3717605.20 | 0.00069 | 484465.00 |
| 3717664.14 | 0.00029 | | |
| 484437.56 | 3717621.46 | 0.00048 | 484362.73 |
| 3717615.95 | 0.00054 | | |
| 484283.27 | 3717612.67 | 0.00059 | 484594.08 |
| 3717519.61 | 0.00035 | | |
| 484751.82 | 3717510.01 | 0.00031 | 484560.79 |
| 3717519.85 | 0.00035 | | |

| | | | |
|------------|------------|---------|-----------|
| 484719.95 | 3717510.24 | 0.00031 | 484299.44 |
| 3717558.52 | 0.00073 | | |
| 484052.52 | 3717549.21 | 0.00048 | 484021.99 |
| 3717550.56 | 0.00043 | | |
| 483948.34 | 3717569.87 | 0.00044 | 483640.76 |
| 3717578.40 | 0.00010 | | |

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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): L0000493 , L0000494 ,
L0000495 , L0000496 , L0000497 ,
L0000498 , L0000499 , L0000500 , L0000501 , L0000502 ,
L0000503 , L0000504 , L0000505 ,
L0000506 , L0000507 , L0000508 , L0000509 , L0000510 ,
L0000511 , L0000512 , L0000513 ,
L0000514 , L0000515 , L0000516 , L0000517 , L0000518 ,
L0000519 , L0000520 , . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

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

| | | | | |
|------------|------------|---------|-----------|--|
| 483673.54 | 3717728.38 | 0.00017 | 484027.73 | |
| 3718357.88 | 0.00012 | | | |
| 483523.93 | 3718981.10 | 0.00002 | 485148.37 | |
| 3719226.06 | 0.00007 | | | |
| 484929.05 | 3717946.39 | 0.00052 | 485179.54 | |
| 3718026.53 | 0.00012 | | | |
| 484925.15 | 3717823.41 | 0.00058 | 484758.70 | |
| 3719205.23 | 0.00016 | | | |
| 484778.26 | 3719206.46 | 0.00016 | 484796.22 | |
| 3719203.96 | 0.00015 | | | |
| 484814.20 | 3719205.49 | 0.00014 | 484833.54 | |
| 3719202.16 | 0.00014 | | | |
| 484852.81 | 3719203.47 | 0.00013 | 484995.91 | |
| 3719330.67 | 0.00008 | | | |
| 485053.40 | 3719308.94 | 0.00008 | 485098.27 | |
| 3719288.25 | 0.00007 | | | |
| 485221.88 | 3719140.30 | 0.00007 | 485345.61 | |
| 3718981.15 | 0.00007 | | | |
| 485373.75 | 3719049.08 | | | |
| 0.00006 | | | | |

```

*** AERMOD - VERSION 22112 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
Village\14073 O *** 01/26/23
*** AERMET - VERSION 16216 ***
***
*** 14:21:32

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

NETWORK

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

ALL 1ST HIGHEST VALUE IS 0.00179 AT (484325.51, 3718869.12, 472.07,
618.00, 0.00) DC
2ND HIGHEST VALUE IS 0.00156 AT (484411.20, 3718988.57, 472.56,
618.00, 0.00) DC
3RD HIGHEST VALUE IS 0.00096 AT (484871.02, 3718279.73, 456.88,
601.00, 0.00) DC
4TH HIGHEST VALUE IS 0.00096 AT (484272.79, 3718988.85, 475.17,
618.00, 0.00) DC
5TH HIGHEST VALUE IS 0.00092 AT (484874.99, 3717765.41, 450.89,
464.00, 0.00) DC
6TH HIGHEST VALUE IS 0.00092 AT (484870.03, 3718240.94, 457.00,
601.00, 0.00) DC
7TH HIGHEST VALUE IS 0.00091 AT (484873.80, 3717867.52, 453.59,
453.59, 0.00) DC
8TH HIGHEST VALUE IS 0.00090 AT (484871.71, 3718028.07, 456.94,
456.94, 0.00) DC
9TH HIGHEST VALUE IS 0.00090 AT (484873.97, 3717818.58, 451.75,
451.75, 0.00) DC
10TH HIGHEST VALUE IS 0.00090 AT (484873.63, 3717854.48, 452.84,
452.84, 0.00) DC

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

*** AERMOD - VERSION 22112 *** C:\Users\Michael Tirohn\Desktop\HRAs\14073 Discovery
Village\14073 O *** 01/26/23

*** AERMET - VERSION 16216 ***

*** 14:21:32

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1763 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 884 Calm Hours Identified

A Total of 879 Missing Hours Identified (2.00 Percent)

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

***** WARNING MESSAGES *****
ME W186 1338 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50

ME W187

1338

MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** AERMOD Finishes Successfully ***

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APPENDIX 2.3:
RISK CALCULATIONS

Table 1
Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
0-2 Age Bin Exposure Scenario - Construction Activity

| 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) |
| | 0.01653 | 1.65E-05 | | | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 1.3E-05 | 8.7E-06 | 5.0E+00 | 1.4E-03 | 3.3E-03 | | | | | |
| TOTAL | | | | | | | 8.7E-06 | | | 3.3E-03 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | |

8.66

** 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) | 260 |
| exposure duration (years) | 4.50 |
| inhalation rate (L/kg-day) | 1090 |
| inhalation absorption factor | 1 |
| averaging time (years) | 70 |
| fraction of time at home | 1.00 |
| age sensitivity factor (0 to 2 years old) | 10 |

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

| Source (a) | Mass GLC | | Weight Fraction (d) | Contaminant (e) | Carcinogenic Risk | | | | Noncarcinogenic Hazards/ Toxicological Endpoints** | | | | | | | | | |
|---------------|-----------------------------|-----------------------------|---------------------------|--------------------|--|---|----------------------------|-------------|---|---------------------------|-------------|----------------|--------------|--------------|-------------|--------------|--------------|-------------|
| | (ug/m ³) (b) | (mg/m ³) (c) | | | URF (ug/m ³) ⁻¹ (f) | CPF (mg/kg/day) ⁻¹ (g) | DOSE (mg/kg-day) (h) | RISK (i) | REL (ug/m ³) (j) | RfD (mg/kg/day) (k) | RESP (l) | CNS/PNS (m) | CV/BL (n) | IMMUN (o) | KIDN (p) | GI/LV (q) | REPRO (r) | EYES (s) |
| | | 0.00017 | | | 1.70E-07 | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 9.3E-08 | 4.0E-08 | 5.0E+00 | 1.4E-03 | 3.4E-05 | | | | |
| TOTAL | | | | | 4.0E-08 | | | | 3.4E-05 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 | | | | | | | | | |

0.04

** 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) | 13.23 |
| 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) (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) |
| | | 0.00017 | | | 1.70E-07 | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 4.3E-08 | 6.5E-09 | 5.0E+00 | 1.4E-03 | 3.4E-05 | | | | |
| TOTAL | | | | | 6.5E-09 | | | | 3.4E-05 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 0.0E+00 | | | | | | | | | |

0.01

** 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) 8.71

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

| | Source (a) | Mass GLC | | Weight Fraction (d) | Contaminant (e) | Carcinogenic Risk | | | | Noncarcinogenic Hazards/ Toxicological Endpoints** | | | | | | | | | | |
|-------|---------------------|----------------------|----------------------|------------------------|--------------------|------------------------------------|---------------------------|-------------|-------------|--|-------------|-------------|----------------|--------------|--------------|-------------|--------------|--------------|-------------|--|
| | | (b) | (c) | | | URF (f) | CPF (g) | DOSE (h) | RISK (i) | REL (j) | RfD (k) | RESP (l) | CNS/PNS (m) | CV/BL (n) | IMMUN (o) | KIDN (p) | GI/LV (q) | REPRO (r) | EYES (s) | |
| | | (ug/m ³) | (mg/m ³) | | | (ug/m ³) ⁻¹ | (mg/kg/day) ⁻¹ | (mg/kg-day) | | (ug/m ³) | (mg/kg/day) | | | | | | | | | |
| 1 | Diesel Particulates | 2.76E-02 | 2.76E-05 | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 4.5E-06 | 3.1E-07 | 5.0E+00 | 1.4E-03 | 5.5E-03 | | | | | | | | |
| TOTAL | | | | | | | | | 3.1E-07 | | 5.5E-03 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | |
| | | | | | | | | | 0.31 | | | | | | | | | | | |

** Key to Toxicological Endpoints

Note: Exposure factors used to calculate contaminant intake

| | | | |
|---------|--|--------------------------------|------|
| RESP | Respiratory System | exposure frequency (days/year) | 260 |
| CNS/PNS | Central/Peripheral Nervous System | exposure duration (years) | 4.50 |
| CV/BL | Cardiovascular/Blood System | inhalation rate (L/kg-day) | 230 |
| IMMUN | Immune System | inhalation absorption factor | 1 |
| KIDN | Kidney | averaging time (years) | 70 |
| GI/LV | Gastrointestinal System/Liver | | |
| REPRO | Reproductive System (e.g. teratogenic and developmental effects) | | |
| EYES | Eye irritation and/or other effects | | |

Table 6
Quantification of Carcinogenic Risks and Noncarcinogenic Risks
9-Year School Child 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) | | | |
| | | 1 | Diesel Particulates | | | 2.55E-03 | 2.55E-06 | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 7.2E-07 | 1.5E-07 | 5.0E+00 | 1.4E-03 | 5.1E-04 | | | | | | |
| TOTAL | | | | | | | | | 1.5E-07 0.15 | | | 5.1E-04 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | |

** 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) | 4.50 |
| 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 | | |

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) |
| | 0.00096 | 9.60E-07 | | | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 3.3E-07 | 1.1E-08 | 5.0E+00 | 1.4E-03 | 1.9E-04 | | | | | |
| TOTAL | | | | | | | 1.1E-08 | | | 1.9E-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) (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) |
| | 0.00096 | 9.60E-07 | | | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 1.0E-06 | 2.6E-07 | 5.0E+00 | 1.4E-03 | 1.9E-04 | | | | | |
| TOTAL | | | | | 2.6E-07 | | | | 1.9E-04 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | |

** Key to Toxicological Endpoints

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

Note: Exposure factors used to calculate contaminant intake

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

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

| Source (a) | Mass GLC | | Weight Fraction (d) | Contaminant (e) | Carcinogenic Risk | | | | Noncarcinogenic Hazards/ Toxicological Endpoints** | | | | | | | | | |
|---------------|-----------------------------|-----------------------------|---------------------------|--------------------|--|---|----------------------------|-------------|--|---------------------------|-------------|----------------|--------------|--------------|-------------|--------------|--------------|-------------|
| | (ug/m ³) (b) | (mg/m ³) (c) | | | URF (ug/m ³) ⁻¹ (f) | CPF (mg/kg/day) ⁻¹ (g) | DOSE (mg/kg-day) (h) | RISK (i) | REL (ug/m ³) (j) | RfD (mg/kg/day) (k) | RESP (l) | CNS/PNS (m) | CV/BL (n) | IMMUN (o) | KIDN (p) | GI/LV (q) | REPRO (r) | EYES (s) |
| | 0.00096 | 9.60E-07 | | | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 5.3E-07 | 2.4E-07 | 5.0E+00 | 1.4E-03 | 1.9E-04 | | | | | |
| TOTAL | | | | | | | 2.4E-07 | | | 1.9E-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) (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) |
| | | 0.00096 | | | 9.60E-07 | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 2.4E-07 | 3.7E-08 | 5.0E+00 | 1.4E-03 | 1.9E-04 | | | | |
| TOTAL | | | | | 3.7E-08 | | | | 1.9E-04 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | |

0.04

** 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) 0.54

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

| | Source (a) | Mass GLC | | Weight Fraction (d) | Contaminant (e) | Carcinogenic Risk | | | | Noncarcinogenic Hazards/ Toxicological Endpoints** | | | | | | | | | | | |
|-------|---------------|----------|---------------------|------------------------|--------------------|--|---|----------------------------|--------------------|--|---------------------------|-------------|----------------|--------------|--------------|-------------|--------------|--------------|-------------|---------|--|
| | | (b) | (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) | | |
| | | 1 | Diesel Particulates | | | 1.79E-03 | 1.79E-06 | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 2.8E-07 | 1.1E-07 | 5.0E+00 | 1.4E-03 | 3.6E-04 | | | | | |
| TOTAL | | | | | | | | | 1.1E-07 0.11 | | | 3.6E-04 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | |

** Key to Toxicological Endpoints

Note: Exposure factors used to calculate contaminant intake

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

**Table 6
Quantification of Carcinogenic Risks and Noncarcinogenic Risks
9-Year School Child 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) | RIID (mg/kg/day) (k) | RESP (l) | CNS/PNS (m) | CV/BL (n) | IMMUN (o) | KIDN (p) | GI/LV (q) | REPRO (r) | EYES (s) | |
| | | 1 | Diesel Particulates | | | 3.50E-04 | 3.50E-07 | 1.00E+00 | Diesel Particulate | 3.0E-04 | 1.1E+00 | 9.9E-08 | 4.0E-08 | 5.0E+00 | 1.4E-03 | 7.0E-05 | | | | |
| TOTAL | | | | | | | | | 4.0E-08 0.04 | | | 7.0E-05 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 | 0.0E+00 |

** Key to Toxicological Endpoints

Note: Exposure factors used to calculate contaminant intake

| | | | |
|---------|--|------------------------------------|-----|
| RESP | Respiratory System | exposure frequency (days/year) | 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 | | |

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