

HEALTH RISK ASSESSMENT

**MAPES AND TRUMBLE WAREHOUSE
CITY OF PERRIS
RIVERSIDE COUNTY, CALIFORNIA**

LSA

November 2022

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CITY OF PERRIS
RIVERSIDE COUNTY, CALIFORNIA**

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LIST OF ABBREVIATIONS AND ACRONYMS

$\mu\text{g}/\text{m}^3$	millions per microgram per cubic meter
AB	Assembly Bill
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
Basin	South Coast Air Basin
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
<i>CARB Handbook</i>	California Air Resources Board <i>Air Quality and Land Use Handbook: A Community Health Perspective</i>
CEQA	California Environmental Quality Act
DPM	diesel particulate matter
EMFAC2021	California Emissions Factor Model, Version 2021
EPA	United States Environmental Protection Agency
ft	foot/feet
HARP	Hotspots Analysis and Reporting Program, Version 2
HI	Hazard Index
HRA	health risk assessment
MEI	maximum exposed individual
MICR	maximum individual cancer risk
mph	miles per hour
OEHHA	Office of Environmental Health Hazard Assessment
PM_{10}	particulate matter less than 10 microns in size
$\text{PM}_{2.5}$	particulate matter less than 2.5 microns in size
project	Mapes and Trumble Warehouse
ROG	reactive organic gas
SCAQMD	South Coast Air Quality Management District
TAC	toxic air contaminant
URF	unit risk factor

1.0 INTRODUCTION

LSA has prepared a health risk assessment (HRA) for the proposed Mapes and Trumble Warehouse Project in Perris, California. The project involves the development of a 395,500 square foot (sf) warehouse building to be located at the southwest corner of Mapes Road and Trumble Road on vacant Assessor's Parcels Numbers 329-020-044, 329-020-046, 329-020-033, and 329-020-034. The project is planned to begin operations in August 2024.

An HRA is a process used to estimate the increased health risk levels for people living and/or working near a project that emits toxic air contaminants (TACs). An HRA combines results of studies on the health effects of various animal and human exposure to TACs with results of studies that estimate the exposure levels at different distances from the source of pollutants. The purpose of the HRA is to document the potential increased cancer and noncancer health risk levels from project-related emissions of TACs on existing nearby sensitive receptors, including residents and/or workers.

The City of Perris recommends the preparation of an HRA in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD). This HRA evaluates all of these criteria in compliance with applicable requirements.

1.1 BACKGROUND

This section provides a discussion of regulatory guidance from the California Air Resources Board (CARB), the OEHHA, California Air Pollution Control Officers Association (CAPCOA), and the SCAQMD.

1.1.1 California Air Resources Board Handbook and Technical Advisory

The CARB has developed an *Air Quality and Land Use Handbook* (*CARB Handbook*; 2005) and a supplement, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory* (CARB 2017), that are intended to serve as general reference guides for evaluating and reducing air pollution impacts associated with new projects that are part of the land use decision-making process. According to the *CARB Handbook*, recent air pollution studies have shown an association between both respiratory and other non-cancer health effects and proximity to high-traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The *CARB Handbook* recommends that planning agencies recognize that the configuration of warehouse and distribution centers can reduce population exposure and risk. For example, locating the main entry and exit points away from sensitive land uses helps to reduce cancer risks and other health impacts.

1.1.2 Office of Environmental Health and Hazard Assessment Guidelines

The OEHHA developed the *Air Toxics Hot Spots Program Guidance Manual* (OEHHA 2015) in conjunction with the CARB for use in implementing the Air Toxics Hot Spots Program (Health and Safety Code Section 44360). The manual describes health effects values, exposure pathway variates

(e.g., breathing rates), and a tiered approach for performing HRAs based on current science and policy assessment. The intent of the guidance manual is to incorporate children's health concerns, update risk assessment practices, and provide consistent risk assessment procedures.

1.1.3 California Air Pollution Control Officers Association

In 2009, the CAPCOA published guidance (CAPCOA 2009) on assessing the health risk impacts from and to proposed land use projects, focusing on the acute, chronic, and cancer impacts of sources affected by California Environmental Quality Act (CEQA). The document recommends procedures to identify when a project should undergo further risk evaluation, procedures for conducting an HRA, guidelines to engage the public, presentation guidelines for results from the HRA, and mitigation measures that may be appropriate for various land use projects.

1.1.4 South Coast Air Quality Management District

The SCAQMD has risk assessment guidelines, *AB 2588 and Rule 1402 Supplemental Guidelines* (SCAQMD 2018). These guidelines incorporate the OEHHA guidance and the options to be used when using the CARB's Hotspots Analysis and Reporting Program Version 2 (HARP) program for risk assessment calculations.

1.2 PROJECT LOCATION

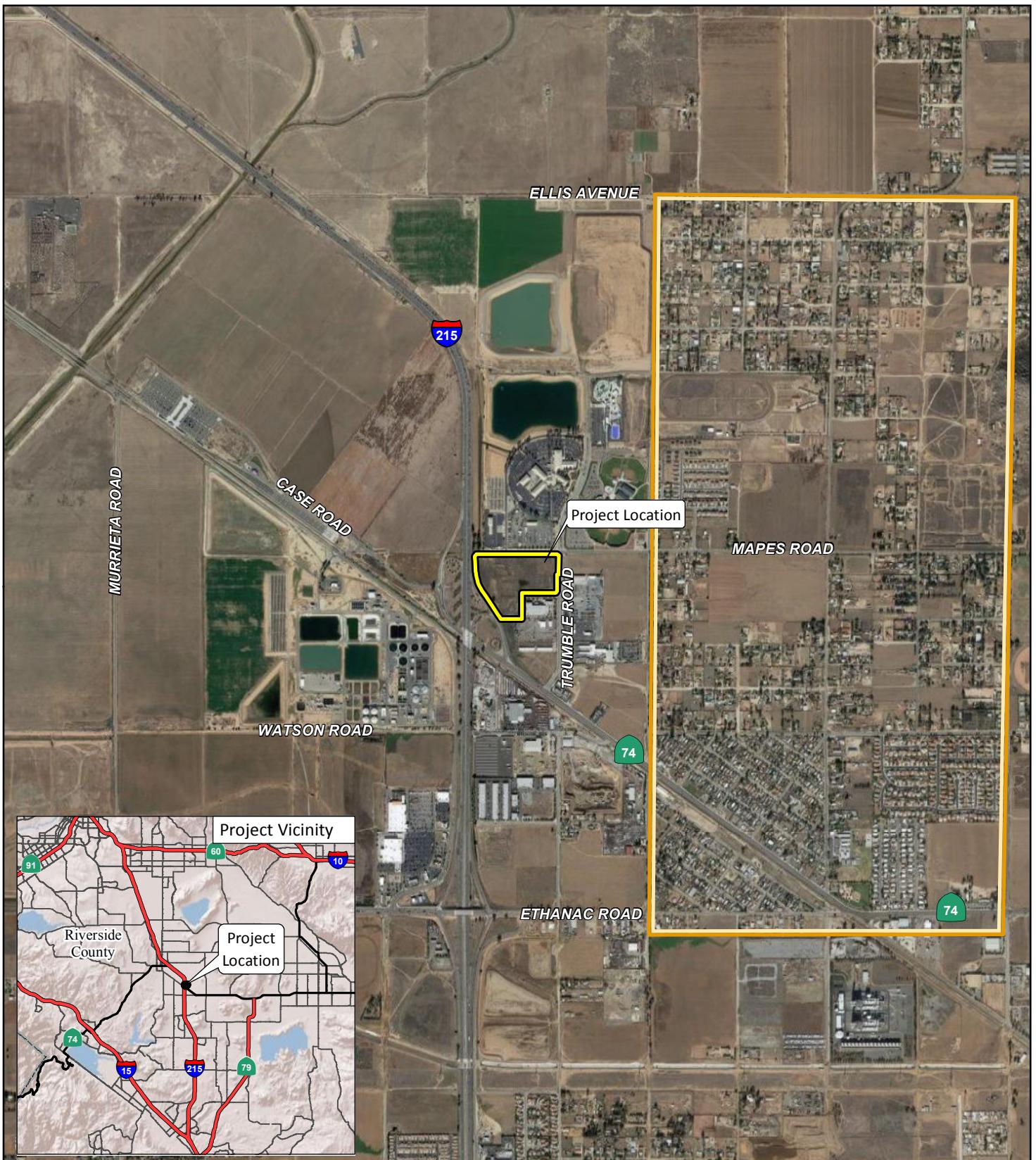
The project site is located southwest of the Trumble Road and Mapes Road intersection in the City of Perris (City). The project site is an undeveloped 19.16-acre lot, consisting of Assessor's Parcel Numbers 329-020-033, -034, -044, and -046. The site has a General Plan Industrial BP-Business Park land use designation and a corresponding BP zoning designation (City of Perris General Plan Map and Zoning Map). The proposed project construction schedule is assumed to begin in March 2023 and be completed in August 2024. The project site location is shown in Figure 1.

1.3 PROJECT DESCRIPTION

The proposed project would result in the development of a 395,500 sf industrial warehouse building. The proposed warehouse project would include of 6,000 sf general office-mezzanine space, tractor trailer loading docks, and both auto and truck parking spaces. The site plan for the proposed project is shown in Figure 2.

1.4 EXISTING SENSITIVE LAND USES IN THE PROJECT AREA

Sensitive receptors include residences, schools, hospitals, and similar uses sensitive to criteria pollutants. The project site is surrounded primarily by commercial and industrial land use types, with multi-family residential developments located approximately 1,365 feet (416 meters [m]) east of the project site along Sherman Road as shown in Figure 1. Additionally, there is the Big League Dreams Sports Complex northeast of the project site.



LSA

LEGEND

- Project Location
- Sensitive Receptors

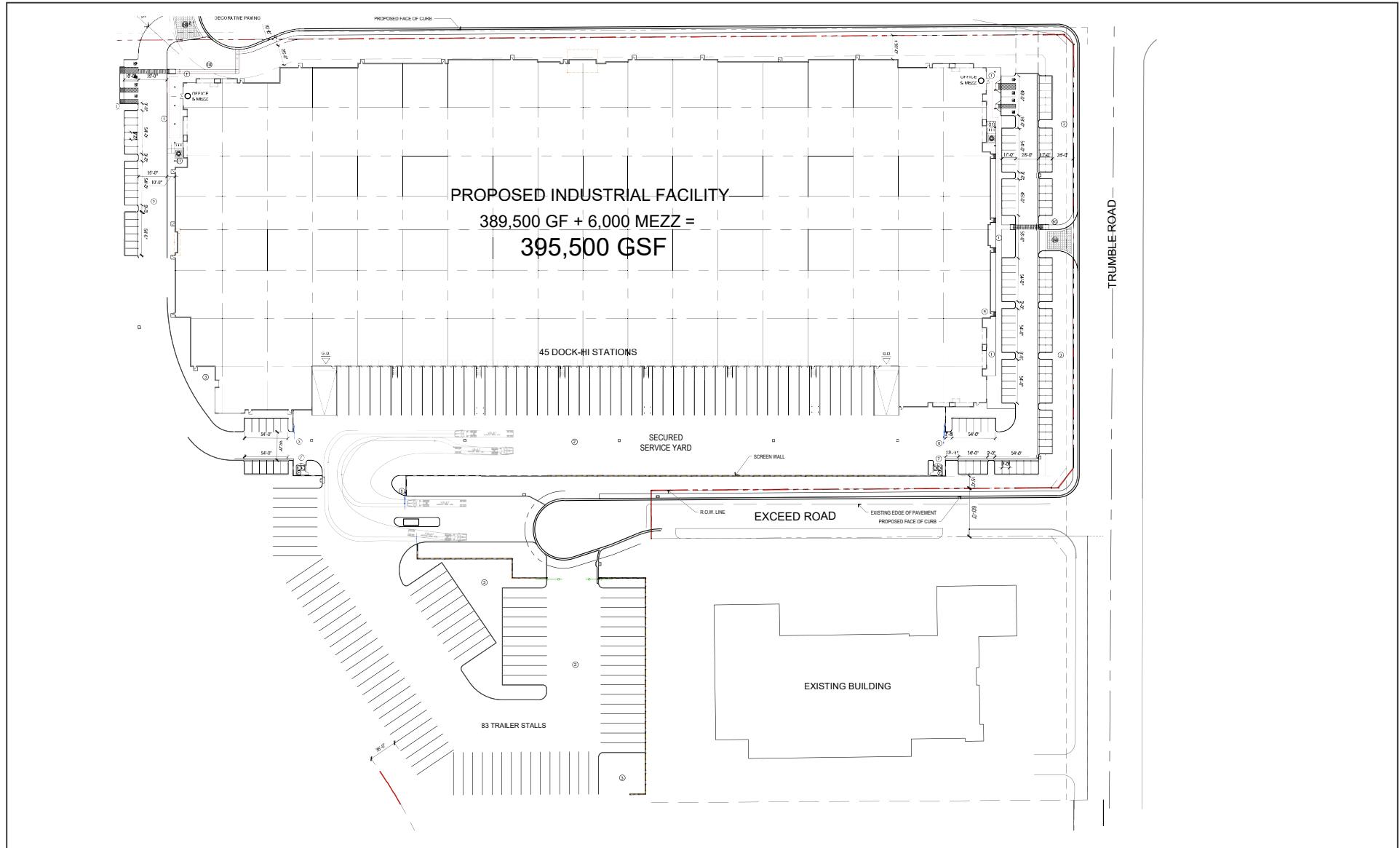
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SOURCE: ESRI Streetmap, 2021; Google Earth, 2019.

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*Mapes and Trumble Industrial Facility Project
Regional and Project Location with Sensitive Receptors*

FIGURE 1



LSA



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SOURCE: AO Architecture

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FIGURE 2

Mapes and Trumble Industrial Facility Project

Site Plan

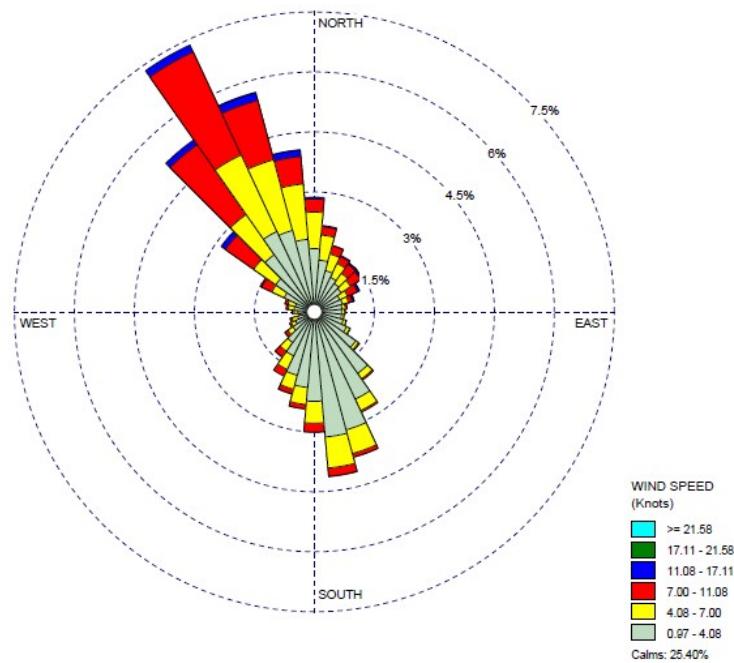
2.0 SETTING

2.1 REGIONAL AIR QUALITY

The project site is in Perris, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the SCAQMD.

2.1.1 Climate/Meteorology

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The nearest representative meteorological station that provides the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) ready meteorological data is the Perris Meteorological Station, about 3.2 miles northwest of the project site. Figure 3, Project Area Wind Patterns, shows the windrose¹ from data measured at this station and the wind patterns for the project area.



Source: SCAQMD Meteorological Data for AERMOD. Website: www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod (accessed June 2022).

Figure 3: Project Area Wind Patterns

¹ A windrose provides a succinct view of how wind speed and direction are typically distributed at a particular location. Presented in a circular format, the windrose shows the frequency of winds blowing from particular directions.

2.1.2 Toxic Air Contaminants

The public's exposure to TACs is a significant environmental health issue in the State of California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the Federal Act (42 United States Code Section 7412) is a TAC. Under State law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act), AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987), and Senate Bill 25, the Children's Environmental Health Protection Act. The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

Air toxics from stationary sources are also regulated in California under AB 2588. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the designated air quality management district or air pollution control district. High-priority facilities are required to perform an HRA and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

To date, the CARB has designated nearly 200 compounds as TACs (CARB Identified Toxic Air Contaminants). Additionally, the CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (diesel particulate matter [DPM]).

3.0 THRESHOLDS

3.1 HEALTH RISK ASSESSMENT THRESHOLDS OF SIGNIFICANCE

Both the State and federal governments have established health-based ambient air quality standards for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, “substantial” is taken to mean that the individual health risk exceeds a threshold considered to be a prudent risk management level.

The following limits for maximum individual cancer risk (MICR) and non-cancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximum exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 30 years for adults and 9 years for children in residential locations and over a period of 25 years for workers. The MICR calculations include multipathway consideration, when applicable.

The cumulative increase in MICR that is the sum of the calculated MICR values for all TACs would be considered significant if it would result in an increased MICR greater than 10 in 1 million (1×10^{-5}) at any receptor location.

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multi-pathway consideration, when applicable.

The project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level.

The project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

The SCAQMD *CEQA Air Quality Handbook* (1993, currently under revision) states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 10 in 1 million. Based on guidance from SCAQMD in the document *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (2003), for the purposes of this analysis, the threshold of 10 in 1 million was used as the cancer risk threshold for the proposed project.

4.0 HEALTH RISK IMPACTS

4.1 GENERAL INFORMATION

For the purposes of an HRA, short-term emissions are of concern for analyzing acute health impacts, and long-term emissions are of concern for analyzing chronic and carcinogenic health impacts. A screening-level multi-pathway assessment has been conducted. This technique was chosen as recommended in the OEHHA *Air Toxic Hot Spots Program Risk Assessment Guidelines* (2015).

This HRA has been conducted using three models: the CARB's California Emissions Factor Model, Version 2021 (EMFAC2021) for vehicle emissions factors and percentages of fuel type within the overall vehicle fleet, the United States Environmental Protection Agency's (EPA) AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways, and the CARB's HARP model to translate the pollutant concentrations from AERMOD into individual health risks at the nearby sensitive receptor locations.

This HRA includes analyzing the inhalation, dermal soil, mother's milk, and homegrown produce pathways. This technique was chosen as prescribed in SCAQMD's *AB 2588 and Rule 1402 Supplemental Guidelines* (2018).

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles (also known as DPM) made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM.

The conservative nature of this analysis is due primarily to the following three factors:

- The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in 1 million per microgram per cubic meter ($\mu\text{g}/\text{m}^3$) is based on the upper 95th percentile of estimated risk for each of the epidemiological studies used to develop the URF. Therefore, the risk factor is already representative of the conservative risk posed by DPM.
- The risk estimates assume sensitive residence receptors will be subject to DPM for 24 hours per day, 350 days per year and worker receptors for 8 hours per day, 350 days per year. As a conservative measure, SCAQMD does not recognize indoor adjustments for residents or

workers. However, typical people spend the majority of their time indoors versus remaining outdoors for 24 hours per day, 350 days per year.¹

- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 30 years). However, emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancement to reduce DPM.

Improvements over the last 40 years to diesel fuel and diesel engines have resulted in lower emissions of some of these TACs.² These improvements resulted in a 75 percent reduction in particle emissions from diesel-powered trucks and other equipment in 2010 and an 85 percent reduction by 2020 as compared to 2000 levels (OEHHA 2001). These improvements are anticipated to continue into the foreseeable future.

4.1.1 Emission Sources

The first step of an HRA is to characterize the project-related emissions of TACs. Based on the operational analysis in the project's *Mapes and Trumble Industrial Facility Project Traffic Study* (LSA 2022), the project configured as a non-refrigerated warehouse would generate a daily trip rate of 495 cars, 49 two-axle trucks, 40 3-axle trucks, and 135 4-plus axle trucks (see Appendix A). If the project would be configured with half of the building as a non-refrigerated warehouse and the other half configured as a cold-storage warehouse, it would generate a daily trip rate of 519 cars, 76 two-axle trucks, 36 3-axle trucks, and 148 4-plus axle trucks. For the rest of this HRA only this second option is analyzed.

While the TAC emissions from gasoline-powered vehicles have a small health effect compared to DPM, this HRA includes all the traffic information described and both gasoline- and diesel-powered vehicle emissions. For the diesel exhaust emissions, it is sufficient to only consider the DPM (particulate matter less than 10 microns in diameter [PM₁₀]) portion of the exhaust; all the TACs for the gasoline exhaust emissions are contained in the reactive organic gas (ROG) emissions. Using speciation data from CARB,³ the emission rates of the TAC components in gasoline exhaust are derived from the total ROG emissions.

The vehicles associated with the project were assumed to operate 24 hours per day, 7 days per week, and 52 weeks per year. The trucks operate in two modes: stationary idling and moving on and off the site. The emissions from trucks while idling result in a much higher concentration of TACs at

¹ In May 1991, the CARB Research Division, in association with the University of California, Berkeley, published research findings titled *Activity Patterns of California Residents*. The findings of that study indicate that, on average, adults and adolescents in California spent almost 15 hours per day inside their homes and 6 hours in other indoor locations, for a total of 21 hours (87 percent of the day). About 2 hours per day were spent in transit, and just over 1 hour per day was spent in outdoor locations.

² United States Environmental Protection Agency (EPA). *Learn About Impacts of Diesel Exhaust and the Diesel Emissions Reduction Act (DERA)*. Website: www.epa.gov/dera/learn-about-impacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera (accessed June 2022).

³ Speciation Profiles Used in ARB Modeling. Website: www.arb.ca.gov/ei/speciate/speciate.htm (accessed June 2022).

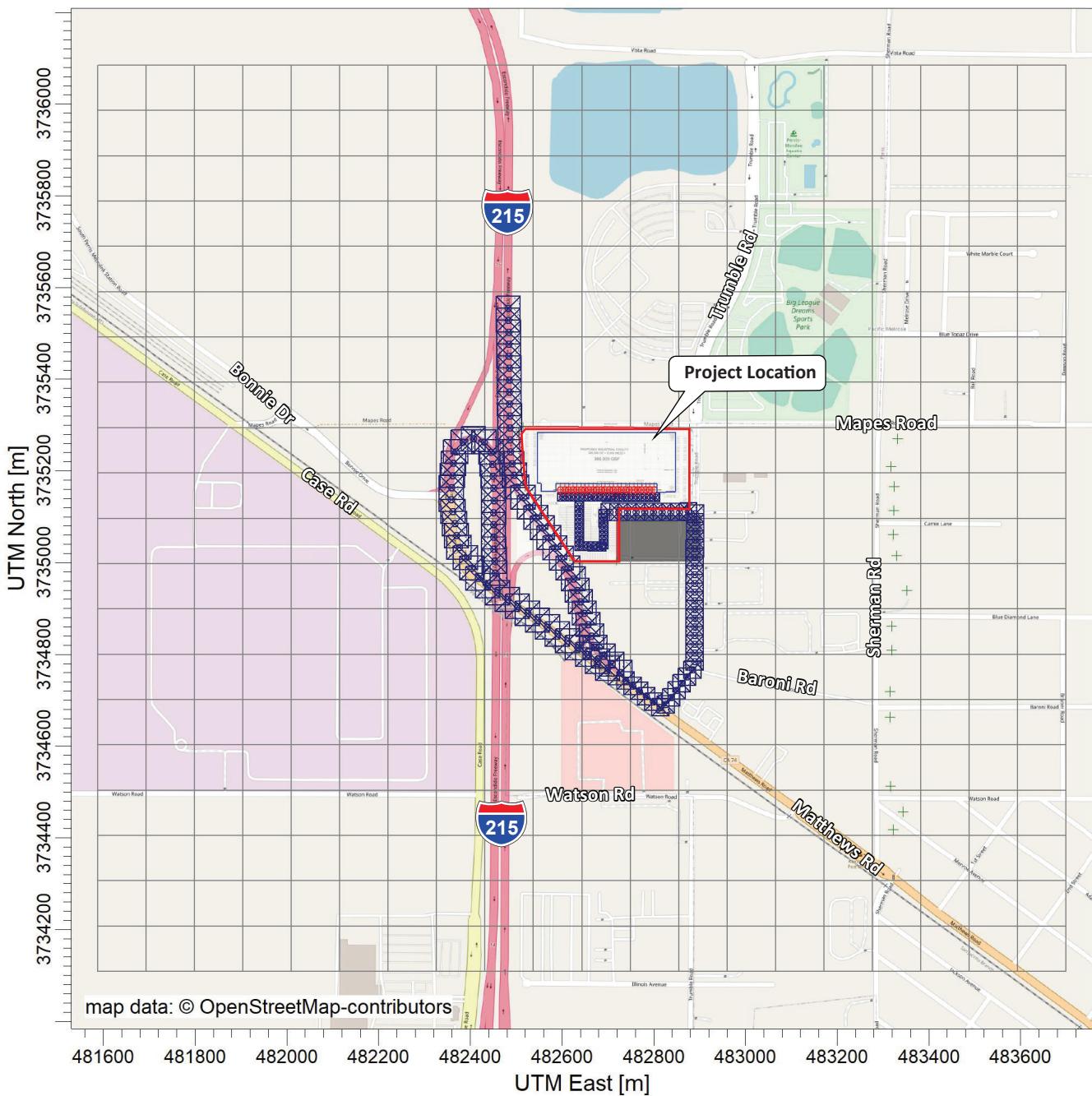
nearby sensitive receptors compared to the emissions from moving trucks. This is due to the dispersion of emissions that occurs with distance and with travel of the vehicle. For this HRA, the truck travel emissions were modeled as a series of volume sources along the on-site driveway and along presumed primary truck route south along Trumble Road, west on State Route 74, and either north or south onto Interstate 215 as shown on Figure 4, Modeling Layout, with the overlapping dark blue squares. Although it is possible that a few trucks could take other routes, the small number of trucks going on any routes other than those identified as these main routes would not add substantial amounts of TACs along those routes. LSA assumed vehicles traveling on site would maneuver slowly, averaging approximately 5 miles per hour (mph), and that vehicles traveling on roadways would average 35 mph. Although the trucks will spend time at higher speeds, their emissions are greater at lower speeds, so using 5 and 35 mph results in a conservative analysis.

The idling emissions of trucks operating on the project site was modeled as individual point sources at idling locations along the planned loading docks, shown in Figure 4 as red circles next to the building. While the idling times of the trucks are regulated to be no more than 5 minutes, it is possible the trucks would stop at the loading dock and one or two other areas on site during a single delivery. For the purposes of this HRA, the idling times per delivery were conservatively assumed to be 15 minutes per delivery.

EMFAC2021 was used to determine the emissions factors of idling and operating diesel trucks to determine the total emissions of PM₁₀. Although the TAC of concern from diesel trucks is DPM, EMFAC2021 does not include emissions factors for this TAC. DPM is a component of the overall exhaust from the project-related trucks. This HRA conservatively assumes the DPM emissions to be equal to the PM₁₀ emissions when actually the DPM is only a portion of the overall PM₁₀ in the truck exhaust. As a conservative measure, a 2024 EMFAC2021 run was conducted and a static 2024 emissions factor data set was used for the entire duration of analysis herein (e.g., 30 years for adult residential). Use of 2024 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 2024.

The tables in Appendix A show the development of the exhaust emission rates for the cars and trucks while operating both on the project site and on the roadways as described above. The tables show the average daily traffic for the project on each stretch of road by vehicle category. Appendix A also shows the percentage within each vehicle category that is diesel powered (from EMFAC2021), the PM₁₀, particulate matter 2.5 microns or less in size (PM_{2.5}), and ROG emissions factors for each vehicle category at the average vehicle speed of 5 mph on site and 35 mph on roadways. Because the AERMOD dispersion model cannot use emissions in grams per mile, emissions are converted to grams per second. The same derivation is repeated for ROG emissions from gasoline-powered vehicles (the majority of TAC emissions from gasoline exhaust are contained in the ROG emissions).

Table A shows the development of the exhaust emission rates for the trucks while idling on the project site. The emissions are equally divided among the six point sources along the loading dock area. These are depicted on Figure 4 as red circles within the loading dock areas, approximately where the truck engine exhaust pipe would be while positioned for unloading or loading. Table A shows emissions data results using the idling emissions factors from EMFAC2021 for these trucks, combined with the total truck count and assuming 15 minutes of idling per trip.



LSA

LEGEND

- Project Site
- AERMOD volume sources
- ◆ - Truck Idling Locations
- + - AERMOD receptors

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FIGURE 4

Mapes and Trumble Industrial Facility Project
AERMOD Modeling Layout

Table A: On-site Truck Idling Emission Rates

Facility	Hours/ Day	Trucks/ Day ¹	Trucks/ Hour	Diesel Idle Exhaust per Vehicle (g/hr) ²		Idle Time (min/trip) ³	Idle Exhaust Diesel (g/hr)	
				PM ₁₀	PM _{2.5}		PM ₁₀	PM _{2.5}
Loading Docks	24	202	8.4	0.0200	0.0192	15	0.0421	0.0403

Source: Compiled by LSA Associates, Inc. (2022).

¹ *Trumble and Mapes Industrial Facility Traffic Study* (LSA 2022). Note that each truck visit comprises two trips, one to arrive and one to depart.

² CARB EMFAC2021 idling emissions factors for 2024 HHDT diesel trucks.

³ This table assumes each truck idles for 15 minutes per trip to account for multiple stops (i.e., at an entry check-in, loading/unloading, and miscellaneous on-site activities).

CARB = California Air Resources Board

min/trip = minutes per trip

EMFAC2021 = California Emissions Factor Model, Version 2021

PM₁₀ = particulate matter less than 10 microns in diameter

g/hr = grams per hour

PM_{2.5} = particulate matter less than 2.5 microns in diameter

HHDT = heavy heavy-duty truck

It was assumed the trucks would idle using their main engines rather than an auxiliary power unit or plugging in to shore power throughout their time at the project site. This is a very conservative assumption, as the loading docks are required to have electrical hookups and the trucks to have the ability to run their accessories from that electricity, so it is likely that the trucks would only operate on their own power when arriving or departing. It was also assumed that any refrigerated trucks would use the electrical hookups rather than operate their transport refrigeration units (TRUs).

4.1.2 Toxic Air Contaminant Air Dispersion Modeling

To assess the dispersion of emissions associated with the project, air dispersion modeling was performed using AERMOD. The model is provided by the EPA to estimate the pollutant concentrations associated with emissions sources in simple and complex terrain. The model was used to calculate the annual average and short-duration (e.g., 1-hour) TAC concentrations associated with project operations. Details of these inputs are shown in Appendix B.

In addition to the idling point sources described above, a series of volume sources were used to represent vehicle activity along nearby roadways. The volume dimensions used were based on the EPA guidance for trucks. For all the truck idling sources, the release height was set to the approximate truck exhaust stack height of 12 ft, a temperature of 200° Fahrenheit, a flow rate of 50 meters (164 ft) per second, and an exhaust pipe diameter of 4 inches. Because building wake effects (building downwash) influences can significantly increase concentrations for receptors downwind of the building close to the emissions source, the proposed building was included with a building height of 30 ft.

The model requires additional input parameters, including local meteorology. Due to the model's sensitivity to individual parameters (e.g., wind speed, temperature, and direction), the EPA recommends meteorological data used as input into dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. As such, five years of

meteorological data from SCAQMD's Perris Monitoring Station¹ (the nearest available) was used to represent local weather conditions and prevailing winds.

Receptors were placed in a grid surrounding the truck routes, as shown in Figure 4, to characterize the regional risk levels. Additionally, discrete receptors were placed at the locations of all sensitive receptors near to the proposed project site and the truck routes.

4.1.3 Hot Spots Analysis and Reporting Program Modeling

CARB's HARP model is a tool that assists with the programmatic requirements of the Air Toxics "Hot Spots" Program (AB 2588). HARP was used to translate the TAC concentrations from AERMOD into long-term carcinogenic and chronic, and short-term acute health risk levels following the guidance in the SCAQMD risk assessment guidelines (2003) for residents and workers. These guidelines specify a minimum set of TAC pathways and HARP modeling options² for the carcinogenic assessment. To estimate chronic non-cancer risks at residential and worker receptors, the "Risk Management Policy using Derived Method" risk-calculation option was used to calculate 1-hour and 8-hour chronic non-cancer risk levels.

The dose-response relationship for a specific pollutant describes the association between exposure and the observed response (health effect). In other words, the relationship estimates how different levels of exposure to a pollutant change the likelihood and severity of health effects. The dose-response relationship (the response occurring with increasing doses) varies with each pollutant, individual sensitivity, and type of health effect. Combining the results of the emission characterization and dispersion modeling described above with the dose-response assessment gives an estimate of the increased health risk for an individual exposed to the maximum predicted long-term concentrations of TACs.

Appendix A contains the HRA emissions worksheet and EMFAC data, Appendix B contains select pages from the AERMOD output and the HARP report files for this HRA.

4.1.4 Acute Project-Related Emission Impacts

Exposure to TACs from vehicle exhaust can result in immediate health effects. However, according to the rulemaking in CARB's *Identifying Particulate Emissions from Diesel-Fueled Engines as a Toxic Air Contaminant* (1998), the available data from studies of humans exposed to diesel exhaust are not sufficient for deriving an acute non-cancer health risk guidance value. Emissions from gasoline-

¹ South Coast Air Quality Management District (SCAQMD). Meteorological Data for AERMOD. Website: www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod (accessed June 2022).

² The SCAQMD guidelines specify that residential cancer risks assume a 30-year exposure and must include, at a minimum, the following pathways: inhalation, homegrown produce, dermal absorption, soil ingestion, and mother's milk; a deposition rate of 0.02 meter per second for the non-inhalation pathways; the dermal pathway should assume a "warm" climate; and the "Risk Management Policy Using the Derived Method" risk calculation option should be used.

powered vehicles do contain TACs with short-term acute health effects. Table B shows the acute health risks from the operation of the proposed project.

Table B: Health Risk Levels for Nearby Residents and Workers

Location	Maximum Cancer Risk	Maximum Non-cancer Chronic Risk (Hazard Index)	Maximum Non-cancer Acute Risk (Hazard Index)
Residential Risks	0.26 in 1 million	0.00006	0.00003
Big League Dreams Sports Complex User Risks	0.36 in 1 million	0.0001	0.00006
Worker Risks	0.40 in 1 million	0.001	0.0004
SCAQMD Significance Threshold	10 in 1 million	1.0	1.0
Significant?	No	No	No

Source: Compiled by LSA Associates, Inc. (2022).
SCAQMD = South Coast Air Quality Management District

The Acute HI would be 0.00003 for the residential MEI, 0.00006 for children at the Big League Dreams Sports Complex, and 0.0004 for the worker MEI, all less than the threshold of 1.0.

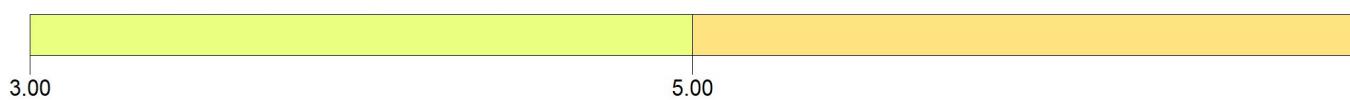
4.1.5 Carcinogenic and Chronic Project-Related Emission Impacts

Table B also shows the carcinogenic and chronic health risks from the operation of the proposed project. The residential risk incorporates both the risk for a child living in a nearby residence for 9 years (the standard period of time for child risk) and an adult living in a nearby residence for 30 years (considered a conservative period of time for an individual to live in any one residence). The maximum cancer risk for the residential MEI would be 0.26 in 1 million, less than the threshold of 10 in 1 million. Figure 5, 30-Year Residential Cancer Risk Levels, shows that the residential risk level of 3 in 1 million only extends slightly past the project boundary to the south, nowhere near the residences approximately 1,365 feet to the east. The risk to children using the Big League Dreams Sports Complex is determined by using the child 9-year exposure. The maximum cancer risk for children at the park would be 0.036 in a million, also less than the threshold of 10 in 1 million. The worker risk incorporates the risk for an adult working nearby for 25 years (considered a conservative period of time for an individual to work in any one place). The maximum cancer risk for the worker MEI would be 0.40 in 1 million, also less than the threshold of 10 in 1 million. The location of the worker MEI is in the facility just south of the project site. Figure 6, 25-Year Worker Cancer Risk Levels, shows the extent of the worker risk levels. The chronic health risks from the operation of the proposed project are also shown in Table B and are all less than the chronic risk threshold.

As these results show, all health risk levels to nearby residents, children, and workers from project-related emissions of TACs from the operation of the proposed project would be below the SCAQMD's HRA thresholds. No significant health risk would occur from the operation of the projects, and no mitigation is necessary. Appendix B provides the HARP modeling reports and AERMOD information.



30 Year Residential Cancer Risk Level



LSA

LEGEND

- Project Site
- Volume Sources Along Roads and Driveways
- + - Truck Idling Locations
- + - Receptors at Sensitive Receptors

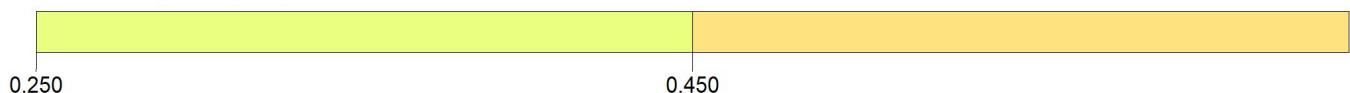
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FIGURE 5

*Mapes and Trumble Industrial Facility Project
30-Year Residential Cancer Isopleth*



25 Year Worker Cancer Risk Level



LSA

LEGEND

- Project Site
- Volume Sources Along Roads and Driveways
- + - Truck Idling Locations
- + - Receptors at Sensitive Receptors



FIGURE 6

Mapes and Trumble Industrial Facility Project

25-Year Worker Cancer Isopleth

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APPENDIX A

EMISSION FACTORS FOR VEHICLES AND HEALTH RISK ASSESSMENT EMISSION RATES

Idling Truck Exhaust Worksheet**Trumble & Mapes Warehouse Facility**

Facility	Hour	Deliveries	Trips	Diesel Idle	Diesel Idle	Idle Exhaust	Idle Exhaust	
	per day	per day ¹	per Hour	Diesel Exhaust PM ₁₀ (gm/vh-hr) ²	Diesel Exhaust PM _{2.5} (gm/vh-hr) ²	Idle Time (min/trip) ³	Diesel PM ₁₀ (gm/hr)	Diesel PM _{2.5} (gm/hr)
Main Building	24	202	8.42	0.0200	0.0192	15	0.0421	0.0403

¹ AADT from project CalEEMod analysis. Note that each truck visit comprises two trips, one to arrive and one to leave.

² Source: EMFAC2021 2024 idling emission factors for HHDT diesel trucks.

³ It is assumed that each truck idles for 15 minute per trip to account for multiple stops, i.e. at an entry check-in, loading/unloading and miscellaneous tasks.

Number of Sources	Diesel PM10 lb/hr	Diesel PM10 lb/yr	Diesel PM2.5 lb/hr	Diesel PM2.5 lb/yr
24	3.9E-06	0.0339	3.7E-06	0.0325

Trumble & Mapes Warehouse Facility

Onsite travel		AADT by Truck Category ¹			
		LDV ²	2-Axle ³	3-Axle ³	4+-Axle ⁴
Average Speed 5 mph	519	76	36	148	
	% of Vehicles That Are Diesel-Powered ⁵				
	0.6%	52%	52%	97%	
	Diesel Exhaust PM10 & PM2.5 Emissions at 5 mph (g/mi)⁶				
	PM ₁₀	0.0671	0.1019	1.02E-01	1.90E-02
	PM _{2.5}	0.0642	0.0975	9.75E-02	1.82E-02
Total distance covered by Onsite travel sources	% of Vehicles That Are Gasoline-Powered ⁶				
	95%	48%	48%	0.02%	
	Gasoline Exhaust ROG Emissions at 5 mph (g/mi)⁷				
	ROG	0.376	4.42E-01	4.42E-01	1.43E-01
PM₁₀, PM_{2.5} & ROG Exhaust Emissions (g/s)					
412 meters	PM ₁₀	5.97E-07	1.19E-05	5.68E-06	8.08E-06
	PM _{2.5}	5.71E-07	1.14E-05	5.44E-06	7.73E-06
	ROG	5.47E-04	4.74E-05	2.26E-05	1.11E-08

Number of Sources	Emission Rates per source		
	g/s	lb/hr	lb/yr
45	5.8E-07	4.6E-06	0.0406
45	5.6E-07	4.4E-06	0.0389
45	1.4E-05	1.1E-04	0.9541

¹ AADT from Mapes and Trumble Industrial Facility Project Traffic Study (LSA 2022)

² LDV assumed to include LDA, LDT1, LDT2, MDV, MH, MCY, SBUS, UBUS, & OBUS

³ 2 axle & 3 axle trucks are assumed to be a mix of LHD1 & LHD2 (Light-Heavy-Duty Truck GVW=8,500-14,000 lbs.)

⁴ 4+ axle trucks are assumed to be HHDT (Heavy-Heavy Duty Truck GVW=33,001-60,000 lbs.)

⁶ Source: EMFAC2021 VMT data

⁷ Source: EMFAC2021 emission factors for 2024 (model year aggregate).

Speciated Emissions Rates

		lb/yr	lb/hr
diesel part.	--	4.06E-02	4.64E-06
PM2.5	--	3.89E-02	4.43E-06
1,3-butadiene	0.0055	5.25E-03	5.99E-07
benzene	0.02636	2.51E-02	2.87E-06
ethylbenzene	0.01072	1.02E-02	1.17E-06
MEK	0.00019	1.81E-04	2.07E-08
naphthalene	0.00048	4.58E-04	5.22E-08
propylene	0.03127998	2.98E-02	3.40E-06
styrene	0.00126	1.20E-03	1.37E-07
toluene	0.05879998	5.61E-02	6.40E-06
m & p-xylene	0.03639998	3.47E-02	3.96E-06

Trumble & Mapes Warehouse Facility

Trumble Road from Project Drwy to SR-74 and to NB I-215		AADT by Truck Category ¹			
		LDV ²	2-Axle ³	3-Axle ⁴	4+-Axle ⁵
		519	76	36	148
% of Vehicles That Are Diesel-Powered ⁶					
Average Speed		0.6%	52%	52%	97%
Diesel Exhaust PM10 & PM2.5 Emissions at Speed mph (g/mi) ⁷					
35 mph	PM ₁₀	0.0194	0.0327	3.27E-02	7.92E-03
	PM _{2.5}	0.0185	0.0313	3.13E-02	7.58E-03
% of Vehicles That Are Gasoline-Powered ⁶					
		95%	48%	48%	0.02%
Gasoline Exhaust ROG Emissions at 35 mph (g/mi) ⁷					
Total distance covered by these sources	ROG	0.032	1.52E-01	1.52E-01	1.29E-02
	PM ₁₀ , PM _{2.5} & ROG Exhaust Emissions (g/s)				
731 meters	PM ₁₀	3.06E-07	6.79E-06	3.23E-06	5.97E-06
	PM _{2.5}	2.93E-07	6.49E-06	3.09E-06	5.71E-06
	ROG	8.19E-05	2.88E-05	1.37E-05	1.77E-09

Number of Sources	Emission Rates per source		
	g/s	lb/hr	lb/yr
40	4.1E-07	3.2E-06	0.0283
40	3.9E-07	3.1E-06	0.0271
40	3.1E-06	2.5E-05	0.2166

¹ AADT from Mapes and Trumble Industrial Facility Project Traffic Study (LSA 2022)

² LDV assumed to include LDA, LDT1, LDT2, MDV, MH, MCY, SBUS, UBUS, & OBUS

³ 2 axle & 3 axle trucks are assumed to be a mix of LHD1 & LHD2 (Light-Heavy-Duty Truck GVW=8,500-14,000 lbs.)

⁴ 4+ axle trucks are assumed to be HHDT (Heavy-Heavy Duty Truck GVW=33,001-60,000 lbs.)

⁶ Source: EMFAC2021 VMT data

⁷ Source: EMFAC2021 emission factors for 2024 (model year aggregate).

Speciated Emissions Rates

		lb/yr	lb/hr
diesel part.	--	2.83E-02	3.23E-06
PM2.5	--	2.71E-02	3.09E-06
1,3-butadiene	0.0055	1.19E-03	1.36E-07
benzene	0.02636	5.71E-03	6.51E-07
ethylbenzene	0.01072	2.32E-03	2.65E-07
MEK	0.00019	4.11E-05	4.69E-09
naphthalene	0.00048	1.04E-04	1.19E-08
propylene	0.03127998	6.77E-03	7.73E-07
styrene	0.00126	2.73E-04	3.11E-08
toluene	0.05879998	1.27E-02	1.45E-06
m & p-xylene	0.03639998	7.88E-03	8.99E-07

Trumble & Mapes Warehouse Facility

NB I-215 Onramp and North on I-215		AADT by Truck Category ¹			
		LDV ²	2-Axle ³	3-Axle ⁴	4+-Axle ⁵
		519	76	36	148
		% of Vehicles That Are Diesel-Powered ⁶			
Average Speed		0.6%	52%	52%	97%
Diesel Exhaust PM10 & PM2.5 Emissions at Speed mph (g/mi)⁷					
35 mph	PM ₁₀	0.0194	0.0327	3.27E-02	7.92E-03
	PM _{2.5}	0.0185	0.0313	3.13E-02	7.58E-03
% of Vehicles That Are Gasoline-Powered ⁶		95%	48%	48%	0.02%
Gasoline Exhaust ROG Emissions at 35 mph (g/mi) ⁷		Number of Sources			
these sources		Emission Rates per source			
ROG		0.032	1.52E-01	1.52E-01	1.29E-02
PM₁₀, PM_{2.5} & ROG Exhaust Emissions (g/s)					
862 meters	PM ₁₀	3.61E-07	8.00E-06	3.81E-06	7.04E-06
	PM _{2.5}	3.45E-07	7.65E-06	3.65E-06	6.74E-06
	ROG	9.66E-05	3.40E-05	1.62E-05	2.09E-09

Sources	Emission Rates per source		
	g/s	lb/hr	lb/yr
34	5.7E-07	4.5E-06	0.0393
34	5.4E-07	4.3E-06	0.0376
34	4.3E-06	3.4E-05	0.3003

¹ AADT from Mapes and Trumble Industrial Facility Project Traffic Study (LSA 2022)

² LDV assumed to include LDA, LDT1, LDT2, MDV, MH, MCY, SBUS, UBUS, & OBUS

³ 2 axle & 3 axle trucks are assumed to be a mix of LHD1 & LHD2 (Light-Heavy-Duty Truck GVW=8,500-14,000 lbs.)

⁴ 4+ axle trucks are assumed to be HHDT (Heavy-Heavy Duty Truck GVW=33,001-60,000 lbs.)

⁶ Source: EMFAC2021 VMT data

⁷ Source: EMFAC2021 emission factors for 2024 (model year aggregate).

Speciated Emissions Rates

		lb/yr	lb/hr
diesel part.	--	3.93E-02	4.48E-06
PM2.5	--	3.76E-02	4.29E-06
1,3-butadiene	0.0055	1.65E-03	1.88E-07
benzene	0.02636	7.92E-03	9.03E-07
ethylbenzene	0.01072	3.22E-03	3.67E-07
MEK	0.00019	5.71E-05	6.51E-09
naphthalene	0.00048	1.44E-04	1.64E-08
propylene	0.03127998	9.39E-03	1.07E-06
styrene	0.00126	3.78E-04	4.32E-08
toluene	0.05879998	1.77E-02	2.01E-06
m & p-xylene	0.03639998	1.09E-02	1.25E-06

Trumble & Mapes Warehouse Facility

West on SR-74 to SB I-215 Ramp and onto SB I-215		AADT by Truck Category ¹			
		LDV ²	2-Axle ³	3-Axle ⁴	4+-Axle ⁵
		519	76	36	148
		% of Vehicles That Are Diesel-Powered ⁶			
Average Speed		0.6%	52%	52%	97%
35 mph		Diesel Exhaust PM10 & PM2.5 Emissions at Speed mph (g/mi)⁷			
	PM ₁₀	0.0194	0.0327	3.27E-02	7.92E-03
	PM _{2.5}	0.0185	0.0313	3.13E-02	7.58E-03
		% of Vehicles That Are Gasoline-Powered ⁶			
		95%	48%	48%	0.02%
		Gasoline Exhaust ROG Emissions at 35 mph (g/mi)⁷			
Total distance covered by these sources		ROG	0.032	1.52E-01	1.52E-01
		PM₁₀, PM_{2.5} & ROG Exhaust Emissions (g/s)			
999 meters	PM ₁₀	4.18E-07	9.28E-06	4.42E-06	8.17E-06
	PM _{2.5}	4.00E-07	8.88E-06	4.23E-06	7.81E-06
	ROG	1.12E-04	3.94E-05	1.88E-05	2.42E-09

Number of Sources	Emission Rates per source		
	g/s	lb/hr	lb/yr
39	5.7E-07	4.5E-06	0.0398
39	5.5E-07	4.3E-06	0.0380
39	4.4E-06	3.5E-05	0.3037

¹ AADT from Mapes and Trumble Industrial Facility Project Traffic Study (LSA 2022)

² LDV assumed to include LDA, LDT1, LDT2, MDV, MH, MCY, SBUS, UBUS, & OBUS

³ 2 axle & 3 axle trucks are assumed to be a mix of LHD1 & LHD2 (Light-Heavy-Duty Truck GVW=8,500-14,000 lbs.)

⁴ 4+ axle trucks are assumed to be HHDT (Heavy-Heavy Duty Truck GVW=33,001-60,000 lbs.)

⁶ Source: EMFAC2021 VMT data

⁷ Source: EMFAC2021 emission factors for 2024 (model year aggregate).

Speciated Emissions Rates

		lb/yr	lb/hr
diesel part.	--	3.98E-02	4.53E-06
PM2.5	--	3.80E-02	4.34E-06
1,3-butadiene	0.0055	1.67E-03	1.91E-07
benzene	0.02636	8.01E-03	9.13E-07
ethylbenzene	0.01072	3.26E-03	3.71E-07
MEK	0.00019	5.77E-05	6.58E-09
naphthalene	0.00048	1.46E-04	1.66E-08
propylene	0.03127998	9.50E-03	1.08E-06
styrene	0.00126	3.83E-04	4.37E-08
toluene	0.05879998	1.79E-02	2.04E-06
m & p-xylene	0.03639998	1.11E-02	1.26E-06

**Trumble & Mapes Warehouse Facility
Project Trip Generation**

Land Uses	Units	Daily
Non-Refrigerated Warehouse	198	TSF
Trips/Unit (Cars)		1.249
Trips/Unit (2-Axle Trucks)		0.123
Trips/Unit (3-Axle Trucks)		0.100
Trips/Unit (4+ Axle Trucks)		0.338
Trips/Unit (Total)		1.810
Refrigerated Warehouse	198	TSF
Trips/Unit (Cars)		1.370
Trips/Unit (2-Axle Trucks)		0.260
Trips/Unit (3-Axle Trucks)		0.083
Trips/Unit (4+ Axle Trucks)		0.407
Trips/Unit (Total)		2.120
Trip Generation (Cars)	519	66.6%
Trip Generation (2-Axle Trucks)	76	9.7%
Trip Generation (3-Axle Trucks)	36	4.6%
Trip Generation (4+ Axle Trucks)	148	19.0%
Trip Generation (Total Trucks)	260	
Trip Generation (Total)	778	100.0%

Note: Non-refrigerated warehouse rates from Mapes and Trumble Industrial Facility Project Traffic Study (LSA, June 2022). Refrigerated warehouse rates based on ITE Land Use 157.

TSF = Thousand Square-Feet

Region	Riverside (SC)
Calendar Year	2024

Row Labels	Max of Total VMT
HHDT	1,911,348
Diesel	1,911,348
Electricity	5,148
Gasoline	348
Natural Gas	50,459
LDA	20,418,130
Diesel	54,327
Electricity	945,705
Gasoline	20,418,130
Plug-in Hybrid	650,967
LDT1	1,523,061
Diesel	340
Electricity	2,790
Gasoline	1,523,061
Plug-in Hybrid	2,973
LDT2	8,732,861
Diesel	29,008
Electricity	43,456
Gasoline	8,732,861
Plug-in Hybrid	88,085
LHDT1	656,766
Diesel	560,368
Electricity	3,953
Gasoline	656,766
LHDT2	254,103
Diesel	254,103
Electricity	970
Gasoline	89,755
MCY	140,258
Gasoline	140,258
MDV	6,468,419
Diesel	102,040
Electricity	48,186
Gasoline	6,468,419
Plug-in Hybrid	54,891
MH	41,624
Diesel	17,553
Gasoline	41,624
MHDT	564,761
Diesel	564,761
Electricity	2,075
Gasoline	49,966
Natural Gas	7,505
OBUS	15,141
Diesel	15,141
Electricity	56
Gasoline	12,782
Natural Gas	2,111
SBUS	16,753
Diesel	10,226
Electricity	62
Gasoline	16,753
Natural Gas	10,868
UBUS	31,072
Diesel	30
Electricity	18
Gasoline	18,511
Natural Gas	31,072

Truck2	
Dsl	97.16%
Electric	0.26%
Gasoline	0.02%
Natural Gas	2.56%

sub_area	Riverside (SC)
calendar_year	2024
season_month	Annual
process	IDLEX
fuel	Dsl

Truck1	
Dsl	52.01%
Electric	0.31%
Gasoline	47.67%

Non-Trucks	
Dsl	0.58%
Electric	2.63%
Gasoline	94.66%
Natural Gas	2.13%

Max of emission_rate	Column Labels
Row Labels	Truck2
PM10	0.020025204
(blank)	0.020025204
PM2_5	0.019158922
(blank)	0.019158922
ROG	2.161197335
(blank)	2.161197335

sub_area	Riverside (SC)
calendar_year	2024
season_month	Annual
process	RUNEX
fuel	Dsl

Max of emission_rate	Column Labels		
Row Labels	NonTruck	Truck1	Truck2
PM10	0.06705274	0.101923035	0.019001074
5	0.06705274	0.101923035	0.019001074
35	0.019376456	0.032712619	0.007922324
PM2_5	0.064152068	0.097513889	0.018179096
5	0.064152068	0.097513889	0.018179096
35	0.018538239	0.031297486	0.007579608
ROG	0.375906754	0.442069703	0.143444418
5	0.375906754	0.442069703	0.143444418
35	0.031753904	0.151631899	0.012889759

APPENDIX B

AERMOD OUTPUT AND HARP RESULTS

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
 *** AERMET - VERSION 16216 *** ***

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

-- Model Is Setup For Calculation of Average CONCetration Values.

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

**Model Uses URBAN Dispersion Algorithm for the SBL for 182 Source(s),
 for Total of 1 Urban Area(s):
 Urban Population = 78700.0 ; Urban Roughness Length = 1.000 m

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

**Other Options Specified:
 ADJ_U* - Use ADJ_U* option for SBL in AERMET
 CCVR_Sub - Meteorological data includes CCVR substitutions
 TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: TOXICS

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

**This Run Includes: 182 Source(s); 182 Source Group(s); and 457 Receptor(s)

with: 24 POINT(s), including
 0 POINTCAP(s) and 0 POINTHOR(s)
 and: 158 VOLUME source(s)
 and: 0 AREA type source(s)
 and: 0 LINE source(s)
 and: 0 RLINE/RЛИNEXT source(s)
 and: 0 OPENPIT source(s)
 and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 16216

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

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

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 442.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
 Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 7.7 MB of RAM.

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

**File for Summary of Results: EB-AERMOD.SUM

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ U

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER	EMISSION RATE	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/HOR	EMIS/RATE
	PART.	(GRAMS/SEC)										CATS.	SCALAR VARY BY
IDLE01	0	0.10000E+01	482597.0	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE02	0	0.10000E+01	482605.8	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE03	0	0.10000E+01	482614.7	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE04	0	0.10000E+01	482623.5	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE05	0	0.10000E+01	482632.4	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE06	0	0.10000E+01	482641.2	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE07	0	0.10000E+01	482650.0	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE08	0	0.10000E+01	482658.9	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE09	0	0.10000E+01	482667.7	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE10	0	0.10000E+01	482676.6	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE11	0	0.10000E+01	482685.4	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE12	0	0.10000E+01	482694.2	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE13	0	0.10000E+01	482703.1	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE14	0	0.10000E+01	482711.9	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE15	0	0.10000E+01	482720.8	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE16	0	0.10000E+01	482729.6	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE17	0	0.10000E+01	482738.4	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE18	0	0.10000E+01	482747.3	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE19	0	0.10000E+01	482756.1	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE20	0	0.10000E+01	482765.0	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE21	0	0.10000E+01	482773.8	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE22	0	0.10000E+01	482782.6	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE23	0	0.10000E+01	482791.5	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO
IDLE24	0	0.10000E+01	482800.3	3735158.7	433.0	3.80	366.00	50.00	0.10	YES	YES		NO

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

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*** MODELOPTs: ReqDFault CONC ELEV URBAN ADJ U

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER	EMISSION RATE			BASE ELEV.	RELEASE HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
	PART. CATS.	(GRAMS/SEC)	X (METERS)	Y (METERS)						
ONSITE01	0	0.10000E+01	482600.8	3735143.5	433.0	3.11	4.49	2.89	YES	
ONSITE02	0	0.10000E+01	482610.5	3735143.4	433.0	3.11	4.49	2.89	YES	
ONSITE03	0	0.10000E+01	482620.1	3735143.3	433.0	3.11	4.49	2.89	YES	
ONSITE04	0	0.10000E+01	482629.8	3735143.3	433.0	3.11	4.49	2.89	YES	
ONSITE05	0	0.10000E+01	482639.5	3735143.2	433.0	3.11	4.49	2.89	YES	
ONSITE06	0	0.10000E+01	482649.1	3735143.2	433.0	3.11	4.49	2.89	YES	
ONSITE07	0	0.10000E+01	482658.8	3735143.1	433.0	3.11	4.49	2.89	YES	
ONSITE08	0	0.10000E+01	482668.4	3735143.0	433.0	3.11	4.49	2.89	YES	
ONSITE09	0	0.10000E+01	482678.1	3735143.0	433.0	3.11	4.49	2.89	YES	
ONSITE10	0	0.10000E+01	482687.8	3735142.9	433.0	3.11	4.49	2.89	YES	
ONSITE11	0	0.10000E+01	482697.4	3735142.8	433.0	3.11	4.49	2.89	YES	
ONSITE12	0	0.10000E+01	482707.1	3735142.8	433.0	3.11	4.49	2.89	YES	
ONSITE13	0	0.10000E+01	482716.7	3735142.7	433.0	3.11	4.49	2.89	YES	
ONSITE14	0	0.10000E+01	482726.4	3735142.6	433.0	3.11	4.49	2.89	YES	
ONSITE15	0	0.10000E+01	482736.0	3735142.6	433.0	3.11	4.49	2.89	YES	
ONSITE16	0	0.10000E+01	482745.7	3735142.5	433.0	3.11	4.49	2.89	YES	
ONSITE17	0	0.10000E+01	482755.4	3735142.4	433.0	3.11	4.49	2.89	YES	
ONSITE18	0	0.10000E+01	482765.0	3735142.4	433.0	3.11	4.49	2.89	YES	
ONSITE19	0	0.10000E+01	482774.7	3735142.3	433.0	3.11	4.49	2.89	YES	
ONSITE20	0	0.10000E+01	482784.3	3735142.2	433.0	3.11	4.49	2.89	YES	
ONSITE21	0	0.10000E+01	482794.0	3735142.2	433.0	3.11	4.49	2.89	YES	
ONSITE22	0	0.10000E+01	482803.6	3735142.1	433.0	3.11	4.49	2.89	YES	
ONSITE23	0	0.10000E+01	482638.4	3735122.7	433.0	3.11	4.49	2.89	YES	
ONSITE24	0	0.10000E+01	482638.4	3735113.0	433.0	3.11	4.49	2.89	YES	
ONSITE25	0	0.10000E+01	482638.4	3735103.4	433.0	3.11	4.49	2.89	YES	
ONSITE26	0	0.10000E+01	482638.4	3735093.7	433.0	3.11	4.49	2.89	YES	
ONSITE27	0	0.10000E+01	482638.4	3735084.0	433.0	3.11	4.49	2.89	YES	
ONSITE28	0	0.10000E+01	482638.4	3735074.4	433.0	3.11	4.49	2.89	YES	
ONSITE29	0	0.10000E+01	482638.4	3735064.7	433.0	3.11	4.49	2.89	YES	
ONSITE30	0	0.10000E+01	482638.4	3735055.1	433.0	3.11	4.49	2.89	YES	
ONSITE31	0	0.10000E+01	482638.4	3735045.4	433.0	3.11	4.49	2.89	YES	
ONSITE32	0	0.10000E+01	482638.4	3735035.8	433.0	3.11	4.49	2.89	YES	
ONSITE33	0	0.10000E+01	482648.0	3735035.5	433.0	3.11	4.49	2.89	YES	
ONSITE34	0	0.10000E+01	482657.7	3735035.2	433.0	3.11	4.49	2.89	YES	
ONSITE35	0	0.10000E+01	482667.3	3735035.0	433.0	3.11	4.49	2.89	YES	
ONSITE36	0	0.10000E+01	482677.0	3735034.7	433.0	3.11	4.49	2.89	YES	
ONSITE37	0	0.10000E+01	482686.6	3735034.5	433.0	3.11	4.49	2.89	YES	
ONSITE38	0	0.10000E+01	482691.9	3735038.6	433.0	3.11	4.49	2.89	YES	
ONSITE39	0	0.10000E+01	482691.7	3735048.3	433.0	3.11	4.49	2.89	YES	
ONSITE40	0	0.10000E+01	482691.5	3735057.9	433.0	3.11	4.49	2.89	YES	

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*** MODELOPTs: ReqDFault CONC ELEV URBAN ADJ U

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER	EMISSION RATE	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT.	INIT.	URBAN	EMISSION RATE
	PART. CATS.	(GRAMS/SEC)					SY (METERS)	SZ (METERS)	SOURCE	SCALAR VARY BY
ONSITE41	0	0.10000E+01	482691.4	3735067.6	433.0	3.11	4.49	2.89	YES	
ONSITE42	0	0.10000E+01	482691.2	3735077.3	433.0	3.11	4.49	2.89	YES	
ONSITE43	0	0.10000E+01	482691.0	3735086.9	433.0	3.11	4.49	2.89	YES	
ONSITE44	0	0.10000E+01	482690.8	3735096.6	433.0	3.11	4.49	2.89	YES	
ONSITE45	0	0.10000E+01	482690.6	3735106.2	433.0	3.11	4.49	2.89	YES	
TRKRTE01	0	0.10000E+01	482704.5	3735110.1	433.0	3.11	8.83	2.89	YES	
TRKRTE02	0	0.10000E+01	482723.5	3735110.2	433.0	3.11	8.83	2.89	YES	
TRKRTE03	0	0.10000E+01	482742.4	3735110.3	433.0	3.11	8.83	2.89	YES	
TRKRTE04	0	0.10000E+01	482761.4	3735110.3	433.0	3.11	8.83	2.89	YES	
TRKRTE05	0	0.10000E+01	482780.4	3735110.4	433.0	3.11	8.83	2.89	YES	
TRKRTE06	0	0.10000E+01	482799.4	3735110.5	433.0	3.11	8.83	2.89	YES	
TRKRTE07	0	0.10000E+01	482818.4	3735110.6	433.0	3.11	8.83	2.89	YES	
TRKRTE08	0	0.10000E+01	482837.4	3735110.6	433.0	3.11	8.83	2.89	YES	
TRKRTE09	0	0.10000E+01	482856.4	3735110.7	433.0	3.11	8.83	2.89	YES	
TRKRTE10	0	0.10000E+01	482875.3	3735110.8	433.0	3.11	8.83	2.89	YES	
TRKRTE11	0	0.10000E+01	482890.2	3735106.7	433.0	3.11	8.83	2.89	YES	
TRKRTE12	0	0.10000E+01	482890.2	3735087.7	433.0	3.11	8.83	2.89	YES	
TRKRTE13	0	0.10000E+01	482890.1	3735068.7	433.0	3.11	8.83	2.89	YES	
TRKRTE14	0	0.10000E+01	482890.1	3735049.7	433.0	3.11	8.83	2.89	YES	
TRKRTE15	0	0.10000E+01	482890.0	3735030.7	433.0	3.11	8.83	2.89	YES	
TRKRTE16	0	0.10000E+01	482890.0	3735011.8	433.0	3.11	8.83	2.89	YES	
TRKRTE17	0	0.10000E+01	482890.0	3734992.8	433.0	3.11	8.83	2.89	YES	
TRKRTE18	0	0.10000E+01	482889.9	3734973.8	433.0	3.11	8.83	2.89	YES	
TRKRTE19	0	0.10000E+01	482889.9	3734954.8	433.0	3.11	8.83	2.89	YES	
TRKRTE20	0	0.10000E+01	482889.8	3734935.8	433.0	3.11	8.83	2.89	YES	
TRKRTE21	0	0.10000E+01	482889.8	3734916.8	433.0	3.11	8.83	2.89	YES	
TRKRTE22	0	0.10000E+01	482889.8	3734897.8	433.0	3.11	8.83	2.89	YES	
TRKRTE23	0	0.10000E+01	482889.7	3734878.8	433.0	3.11	8.83	2.89	YES	
TRKRTE24	0	0.10000E+01	482889.7	3734859.8	433.0	3.11	8.83	2.89	YES	
TRKRTE25	0	0.10000E+01	482889.6	3734840.9	433.0	3.11	8.83	2.89	YES	
TRKRTE26	0	0.10000E+01	482889.6	3734821.9	433.0	3.11	8.83	2.89	YES	
TRKRTE27	0	0.10000E+01	482889.6	3734802.9	433.1	3.11	8.83	2.89	YES	
TRKRTE28	0	0.10000E+01	482889.5	3734783.9	433.7	3.11	8.83	2.89	YES	
TRKRTE29	0	0.10000E+01	482884.3	3734766.7	433.8	3.11	8.83	2.89	YES	
TRKRTE30	0	0.10000E+01	482872.8	3734751.5	433.4	3.11	8.83	2.89	YES	
TRKRTE31	0	0.10000E+01	482861.3	3734736.4	433.4	3.11	8.83	2.89	YES	
TRKRTE32	0	0.10000E+01	482849.9	3734721.3	433.5	3.11	8.83	2.89	YES	
TRKRTE33	0	0.10000E+01	482838.4	3734706.2	433.5	3.11	8.83	2.89	YES	
TRKRTE34	0	0.10000E+01	482826.9	3734691.0	433.7	3.11	8.83	2.89	YES	
TRKRTE35	0	0.10000E+01	482814.2	3734684.9	433.5	3.11	8.83	2.89	YES	

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

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ U

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER	EMISSION RATE	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT.	INIT.	URBAN	EMISSION RATE
	PART. CATS.	(GRAMS/SEC)					SY (METERS)	SZ (METERS)	SOURCE	SCALAR VARY BY
TRKRTE36	0	0.10000E+01	482799.2	3734696.5	433.0	3.11	8.83	2.89	YES	
TRKRTE37	0	0.10000E+01	482784.1	3734708.0	433.0	3.11	8.83	2.89	YES	
TRKRTE38	0	0.10000E+01	482769.0	3734719.6	433.0	3.11	8.83	2.89	YES	
TRKRTE39	0	0.10000E+01	482754.0	3734731.2	433.0	3.11	8.83	2.89	YES	
TRKRTE40	0	0.10000E+01	482738.9	3734742.7	433.0	3.11	8.83	2.89	YES	
NBND01	0	0.10000E+01	482727.5	3734759.9	433.0	3.11	12.15	2.89	YES	
NBND02	0	0.10000E+01	482708.7	3734778.0	433.0	3.11	12.15	2.89	YES	
NBND03	0	0.10000E+01	482689.9	3734796.1	433.0	3.11	12.15	2.89	YES	
NBND04	0	0.10000E+01	482672.7	3734815.3	433.0	3.11	12.15	2.89	YES	
NBND05	0	0.10000E+01	482664.8	3734840.2	433.0	3.11	12.15	2.89	YES	
NBND06	0	0.10000E+01	482656.9	3734865.1	433.0	3.11	12.15	2.89	YES	
NBND07	0	0.10000E+01	482649.0	3734890.0	433.0	3.11	12.15	2.89	YES	
NBND08	0	0.10000E+01	482641.0	3734914.9	433.0	3.11	12.15	2.89	YES	
NBND09	0	0.10000E+01	482633.1	3734939.8	433.0	3.11	12.15	2.89	YES	
NBND10	0	0.10000E+01	482625.2	3734964.7	433.0	3.11	12.15	2.89	YES	
NBND11	0	0.10000E+01	482613.1	3734987.6	433.0	3.11	12.15	2.89	YES	
NBND12	0	0.10000E+01	482599.1	3735009.8	433.0	3.11	12.15	2.89	YES	
NBND13	0	0.10000E+01	482585.2	3735031.9	433.0	3.11	12.15	2.89	YES	
NBND14	0	0.10000E+01	482571.3	3735054.0	433.0	3.11	12.15	2.89	YES	
NBND15	0	0.10000E+01	482557.3	3735076.1	433.0	3.11	12.15	2.89	YES	
NBND16	0	0.10000E+01	482543.4	3735098.2	433.0	3.11	12.15	2.89	YES	
NBND17	0	0.10000E+01	482529.5	3735120.3	433.0	3.11	12.15	2.89	YES	
NBND18	0	0.10000E+01	482515.5	3735142.4	433.0	3.11	12.15	2.89	YES	
NBND19	0	0.10000E+01	482501.7	3735164.5	433.0	3.11	12.15	2.89	YES	
NBND20	0	0.10000E+01	482496.5	3735190.1	433.0	3.11	12.15	2.89	YES	
NBND21	0	0.10000E+01	482491.3	3735215.8	433.0	3.11	12.15	2.89	YES	
NBND22	0	0.10000E+01	482487.1	3735241.5	433.0	3.11	12.15	2.89	YES	
NBND23	0	0.10000E+01	482486.8	3735267.6	433.0	3.11	12.15	2.89	YES	
NBND24	0	0.10000E+01	482486.4	3735293.7	432.9	3.11	12.15	2.89	YES	
NBND25	0	0.10000E+01	482486.1	3735319.9	432.4	3.11	12.15	2.89	YES	
NBND26	0	0.10000E+01	482485.8	3735346.0	432.0	3.11	12.15	2.89	YES	
NBND27	0	0.10000E+01	482485.4	3735372.1	432.0	3.11	12.15	2.89	YES	
NBND28	0	0.10000E+01	482485.1	3735398.2	432.0	3.11	12.15	2.89	YES	
NBND29	0	0.10000E+01	482484.8	3735424.4	432.0	3.11	12.15	2.89	YES	
NBND30	0	0.10000E+01	482484.4	3735450.5	432.0	3.11	12.15	2.89	YES	
NBND31	0	0.10000E+01	482484.1	3735476.6	431.8	3.11	12.15	2.89	YES	
NBND32	0	0.10000E+01	482483.8	3735502.8	431.5	3.11	12.15	2.89	YES	
NBND33	0	0.10000E+01	482483.4	3735528.9	431.4	3.11	12.15	2.89	YES	
NBND34	0	0.10000E+01	482483.1	3735555.0	431.4	3.11	12.15	2.89	YES	
SBND01	0	0.10000E+01	482699.7	3734769.4	433.0	3.11	12.32	2.89	YES	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: ReqDFault CONC ELEV URBAN ADJ U

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER	EMISSION RATE			BASE ELEV.	RELEASE HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
	PART. CATS.	(GRAMS/SEC)	X (METERS)	Y (METERS)	(METERS)	(METERS)	(METERS)	(METERS)		
SBND02	0	0.10000E+01	482677.9	3734784.4	433.0	3.11	12.32	2.89	YES	
SBND03	0	0.10000E+01	482656.0	3734799.4	433.0	3.11	12.32	2.89	YES	
SBND04	0	0.10000E+01	482634.2	3734814.4	433.0	3.11	12.32	2.89	YES	
SBND05	0	0.10000E+01	482612.4	3734829.4	433.2	3.11	12.32	2.89	YES	
SBND06	0	0.10000E+01	482590.5	3734844.3	433.7	3.11	12.32	2.89	YES	
SBND07	0	0.10000E+01	482568.7	3734859.3	433.1	3.11	12.32	2.89	YES	
SBND08	0	0.10000E+01	482546.9	3734874.3	433.0	3.11	12.32	2.89	YES	
SBND09	0	0.10000E+01	482525.0	3734889.3	433.0	3.11	12.32	2.89	YES	
SBND10	0	0.10000E+01	482503.2	3734904.3	433.0	3.11	12.32	2.89	YES	
SBND11	0	0.10000E+01	482481.4	3734919.2	433.0	3.11	12.32	2.89	YES	
SBND12	0	0.10000E+01	482459.5	3734934.2	433.0	3.11	12.32	2.89	YES	
SBND13	0	0.10000E+01	482437.7	3734949.2	433.0	3.11	12.32	2.89	YES	
SBND14	0	0.10000E+01	482417.2	3734965.4	433.0	3.11	12.32	2.89	YES	
SBND15	0	0.10000E+01	482403.3	3734988.0	433.0	3.11	12.32	2.89	YES	
SBND16	0	0.10000E+01	482389.5	3735010.6	433.0	3.11	12.32	2.89	YES	
SBND17	0	0.10000E+01	482375.7	3735033.2	432.9	3.11	12.32	2.89	YES	
SBND18	0	0.10000E+01	482370.2	3735058.8	432.7	3.11	12.32	2.89	YES	
SBND19	0	0.10000E+01	482366.4	3735085.0	432.5	3.11	12.32	2.89	YES	
SBND20	0	0.10000E+01	482362.5	3735111.2	432.4	3.11	12.32	2.89	YES	
SBND21	0	0.10000E+01	482358.7	3735137.4	432.3	3.11	12.32	2.89	YES	
SBND22	0	0.10000E+01	482359.4	3735163.7	432.3	3.11	12.32	2.89	YES	
SBND23	0	0.10000E+01	482361.4	3735190.1	432.4	3.11	12.32	2.89	YES	
SBND24	0	0.10000E+01	482363.5	3735216.5	432.4	3.11	12.32	2.89	YES	
SBND25	0	0.10000E+01	482368.5	3735241.8	432.6	3.11	12.32	2.89	YES	
SBND26	0	0.10000E+01	482384.4	3735263.0	432.8	3.11	12.32	2.89	YES	
SBND27	0	0.10000E+01	482407.0	3735269.6	432.9	3.11	12.32	2.89	YES	
SBND28	0	0.10000E+01	482430.5	3735262.9	433.0	3.11	12.32	2.89	YES	
SBND29	0	0.10000E+01	482445.4	3735241.0	433.0	3.11	12.32	2.89	YES	
SBND30	0	0.10000E+01	482448.0	3735214.9	433.0	3.11	12.32	2.89	YES	
SBND31	0	0.10000E+01	482449.6	3735188.4	433.0	3.11	12.32	2.89	YES	
SBND32	0	0.10000E+01	482451.2	3735162.0	433.0	3.11	12.32	2.89	YES	
SBND33	0	0.10000E+01	482451.5	3735135.6	433.0	3.11	12.32	2.89	YES	
SBND34	0	0.10000E+01	482451.3	3735109.1	433.0	3.11	12.32	2.89	YES	
SBND35	0	0.10000E+01	482451.0	3735082.6	433.0	3.11	12.32	2.89	YES	
SBND36	0	0.10000E+01	482450.8	3735056.1	433.0	3.11	12.32	2.89	YES	
SBND37	0	0.10000E+01	482451.4	3735029.7	433.0	3.11	12.32	2.89	YES	
SBND38	0	0.10000E+01	482452.9	3735003.2	433.0	3.11	12.32	2.89	YES	
SBND39	0	0.10000E+01	482454.4	3734976.8	433.0	3.11	12.32	2.89	YES	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
IDLE01	IDLE01	,	
IDLE02	IDLE02	,	
IDLE03	IDLE03	,	
IDLE04	IDLE04	,	
IDLE05	IDLE05	,	
IDLE06	IDLE06	,	
IDLE07	IDLE07	,	
IDLE08	IDLE08	,	
IDLE09	IDLE09	,	
IDLE10	IDLE10	,	
IDLE11	IDLE11	,	
IDLE12	IDLE12	,	
IDLE13	IDLE13	,	
IDLE14	IDLE14	,	
IDLE15	IDLE15	,	
IDLE16	IDLE16	,	
IDLE17	IDLE17	,	
IDLE18	IDLE18	,	
IDLE19	IDLE19	,	
IDLE20	IDLE20	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
IDLE21	IDLE21	,	
IDLE22	IDLE22	,	
IDLE23	IDLE23	,	
IDLE24	IDLE24	,	
NBND01	NBND01	,	
NBND02	NBND02	,	
NBND03	NBND03	,	
NBND04	NBND04	,	
NBND05	NBND05	,	
NBND06	NBND06	,	
NBND07	NBND07	,	
NBND08	NBND08	,	
NBND09	NBND09	,	
NBND10	NBND10	,	
NBND11	NBND11	,	
NBND12	NBND12	,	
NBND13	NBND13	,	
NBND14	NBND14	,	
NBND15	NBND15	,	
NBND16	NBND16	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
NBND17	NBND17	,	
NBND18	NBND18	,	
NBND19	NBND19	,	
NBND20	NBND20	,	
NBND21	NBND21	,	
NBND22	NBND22	,	
NBND23	NBND23	,	
NBND24	NBND24	,	
NBND25	NBND25	,	
NBND26	NBND26	,	
NBND27	NBND27	,	
NBND28	NBND28	,	
NBND29	NBND29	,	
NBND30	NBND30	,	
NBND31	NBND31	,	
NBND32	NBND32	,	
NBND33	NBND33	,	
NBND34	NBND34	,	
ONSITE01	ONSITE01	,	
ONSITE02	ONSITE02	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
ONSITE03	ONSITE03	,	
ONSITE04	ONSITE04	,	
ONSITE05	ONSITE05	,	
ONSITE06	ONSITE06	,	
ONSITE07	ONSITE07	,	
ONSITE08	ONSITE08	,	
ONSITE09	ONSITE09	,	
ONSITE10	ONSITE10	,	
ONSITE11	ONSITE11	,	
ONSITE12	ONSITE12	,	
ONSITE13	ONSITE13	,	
ONSITE14	ONSITE14	,	
ONSITE15	ONSITE15	,	
ONSITE16	ONSITE16	,	
ONSITE17	ONSITE17	,	
ONSITE18	ONSITE18	,	
ONSITE19	ONSITE19	,	
ONSITE20	ONSITE20	,	
ONSITE21	ONSITE21	,	
ONSITE22	ONSITE22	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
ONSITE23	ONSITE23	,	
ONSITE24	ONSITE24	,	
ONSITE25	ONSITE25	,	
ONSITE26	ONSITE26	,	
ONSITE27	ONSITE27	,	
ONSITE28	ONSITE28	,	
ONSITE29	ONSITE29	,	
ONSITE30	ONSITE30	,	
ONSITE31	ONSITE31	,	
ONSITE32	ONSITE32	,	
ONSITE33	ONSITE33	,	
ONSITE34	ONSITE34	,	
ONSITE35	ONSITE35	,	
ONSITE36	ONSITE36	,	
ONSITE37	ONSITE37	,	
ONSITE38	ONSITE38	,	
ONSITE39	ONSITE39	,	
ONSITE40	ONSITE40	,	
ONSITE41	ONSITE41	,	
ONSITE42	ONSITE42	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
ONSITE43	ONSITE43	,	
ONSITE44	ONSITE44	,	
ONSITE45	ONSITE45	,	
SBND01	SBND01	,	
SBND02	SBND02	,	
SBND03	SBND03	,	
SBND04	SBND04	,	
SBND05	SBND05	,	
SBND06	SBND06	,	
SBND07	SBND07	,	
SBND08	SBND08	,	
SBND09	SBND09	,	
SBND10	SBND10	,	
SBND11	SBND11	,	
SBND12	SBND12	,	
SBND13	SBND13	,	
SBND14	SBND14	,	
SBND15	SBND15	,	
SBND16	SBND16	,	
SBND17	SBND17	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
SBND18	SBND18	,	
SBND19	SBND19	,	
SBND20	SBND20	,	
SBND21	SBND21	,	
SBND22	SBND22	,	
SBND23	SBND23	,	
SBND24	SBND24	,	
SBND25	SBND25	,	
SBND26	SBND26	,	
SBND27	SBND27	,	
SBND28	SBND28	,	
SBND29	SBND29	,	
SBND30	SBND30	,	
SBND31	SBND31	,	
SBND32	SBND32	,	
SBND33	SBND33	,	
SBND34	SBND34	,	
SBND35	SBND35	,	
SBND36	SBND36	,	
SBND37	SBND37	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
SBND38	SBND38	,	
SBND39	SBND39	,	
TRKRTE01	TRKRTE01	,	
TRKRTE02	TRKRTE02	,	
TRKRTE03	TRKRTE03	,	
TRKRTE04	TRKRTE04	,	
TRKRTE05	TRKRTE05	,	
TRKRTE06	TRKRTE06	,	
TRKRTE07	TRKRTE07	,	
TRKRTE08	TRKRTE08	,	
TRKRTE09	TRKRTE09	,	
TRKRTE10	TRKRTE10	,	
TRKRTE11	TRKRTE11	,	
TRKRTE12	TRKRTE12	,	
TRKRTE13	TRKRTE13	,	
TRKRTE14	TRKRTE14	,	
TRKRTE15	TRKRTE15	,	
TRKRTE16	TRKRTE16	,	
TRKRTE17	TRKRTE17	,	
TRKRTE18	TRKRTE18	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
TRKRTE19	TRKRTE19	,	
TRKRTE20	TRKRTE20	,	
TRKRTE21	TRKRTE21	,	
TRKRTE22	TRKRTE22	,	
TRKRTE23	TRKRTE23	,	
TRKRTE24	TRKRTE24	,	
TRKRTE25	TRKRTE25	,	
TRKRTE26	TRKRTE26	,	
TRKRTE27	TRKRTE27	,	
TRKRTE28	TRKRTE28	,	
TRKRTE29	TRKRTE29	,	
TRKRTE30	TRKRTE30	,	
TRKRTE31	TRKRTE31	,	
TRKRTE32	TRKRTE32	,	
TRKRTE33	TRKRTE33	,	
TRKRTE34	TRKRTE34	,	
TRKRTE35	TRKRTE35	,	
TRKRTE36	TRKRTE36	,	
TRKRTE37	TRKRTE37	,	
TRKRTE38	TRKRTE38	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP	ID	SOURCE	IDS
TRKRTE39	TRKRTE39	,	
TRKRTE40	TRKRTE40	,	

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: ReqDFAULT CONC ELEV URBAN ADJ U

*** SOURCE IDs DEFINED AS URBAN SOURCES **

URBAN ID	URBAN POP	SOURCE IDs													
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----				
IDLE08	78700.	IDLE01	,	IDLE02	,	IDLE03	,	IDLE04	,	IDLE05	,	IDLE06	,	IDLE07	
	,														
	IDLE09	,	IDLE10	,	IDLE11	,	IDLE12	,	IDLE13	,	IDLE14	,	IDLE15	,	IDLE16
	IDLE17	,	IDLE18	,	IDLE19	,	IDLE20	,	IDLE21	,	IDLE22	,	IDLE23	,	IDLE24
	ONSITE01	,	ONSITE02	,	ONSITE03	,	ONSITE04	,	ONSITE05	,	ONSITE06	,	ONSITE07	,	ONSITE08
	ONSITE09	,	ONSITE10	,	ONSITE11	,	ONSITE12	,	ONSITE13	,	ONSITE14	,	ONSITE15	,	ONSITE16
	ONSITE17	,	ONSITE18	,	ONSITE19	,	ONSITE20	,	ONSITE21	,	ONSITE22	,	ONSITE23	,	ONSITE24
	ONSITE25	,	ONSITE26	,	ONSITE27	,	ONSITE28	,	ONSITE29	,	ONSITE30	,	ONSITE31	,	ONSITE32
	ONSITE33	,	ONSITE34	,	ONSITE35	,	ONSITE36	,	ONSITE37	,	ONSITE38	,	ONSITE39	,	ONSITE40
	ONSITE41	,	ONSITE42	,	ONSITE43	,	ONSITE44	,	ONSITE45	,	TRKRTE01	,	TRKRTE02	,	TRKRTE03
	TRKRTE04	,	TRKRTE05	,	TRKRTE06	,	TRKRTE07	,	TRKRTE08	,	TRKRTE09	,	TRKRTE10	,	TRKRTE11
	TRKRTE12	,	TRKRTE13	,	TRKRTE14	,	TRKRTE15	,	TRKRTE16	,	TRKRTE17	,	TRKRTE18	,	TRKRTE19
	TRKRTE20	,	TRKRTE21	,	TRKRTE22	,	TRKRTE23	,	TRKRTE24	,	TRKRTE25	,	TRKRTE26	,	TRKRTE27
	TRKRTE28	,	TRKRTE29	,	TRKRTE30	,	TRKRTE31	,	TRKRTE32	,	TRKRTE33	,	TRKRTE34	,	TRKRTE35
	TRKRTE36	,	TRKRTE37	,	TRKRTE38	,	TRKRTE39	,	TRKRTE40	,	NBND01	,	NBND02	,	NBND03
	NBND04	,	NBND05	,	NBND06	,	NBND07	,	NBND08	,	NBND09	,	NBND10	,	NBND11
	NBND12	,	NBND13	,	NBND14	,	NBND15	,	NBND16	,	NBND17	,	NBND18	,	NBND19
	NBND20	,	NBND21	,	NBND22	,	NBND23	,	NBND24	,	NBND25	,	NBND26	,	NBND27
	NBND28	,	NBND29	,	NBND30	,	NBND31	,	NBND32	,	NBND33	,	NBND34	,	SBND01
	SBND02	,	SBND03	,	SBND04	,	SBND05	,	SBND06	,	SBND07	,	SBND08	,	SBND09
	SBND10	,	SBND11	,	SBND12	,	SBND13	,	SBND14	,	SBND15	,	SBND16	,	SBND17

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
SBND18	,	SBND19 , SBND20 , SBND21 , SBND22 , SBND23 , SBND24 , SBND25 ,
SBND26	,	SBND27 , SBND28 , SBND29 , SBND30 , SBND31 , SBND32 , SBND33 ,
SBND34	,	SBND35 , SBND36 , SBND37 , SBND38 , SBND39 ,

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: ReqDFAULT CONC ELEV URBAN ADJ U

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IDLE01

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-10.6,	-88.1,	2	9.1,	326.2,	220.4,	-17.5,	-73.3,
3	9.1,	324.6,	257.2,	-23.9,	-56.3,	4	9.1,	313.2,	286.2,	-29.6,	-37.6,
5	9.1,	292.3,	306.6,	-34.4,	-17.7,	6	9.1,	262.5,	317.6,	-38.1,	2.7,
7	9.1,	224.7,	319.9,	-41.6,	23.0,	8	9.1,	180.1,	315.0,	-46.4,	42.6,
9	9.1,	131.5,	300.5,	-49.7,	60.3,	10	9.1,	176.9,	317.8,	-70.8,	77.8,
11	9.1,	220.4,	326.2,	-89.8,	92.7,	12	9.1,	257.2,	324.6,	-106.0,	104.7,
13	9.1,	286.2,	313.2,	-119.0,	113.5,	14	9.1,	306.6,	292.3,	-128.5,	118.9,
15	9.1,	317.6,	262.5,	-134.0,	120.7,	16	9.1,	319.9,	224.7,	-135.4,	118.3,
17	9.1,	315.0,	180.1,	-132.7,	111.1,	18	9.1,	300.5,	131.5,	-126.0,	100.6,
19	9.1,	317.8,	176.9,	-166.3,	88.1,	20	9.1,	326.2,	220.4,	-202.9,	73.3,
21	9.1,	324.6,	257.2,	-233.3,	56.3,	22	9.1,	313.2,	286.2,	-256.7,	37.6,
23	9.1,	292.3,	306.6,	-272.2,	17.7,	24	9.1,	262.5,	317.6,	-279.5,	-2.7,
25	9.1,	224.7,	319.9,	-278.3,	-23.0,	26	9.1,	180.1,	315.0,	-268.6,	-42.6,
27	9.1,	131.5,	300.5,	-250.8,	-60.3,	28	9.1,	176.9,	317.8,	-247.0,	-77.8,
29	9.1,	220.4,	326.2,	-236.4,	-92.7,	30	9.1,	257.2,	324.6,	-218.6,	-104.7,
31	9.1,	286.2,	313.2,	-194.2,	-113.5,	32	9.1,	306.6,	292.3,	-163.9,	-118.9,
33	9.1,	317.6,	262.5,	-128.6,	-120.7,	34	9.1,	319.9,	224.7,	-89.3,	-118.3,
35	9.1,	315.0,	180.1,	-47.4,	-111.1,	36	9.1,	300.5,	131.5,	-5.5,	-100.6,

SOURCE ID: IDLE02

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-12.2,	-79.4,	2	9.1,	326.2,	220.4,	-20.6,	-65.0,
3	9.1,	324.6,	257.2,	-28.4,	-48.6,	4	9.1,	313.2,	286.2,	-35.3,	-30.8,
5	9.1,	292.3,	306.6,	-41.1,	-12.0,	6	9.1,	262.5,	317.6,	-45.7,	7.1,
7	9.1,	224.7,	319.9,	-49.9,	26.0,	8	9.1,	180.1,	315.0,	-55.1,	44.2,
9	9.1,	131.5,	300.5,	-58.5,	60.3,	10	9.1,	176.9,	317.8,	-79.5,	76.3,
11	9.1,	220.4,	326.2,	-98.1,	89.6,	12	9.1,	257.2,	324.6,	-113.7,	100.3,
13	9.1,	286.2,	313.2,	-125.8,	107.8,	14	9.1,	306.6,	292.3,	-134.1,	112.2,
15	9.1,	317.6,	262.5,	-138.4,	113.0,	16	9.1,	319.9,	224.7,	-138.4,	110.0,
17	9.1,	315.0,	180.1,	-134.2,	102.4,	18	9.1,	300.5,	131.5,	-126.0,	91.7,
19	9.1,	317.8,	176.9,	-164.7,	79.4,	20	9.1,	326.2,	220.4,	-199.9,	65.0,
21	9.1,	324.6,	257.2,	-228.9,	48.6,	22	9.1,	313.2,	286.2,	-251.0,	30.8,
23	9.1,	292.3,	306.6,	-265.4,	12.0,	24	9.1,	262.5,	317.6,	-271.8,	-7.1,
25	9.1,	224.7,	319.9,	-270.0,	-26.0,	26	9.1,	180.1,	315.0,	-259.9,	-44.2,
27	9.1,	131.5,	300.5,	-242.0,	-60.3,	28	9.1,	176.9,	317.8,	-238.3,	-76.3,
29	9.1,	220.4,	326.2,	-228.1,	-89.6,	30	9.1,	257.2,	324.6,	-211.0,	-100.3,
31	9.1,	286.2,	313.2,	-187.4,	-107.8,	32	9.1,	306.6,	292.3,	-158.2,	-112.2,
33	9.1,	317.6,	262.5,	-124.1,	-113.0,	34	9.1,	319.9,	224.7,	-86.3,	-110.0,
35	9.1,	315.0,	180.1,	-45.9,	-102.4,	36	9.1,	300.5,	131.5,	-5.5,	-91.7,

SOURCE ID: IDLE03

SOURCE	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
	1	9.1,	317.8,	176.9,	-13.7,	-70.7,	2	9.1,	326.2,	220.4,	-23.6,	-56.7,
	3	9.1,	324.6,	257.2,	-32.8,	-41.0,	4	9.1,	313.2,	286.2,	-41.0,	-24.0,
	5	9.1,	292.3,	306.6,	-47.9,	-6.3,	6	9.1,	262.5,	317.6,	-53.4,	11.5,
	7	9.1,	224.7,	319.9,	-58.2,	29.1,	8	9.1,	180.1,	315.0,	-63.8,	45.7,
	9	9.1,	131.5,	300.5,	-67.3,	60.3,	10	9.1,	176.9,	317.8,	-88.2,	74.8,
	11	9.1,	220.4,	326.2,	-106.4,	86.6,	12	9.1,	257.2,	324.6,	-121.3,	95.8,
	13	9.1,	286.2,	313.2,	-132.6,	102.2,	14	9.1,	306.6,	292.3,	-139.8,	105.4,
	15	9.1,	317.6,	262.5,	-142.8,	105.4,	16	9.1,	319.9,	224.7,	-141.4,	101.7,
	17	9.1,	315.0,	180.1,	-135.8,	93.7,	18	9.1,	300.5,	131.5,	-126.0,	82.9,
	19	9.1,	317.8,	176.9,	-163.2,	70.7,	20	9.1,	326.2,	220.4,	-196.8,	56.7,
	21	9.1,	324.6,	257.2,	-224.5,	41.0,	22	9.1,	313.2,	286.2,	-245.3,	24.0,
	23	9.1,	292.3,	306.6,	-258.7,	6.3,	24	9.1,	262.5,	317.6,	-264.2,	-11.5,
	25	9.1,	224.7,	319.9,	-261.7,	-29.1,	26	9.1,	180.1,	315.0,	-251.2,	-45.7,
	27	9.1,	131.5,	300.5,	-233.1,	-60.3,	28	9.1,	176.9,	317.8,	-229.6,	-74.8,
	29	9.1,	220.4,	326.2,	-219.8,	-86.6,	30	9.1,	257.2,	324.6,	-203.3,	-95.8,
	31	9.1,	286.2,	313.2,	-180.7,	-102.2,	32	9.1,	306.6,	292.3,	-152.5,	-105.4,
	33	9.1,	317.6,	262.5,	-119.7,	-105.4,	34	9.1,	319.9,	224.7,	-83.3,	-101.7,
	35	9.1,	315.0,	180.1,	-44.4,	-93.7,	36	9.1,	300.5,	131.5,	-5.5,	-82.9,

SOURCE ID: TDLE04

SOURCE	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-15.2,	-62.0,		2	9.1,	326.2,	220.4,	-26.6,	-48.4,
3	9.1,	324.6,	257.2,	-37.2,	-33.3,		4	9.1,	313.2,	286.2,	-46.6,	-17.3,

5	9.1,	292.3,	306.6,	-54.7,	-0.7,	6	9.1,	262.5,	317.6,	-61.0,	16.0,
7	9.1,	224.7,	319.9,	-66.6,	32.1,	8	9.1,	180.1,	315.0,	-72.5,	47.2,
9	9.1,	131.5,	300.5,	-76.2,	60.3,	10	9.1,	176.9,	317.8,	-96.9,	73.2,
11	9.1,	220.4,	326.2,	-114.7,	83.6,	12	9.1,	257.2,	324.6,	-129.0,	91.4,
13	9.1,	286.2,	313.2,	-139.4,	96.5,	14	9.1,	306.6,	292.3,	-145.5,	98.6,
15	9.1,	317.6,	262.5,	-147.2,	97.7,	16	9.1,	319.9,	224.7,	-144.5,	93.4,
17	9.1,	315.0,	180.1,	-137.3,	85.0,	18	9.1,	300.5,	131.5,	-126.0,	74.0,
19	9.1,	317.8,	176.9,	-161.7,	62.0,	20	9.1,	326.2,	220.4,	-193.8,	48.4,
21	9.1,	324.6,	257.2,	-220.1,	33.3,	22	9.1,	313.2,	286.2,	-239.6,	17.3,
23	9.1,	292.3,	306.6,	-251.9,	0.7,	24	9.1,	262.5,	317.6,	-256.5,	-16.0,
25	9.1,	224.7,	319.9,	-253.4,	-32.1,	26	9.1,	180.1,	315.0,	-242.5,	-47.2,
27	9.1,	131.5,	300.5,	-224.3,	-60.3,	28	9.1,	176.9,	317.8,	-220.9,	-73.2,
29	9.1,	220.4,	326.2,	-211.5,	-83.6,	30	9.1,	257.2,	324.6,	-195.7,	-91.4,
31	9.1,	286.2,	313.2,	-173.9,	-96.5,	32	9.1,	306.6,	292.3,	-146.8,	-98.6,
33	9.1,	317.6,	262.5,	-115.3,	-97.7,	34	9.1,	319.9,	224.7,	-80.3,	-93.4,
35	9.1,	315.0,	180.1,	-42.8,	-85.0,	36	9.1,	300.5,	131.5,	-5.5,	-74.0,

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: ReqDFAULT CONC ELEV URBAN ADJ U

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IDLE05

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-16.8,	-53.3,	2	9.1,	326.2,	220.4,	-29.6,	-40.1,
3	9.1,	324.6,	257.2,	-41.6,	-25.7,	4	9.1,	313.2,	286.2,	-52.3,	-10.5,
5	9.1,	292.3,	306.6,	-61.4,	5.0,	6	9.1,	262.5,	317.6,	-68.7,	20.4,
7	9.1,	224.7,	319.9,	-74.9,	35.1,	8	9.1,	180.1,	315.0,	-81.2,	48.8,
9	9.1,	131.5,	300.5,	-85.0,	60.3,	10	9.1,	176.9,	317.8,	-105.6,	71.7,
11	9.1,	220.4,	326.2,	-123.0,	80.6,	12	9.1,	257.2,	324.6,	-136.6,	87.0,
13	9.1,	286.2,	313.2,	-146.1,	90.8,	14	9.1,	306.6,	292.3,	-151.2,	91.8,
15	9.1,	317.6,	262.5,	-151.6,	90.1,	16	9.1,	319.9,	224.7,	-147.5,	85.1,
17	9.1,	315.0,	180.1,	-138.9,	76.3,	18	9.1,	300.5,	131.5,	-126.0,	65.2,
19	9.1,	317.8,	176.9,	-160.1,	53.3,	20	9.1,	326.2,	220.4,	-190.8,	40.1,
21	9.1,	324.6,	257.2,	-215.6,	25.7,	22	9.1,	313.2,	286.2,	-233.9,	10.5,
23	9.1,	292.3,	306.6,	-245.1,	-5.0,	24	9.1,	262.5,	317.6,	-248.9,	-20.4,
25	9.1,	224.7,	319.9,	-245.1,	-35.1,	26	9.1,	180.1,	315.0,	-233.8,	-48.8,
27	9.1,	131.5,	300.5,	-215.4,	-60.3,	28	9.1,	176.9,	317.8,	-212.2,	-71.7,
29	9.1,	220.4,	326.2,	-203.2,	-80.6,	30	9.1,	257.2,	324.6,	-188.0,	-87.0,
31	9.1,	286.2,	313.2,	-167.1,	-90.8,	32	9.1,	306.6,	292.3,	-141.1,	-91.8,
33	9.1,	317.6,	262.5,	-110.9,	-90.1,	34	9.1,	319.9,	224.7,	-77.3,	-85.1,
35	9.1,	315.0,	180.1,	-41.3,	-76.3,	36	9.1,	300.5,	131.5,	-5.5,	-65.2,

SOURCE ID: IDLE06

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-18.3,	-44.6,	2	9.1,	326.2,	220.4,	-32.7,	-31.8,
3	9.1,	324.6,	257.2,	-46.0,	-18.0,	4	9.1,	313.2,	286.2,	-58.0,	-3.7,
5	9.1,	292.3,	306.6,	-68.2,	10.7,	6	9.1,	262.5,	317.6,	-76.3,	24.8,
7	9.1,	224.7,	319.9,	-83.2,	38.1,	8	9.1,	180.1,	315.0,	-89.9,	50.3,
9	9.1,	131.5,	300.5,	-93.9,	60.3,	10	9.1,	176.9,	317.8,	-114.3,	70.1,
11	9.1,	220.4,	326.2,	-131.3,	77.5,	12	9.1,	257.2,	324.6,	-144.3,	82.6,
13	9.1,	286.2,	313.2,	-152.9,	85.1,	14	9.1,	306.6,	292.3,	-156.9,	85.1,
15	9.1,	317.6,	262.5,	-156.1,	82.4,	16	9.1,	319.9,	224.7,	-150.5,	76.8,
17	9.1,	315.0,	180.1,	-140.4,	67.6,	18	9.1,	300.5,	131.5,	-126.0,	56.4,
19	9.1,	317.8,	176.9,	-158.6,	44.6,	20	9.1,	326.2,	220.4,	-187.8,	31.8,
21	9.1,	324.6,	257.2,	-211.2,	18.0,	22	9.1,	313.2,	286.2,	-228.2,	3.7,
23	9.1,	292.3,	306.6,	-238.4,	-10.7,	24	9.1,	262.5,	317.6,	-241.2,	-24.8,
25	9.1,	224.7,	319.9,	-236.8,	-38.1,	26	9.1,	180.1,	315.0,	-225.1,	-50.3,
27	9.1,	131.5,	300.5,	-206.6,	-60.3,	28	9.1,	176.9,	317.8,	-203.5,	-70.1,
29	9.1,	220.4,	326.2,	-194.9,	-77.5,	30	9.1,	257.2,	324.6,	-180.3,	-82.6,
31	9.1,	286.2,	313.2,	-160.3,	-85.1,	32	9.1,	306.6,	292.3,	-135.5,	-85.1,
33	9.1,	317.6,	262.5,	-106.5,	-82.4,	34	9.1,	319.9,	224.7,	-74.2,	-76.8,
35	9.1,	315.0,	180.1,	-39.8,	-67.6,	36	9.1,	300.5,	131.5,	-5.5,	-56.4,

SOURCE ID: IDLE07

SOURCE	IB	TABLE	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-19.8,	-35.9,	2	9.1,	326.2,	220.4,	-35.7,	-23.5,		
3	9.1,	324.6,	257.2,	-50.4,	-10.4,	4	9.1,	313.2,	286.2,	-63.7,	3.1,		
5	9.1,	292.3,	306.6,	-75.0,	16.4,	6	9.1,	262.5,	317.6,	-84.0,	29.2,		
7	9.1,	224.7,	319.9,	-91.5,	41.2,	8	9.1,	180.1,	315.0,	-98.6,	51.8,		
9	9.1,	131.5,	300.5,	-102.7,	60.3,	10	9.1,	176.9,	317.8,	-123.0,	68.6,		
11	9.1,	220.4,	326.2,	-139.6,	74.5,	12	9.1,	257.2,	324.6,	-152.0,	78.2,		
13	9.1,	286.2,	313.2,	-159.7,	79.4,	14	9.1,	306.6,	292.3,	-162.5,	78.3,		
15	9.1,	317.6,	262.5,	-160.5,	74.8,	16	9.1,	319.9,	224.7,	-153.5,	68.5,		
17	9.1,	315.0,	180.1,	-141.9,	58.9,	18	9.1,	300.5,	131.5,	-126.0,	47.5,		
19	9.1,	317.8,	176.9,	-157.1,	35.9,	20	9.1,	326.2,	220.4,	-184.7,	23.5,		
21	9.1,	324.6,	257.2,	-206.8,	10.4,	22	9.1,	313.2,	286.2,	-222.6,	-3.1,		
23	9.1,	292.3,	306.6,	-231.6,	-16.4,	24	9.1,	262.5,	317.6,	-233.6,	-29.2,		
25	9.1,	224.7,	319.9,	-228.4,	-41.2,	26	9.1,	180.1,	315.0,	-216.4,	-51.8,		
27	9.1,	131.5,	300.5,	-197.8,	-60.3,	28	9.1,	176.9,	317.8,	-194.8,	-68.6,		
29	9.1,	220.4,	326.2,	-186.6,	-74.5,	30	9.1,	257.2,	324.6,	-172.7,	-78.2,		
31	9.1,	286.2,	313.2,	-153.6,	-79.4,	32	9.1,	306.6,	292.3,	-129.8,	-78.3,		
33	9.1,	317.6,	262.5,	-102.0,	-74.8,	34	9.1,	319.9,	224.7,	-71.2,	-68.5,		
35	9.1	315.0	180.1	-38.2	-58.9	36	9.1	300.5	131.5	-5.5	-47.5		

SOURCE ID: TDE08

SOURCE	ID	TYPE	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
			1	9.1,	317.8,	176.9,	-21.4,	-27.2,	2	9.1,	326.2,	220.4,	-38.7,	-15.2,
			3	9.1	324.6,	257.2,	-54.9,	-2.7,	4	9.1	313.2,	286.2,	-69.4,	9.8,

5	9.1,	292.3,	306.6,	-81.8,	22.1,	6	9.1,	262.5,	317.6,	-91.7,	33.6,
7	9.1,	224.7,	319.9,	-99.8,	44.2,	8	9.1,	180.1,	315.0,	-107.3,	53.4,
9	9.1,	131.5,	300.5,	-111.5,	60.3,	10	9.1,	176.9,	317.8,	-131.7,	67.1,
11	9.1,	220.4,	326.2,	-147.9,	71.5,	12	9.1,	257.2,	324.6,	-159.6,	73.8,
13	9.1,	286.2,	313.2,	-166.4,	73.8,	14	9.1,	306.6,	292.3,	-168.2,	71.5,
15	9.1,	317.6,	262.5,	-164.9,	67.1,	16	9.1,	319.9,	224.7,	-156.6,	60.2,
17	9.1,	315.0,	180.1,	-143.5,	50.2,	18	9.1,	300.5,	131.5,	-126.0,	38.7,
19	9.1,	317.8,	176.9,	-155.5,	27.2,	20	9.1,	326.2,	220.4,	-181.7,	15.2,
21	9.1,	324.6,	257.2,	-202.4,	2.7,	22	9.1,	313.2,	286.2,	-216.9,	-9.8,
23	9.1,	292.3,	306.6,	-224.8,	-22.1,	24	9.1,	262.5,	317.6,	-225.9,	-33.6,
25	9.1,	224.7,	319.9,	-220.1,	-44.2,	26	9.1,	180.1,	315.0,	-207.7,	-53.4,
27	9.1,	131.5,	300.5,	-188.9,	-60.3,	28	9.1,	176.9,	317.8,	-186.1,	-67.1,
29	9.1,	220.4,	326.2,	-178.2,	-71.5,	30	9.1,	257.2,	324.6,	-165.0,	-73.8,
31	9.1,	286.2,	313.2,	-146.8,	-73.8,	32	9.1,	306.6,	292.3,	-124.1,	-71.5,
33	9.1,	317.6,	262.5,	-97.6,	-67.1,	34	9.1,	319.9,	224.7,	-68.2,	-60.2,
35	9.1,	315.0,	180.1,	-36.7,	-50.2,	36	9.1,	300.5,	131.5,	-5.5,	-38.7,

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IDLE09

	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-22.9,	-18.4,	2	9.1,	326.2,	220.4,	-41.7,	-6.9,	
3	9.1,	324.6,	257.2,	-59.3,	5.0,	4	9.1,	313.2,	286.2,	-75.0,	16.6,	
5	9.1,	292.3,	306.6,	-88.5,	27.8,	6	9.1,	262.5,	317.6,	-99.3,	38.1,	
7	9.1,	224.7,	319.9,	-108.1,	47.2,	8	9.1,	180.1,	315.0,	-116.0,	54.9,	
9	9.1,	131.5,	300.5,	-120.4,	60.3,	10	9.1,	176.9,	317.8,	-140.4,	65.5,	
11	9.1,	220.4,	326.2,	-156.2,	68.5,	12	9.1,	257.2,	324.6,	-167.3,	69.3,	
13	9.1,	286.2,	313.2,	-173.2,	68.1,	14	9.1,	306.6,	292.3,	-173.9,	64.8,	
15	9.1,	317.6,	262.5,	-169.3,	59.5,	16	9.1,	319.9,	224.7,	-159.6,	51.9,	
17	9.1,	315.0,	180.1,	-145.0,	41.5,	18	9.1,	300.5,	131.5,	-126.0,	29.8,	
19	9.1,	317.8,	176.9,	-154.0,	18.4,	20	9.1,	326.2,	220.4,	-178.7,	6.9,	
21	9.1,	324.6,	257.2,	-198.0,	-5.0,	22	9.1,	313.2,	286.2,	-211.2,	-16.6,	
23	9.1,	292.3,	306.6,	-218.0,	-27.8,	24	9.1,	262.5,	317.6,	-218.2,	-38.1,	
25	9.1,	224.7,	319.9,	-211.8,	-47.2,	26	9.1,	180.1,	315.0,	-199.0,	-54.9,	
27	9.1,	131.5,	300.5,	-180.1,	-60.3,	28	9.1,	176.9,	317.8,	-177.4,	-65.5,	
29	9.1,	220.4,	326.2,	-169.9,	-68.5,	30	9.1,	257.2,	324.6,	-157.4,	-69.3,	
31	9.1,	286.2,	313.2,	-140.0,	-68.1,	32	9.1,	306.6,	292.3,	-118.4,	-64.8,	
33	9.1,	317.6,	262.5,	-93.2,	-59.5,	34	9.1,	319.9,	224.7,	-65.2,	-51.9,	
35	9.1,	315.0,	180.1,	-35.1,	-41.5,	36	9.1,	300.5,	131.5,	-5.5,	-29.8,	

SOURCE ID: IDLE10

	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-24.4,	-9.8,	2	9.1,	326.2,	220.4,	-44.8,	1.4,	
3	9.1,	324.6,	257.2,	-63.7,	12.6,	4	9.1,	313.2,	286.2,	-80.7,	23.4,	
5	9.1,	292.3,	306.6,	-95.3,	33.4,	6	9.1,	262.5,	317.6,	-107.0,	42.5,	
7	9.1,	224.7,	319.9,	-116.4,	50.2,	8	9.1,	180.1,	315.0,	-124.7,	56.5,	
9	9.1,	131.5,	300.5,	-129.2,	60.3,	10	9.1,	176.9,	317.8,	-149.2,	64.0,	
11	9.1,	220.4,	326.2,	-164.5,	65.5,	12	9.1,	257.2,	324.6,	-174.9,	64.9,	
13	9.1,	286.2,	313.2,	-180.0,	62.4,	14	9.1,	306.6,	292.3,	-179.6,	58.0,	
15	9.1,	317.6,	262.5,	-173.7,	51.8,	16	9.1,	319.9,	224.7,	-162.6,	43.6,	
17	9.1,	315.0,	180.1,	-146.5,	32.8,	18	9.1,	300.5,	131.5,	-126.0,	21.0,	
19	9.1,	317.8,	176.9,	-152.5,	9.8,	20	9.1,	326.2,	220.4,	-175.7,	-1.4,	
21	9.1,	324.6,	257.2,	-193.5,	-12.6,	22	9.1,	313.2,	286.2,	-205.5,	-23.4,	
23	9.1,	292.3,	306.6,	-211.3,	-33.4,	24	9.1,	262.5,	317.6,	-210.6,	-42.5,	
25	9.1,	224.7,	319.9,	-203.5,	-50.2,	26	9.1,	180.1,	315.0,	-190.3,	-56.5,	
27	9.1,	131.5,	300.5,	-171.2,	-60.3,	28	9.1,	176.9,	317.8,	-168.6,	-64.0,	
29	9.1,	220.4,	326.2,	-161.6,	-65.5,	30	9.1,	257.2,	324.6,	-149.7,	-64.9,	
31	9.1,	286.2,	313.2,	-133.2,	-62.4,	32	9.1,	306.6,	292.3,	-112.7,	-58.0,	
33	9.1,	317.6,	262.5,	-88.8,	-51.8,	34	9.1,	319.9,	224.7,	-62.1,	-43.6,	
35	9.1,	315.0,	180.1,	-33.6,	-32.8,	36	9.1,	300.5,	131.5,	-5.5,	-21.0,	

SOURCE ID: IDLE11

	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-26.0,	-1.0,	2	9.1,	326.2,	220.4,	-47.8,	9.8,	
3	9.1,	324.6,	257.2,	-68.1,	20.3,	4	9.1,	313.2,	286.2,	-86.4,	30.1,	
5	9.1,	292.3,	306.6,	-102.1,	39.1,	6	9.1,	262.5,	317.6,	-114.6,	46.9,	
7	9.1,	224.7,	319.9,	-124.7,	53.2,	8	9.1,	180.1,	315.0,	-133.4,	58.0,	
9	9.1,	131.5,	300.5,	-138.1,	60.3,	10	9.1,	176.9,	317.8,	-157.9,	62.5,	
11	9.1,	220.4,	326.2,	-172.8,	62.4,	12	9.1,	257.2,	324.6,	-182.6,	60.5,	
13	9.1,	286.2,	313.2,	-186.8,	56.7,	14	9.1,	306.6,	292.3,	-185.3,	51.2,	
15	9.1,	317.6,	262.5,	-178.2,	44.1,	16	9.1,	319.9,	224.7,	-165.6,	35.2,	
17	9.1,	315.0,	180.1,	-148.1,	24.1,	18	9.1,	300.5,	131.5,	-126.0,	12.2,	
19	9.1,	317.8,	176.9,	-150.9,	1.0,	20	9.1,	326.2,	220.4,	-172.6,	-9.8,	
21	9.1,	324.6,	257.2,	-189.1,	-20.3,	22	9.1,	313.2,	286.2,	-199.8,	-30.1,	
23	9.1,	292.3,	306.6,	-204.5,	-39.1,	24	9.1,	262.5,	317.6,	-202.9,	-46.9,	
25	9.1,	224.7,	319.9,	-195.2,	-53.2,	26	9.1,	180.1,	315.0,	-181.6,	-58.0,	
27	9.1,	131.5,	300.5,	-162.4,	-60.3,	28	9.1,	176.9,	317.8,	-159.9,	-62.5,	
29	9.1,	220.4,	326.2,	-153.3,	-62.4,	30	9.1,	257.2,	324.6,	-142.1,	-60.5,	
31	9.1,	286.2,	313.2,	-126.5,	-56.7,	32	9.1,	306.6,	292.3,	-107.0,	-51.2,	
33	9.1,	317.6,	262.5,	-84.4,	-44.1,	34	9.1,	319.9,	224.7,	-59.1,	-35.2,	
35	9.1,	315.0,	180.1,	-32.1,	-24.1,	36	9.1,	300.5,	131.5,	-5.5,	-12.2,	

SOURCE ID: IDLE12

	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-27.5,	7.7,	2	9.1,	326.2,	220.4,	-50.8,	18.1,	
3	9.1,	324.6,	257.2,	-72.5,	27.9,	4	9.1,	313.2,	286.2,	-92.1,	36.9,	

5	9.1,	292.3,	306.6,	-108.8,	44.8,	6	9.1,	262.5,	317.6,	-122.3,	51.3,
7	9.1,	224.7,	319.9,	-133.0,	56.3,	8	9.1,	180.1,	315.0,	-142.1,	59.5,
9	9.1,	131.5,	300.5,	-146.9,	60.3,	10	9.1,	176.9,	317.8,	-166.6,	60.9,
11	9.1,	220.4,	326.2,	-181.1,	59.4,	12	9.1,	257.2,	324.6,	-190.2,	56.1,
13	9.1,	286.2,	313.2,	-193.5,	51.0,	14	9.1,	306.6,	292.3,	-191.0,	44.4,
15	9.1,	317.6,	262.5,	-182.6,	36.5,	16	9.1,	319.9,	224.7,	-168.7,	26.9,
17	9.1,	315.0,	180.1,	-149.6,	15.4,	18	9.1,	300.5,	131.5,	-126.0,	3.3,
19	9.1,	317.8,	176.9,	-149.4,	-7.7,	20	9.1,	326.2,	220.4,	-169.6,	-18.1,
21	9.1,	324.6,	257.2,	-184.7,	-27.9,	22	9.1,	313.2,	286.2,	-194.2,	-36.9,
23	9.1,	292.3,	306.6,	-197.7,	-44.8,	24	9.1,	262.5,	317.6,	-195.3,	-51.3,
25	9.1,	224.7,	319.9,	-186.9,	-56.3,	26	9.1,	180.1,	315.0,	-172.9,	-59.5,
27	9.1,	131.5,	300.5,	-153.6,	-60.3,	28	9.1,	176.9,	317.8,	-151.2,	-60.9,
29	9.1,	220.4,	326.2,	-145.0,	-59.4,	30	9.1,	257.2,	324.6,	-134.4,	-56.1,
31	9.1,	286.2,	313.2,	-119.7,	-51.0,	32	9.1,	306.6,	292.3,	-101.4,	-44.4,
33	9.1,	317.6,	262.5,	-79.9,	-36.5,	34	9.1,	319.9,	224.7,	-56.1,	-26.9,
35	9.1,	315.0,	180.1,	-30.5,	-15.4,	36	9.1,	300.5,	131.5,	-5.5,	-3.3,

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: ReqDFAULT CONC ELEV URBAN ADJ U

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IDLE13

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-29.0,	16.4,	2	9.1,	326.2,	220.4,	-53.8,	26.4,
3	9.1,	324.6,	257.2,	-77.0,	35.6,	4	9.1,	313.2,	286.2,	-97.8,	43.7,
5	9.1,	292.3,	306.6,	-115.6,	50.5,	6	9.1,	262.5,	317.6,	-129.9,	55.7,
7	9.1,	224.7,	319.9,	-141.3,	59.3,	8	9.1,	180.1,	315.0,	-150.8,	61.1,
9	9.1,	131.5,	300.5,	-155.8,	60.3,	10	9.1,	176.9,	317.8,	-175.3,	59.4,
11	9.1,	220.4,	326.2,	-189.5,	56.4,	12	9.1,	257.2,	324.6,	-197.9,	51.6,
13	9.1,	286.2,	313.2,	-200.3,	45.3,	14	9.1,	306.6,	292.3,	-196.6,	37.7,
15	9.1,	317.6,	262.5,	-187.0,	28.8,	16	9.1,	319.9,	224.7,	-171.7,	18.6,
17	9.1,	315.0,	180.1,	-151.1,	6.7,	18	9.1,	300.5,	131.5,	-126.0,	-5.5,
19	9.1,	317.8,	176.9,	-147.9,	-16.4,	20	9.1,	326.2,	220.4,	-166.6,	-26.4,
21	9.1,	324.6,	257.2,	-180.3,	-35.6,	22	9.1,	313.2,	286.2,	-188.5,	-43.7,
23	9.1,	292.3,	306.6,	-191.0,	-50.5,	24	9.1,	262.5,	317.6,	-187.6,	-55.7,
25	9.1,	224.7,	319.9,	-178.6,	-59.3,	26	9.1,	180.1,	315.0,	-164.2,	-61.1,
27	9.1,	131.5,	300.5,	-144.7,	-60.3,	28	9.1,	176.9,	317.8,	-142.5,	-59.4,
29	9.1,	220.4,	326.2,	-136.7,	-56.4,	30	9.1,	257.2,	324.6,	-126.8,	-51.6,
31	9.1,	286.2,	313.2,	-112.9,	-45.3,	32	9.1,	306.6,	292.3,	-95.7,	-37.7,
33	9.1,	317.6,	262.5,	-75.5,	-28.8,	34	9.1,	319.9,	224.7,	-53.1,	-18.6,
35	9.1,	315.0,	180.1,	-29.0,	-6.7,	36	9.1,	300.5,	131.5,	-5.5,	5.5,

SOURCE ID: IDLE14

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-30.6,	25.1,	2	9.1,	326.2,	220.4,	-56.8,	34.7,
3	9.1,	324.6,	257.2,	-81.4,	43.2,	4	9.1,	313.2,	286.2,	-103.5,	50.5,
5	9.1,	292.3,	306.6,	-122.4,	56.2,	6	9.1,	262.5,	317.6,	-137.6,	60.2,
7	9.1,	224.7,	319.9,	-149.6,	62.3,	8	9.1,	180.1,	315.0,	-159.5,	62.6,
9	9.1,	131.5,	300.5,	-164.6,	60.3,	10	9.1,	176.9,	317.8,	-184.0,	57.9,
11	9.1,	220.4,	326.2,	-197.8,	53.4,	12	9.1,	257.2,	324.6,	-205.5,	47.2,
13	9.1,	286.2,	313.2,	-207.1,	39.7,	14	9.1,	306.6,	292.3,	-202.3,	30.9,
15	9.1,	317.6,	262.5,	-191.4,	21.2,	16	9.1,	319.9,	224.7,	-174.7,	10.3,
17	9.1,	315.0,	180.1,	-152.7,	-2.0,	18	9.1,	300.5,	131.5,	-126.0,	-14.4,
19	9.1,	317.8,	176.9,	-146.3,	-25.1,	20	9.1,	326.2,	220.4,	-163.6,	-34.7,
21	9.1,	324.6,	257.2,	-175.9,	-43.2,	22	9.1,	313.2,	286.2,	-182.8,	-50.5,
23	9.1,	292.3,	306.6,	-184.2,	-56.2,	24	9.1,	262.5,	317.6,	-180.0,	-60.2,
25	9.1,	224.7,	319.9,	-170.3,	-62.3,	26	9.1,	180.1,	315.0,	-155.4,	-62.6,
27	9.1,	131.5,	300.5,	-135.9,	-60.3,	28	9.1,	176.9,	317.8,	-133.8,	-57.9,
29	9.1,	220.4,	326.2,	-128.4,	-53.4,	30	9.1,	257.2,	324.6,	-119.1,	-47.2,
31	9.1,	286.2,	313.2,	-106.2,	-39.7,	32	9.1,	306.6,	292.3,	-90.0,	-30.9,
33	9.1,	317.6,	262.5,	-71.1,	-21.2,	34	9.1,	319.9,	224.7,	-50.0,	-10.3,
35	9.1,	315.0,	180.1,	-27.5,	2.0,	36	9.1,	300.5,	131.5,	-5.5,	14.4,

SOURCE ID: IDLE15

SOURCE	IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
	1	9.1,	317.8,	176.9,	-32.1,	33.8,	2	9.1,	326.2,	220.4,	-59.9,	43.0,
	3	9.1,	324.6,	257.2,	-85.8,	50.9,	4	9.1,	313.2,	286.2,	-109.1,	57.2,
	5	9.1,	292.3,	306.6,	-129.2,	61.8,	6	9.1,	262.5,	317.6,	-145.2,	64.6,
	7	9.1,	224.7,	319.9,	-157.9,	65.3,	8	9.1,	180.1,	315.0,	-168.2,	64.1,
	9	9.1,	131.5,	300.5,	-173.4,	60.3,	10	9.1,	176.9,	317.8,	-192.7,	56.3,
	11	9.1,	220.4,	326.2,	-206.1,	50.3,	12	9.1,	257.2,	324.6,	-213.2,	42.8,
	13	9.1,	286.2,	313.2,	-213.9,	34.0,	14	9.1,	306.6,	292.3,	-208.0,	24.1,
	15	9.1,	317.6,	262.5,	-195.8,	13.5,	16	9.1,	319.9,	224.7,	-177.7,	2.0,
	17	9.1,	315.0,	180.1,	-154.2,	-10.8,	18	9.1,	300.5,	131.5,	-126.0,	-23.2,
	19	9.1,	317.8,	176.9,	-144.8,	-33.8,	20	9.1,	326.2,	220.4,	-160.5,	-43.0,
	21	9.1,	324.6,	257.2,	-171.4,	-50.9,	22	9.1,	313.2,	286.2,	-177.1,	-57.2,
	23	9.1,	292.3,	306.6,	-177.4,	-61.8,	24	9.1,	262.5,	317.6,	-172.3,	-64.6,
	25	9.1,	224.7,	319.9,	-162.0,	-65.3,	26	9.1,	180.1,	315.0,	-146.7,	-64.1,
	27	9.1,	131.5,	300.5,	-127.0,	-60.3,	28	9.1,	176.9,	317.8,	-125.1,	-56.3,
	29	9.1,	220.4,	326.2,	-120.1,	-50.3,	30	9.1,	257.2,	324.6,	-111.4,	-42.8,
	31	9.1,	286.2,	313.2,	-99.4,	-34.0,	32	9.1,	306.6,	292.3,	-84.3,	-24.1,
	33	9.1,	317.6,	262.5,	-66.7,	-13.5,	34	9.1,	319.9,	224.7,	-47.0,	-2.0,
	35	9.1,	315.0,	180.1,	-25.9,	10.8,	36	9.1,	300.5,	131.5,	-5.5,	23.2,

SOURCE ID: IDLE16

SOURCE	ITV	IDB10												
IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ			
1	9.1,	317.8,	176.9,	-33.6,	42.5,	2	9.1,	326.2,	220.4,	-62.9,	51.3,			
3	9.1,	324.6,	257.2,	-90.2,	58.5,	4	9.1,	313.2,	286.2,	-114.8,	64.0,			

5	9.1,	292.3,	306.6,	-135.9,	67.5,	6	9.1,	262.5,	317.6,	-152.9,	69.0,
7	9.1,	224.7,	319.9,	-166.2,	68.4,	8	9.1,	180.1,	315.0,	-176.9,	65.7,
9	9.1,	131.5,	300.5,	-182.3,	60.3,	10	9.1,	176.9,	317.8,	-201.4,	54.8,
11	9.1,	220.4,	326.2,	-214.4,	47.3,	12	9.1,	257.2,	324.6,	-220.9,	38.4,
13	9.1,	286.2,	313.2,	-220.6,	28.3,	14	9.1,	306.6,	292.3,	-213.7,	17.4,
15	9.1,	317.6,	262.5,	-200.2,	5.9,	16	9.1,	319.9,	224.7,	-180.7,	-6.3,
17	9.1,	315.0,	180.1,	-155.7,	-19.5,	18	9.1,	300.5,	131.5,	-126.0,	-32.0,
19	9.1,	317.8,	176.9,	-143.2,	-42.5,	20	9.1,	326.2,	220.4,	-157.5,	-51.3,
21	9.1,	324.6,	257.2,	-167.0,	-58.5,	22	9.1,	313.2,	286.2,	-171.4,	-64.0,
23	9.1,	292.3,	306.6,	-170.6,	-67.5,	24	9.1,	262.5,	317.6,	-164.7,	-69.0,
25	9.1,	224.7,	319.9,	-153.7,	-68.4,	26	9.1,	180.1,	315.0,	-138.0,	-65.7,
27	9.1,	131.5,	300.5,	-118.2,	-60.3,	28	9.1,	176.9,	317.8,	-116.4,	-54.8,
29	9.1,	220.4,	326.2,	-111.8,	-47.3,	30	9.1,	257.2,	324.6,	-103.8,	-38.4,
31	9.1,	286.2,	313.2,	-92.6,	-28.3,	32	9.1,	306.6,	292.3,	-78.6,	-17.4,
33	9.1,	317.6,	262.5,	-62.3,	-5.9,	34	9.1,	319.9,	224.7,	-44.0,	6.3,
35	9.1,	315.0,	180.1,	-24.4,	19.5,	36	9.1,	300.5,	131.5,	-5.5,	32.0,

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

*** 06/15/22
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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IDLE17

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-35.2,	51.2,	2	9.1,	326.2,	220.4,	-65.9,	59.6,
3	9.1,	324.6,	257.2,	-94.6,	66.2,	4	9.1,	313.2,	286.2,	-120.5,	70.8,
5	9.1,	292.3,	306.6,	-142.7,	73.2,	6	9.1,	262.5,	317.6,	-160.6,	73.4,
7	9.1,	224.7,	319.9,	-174.6,	71.4,	8	9.1,	180.1,	315.0,	-185.7,	67.2,
9	9.1,	131.5,	300.5,	-191.1,	60.3,	10	9.1,	176.9,	317.8,	-210.1,	53.3,
11	9.1,	220.4,	326.2,	-222.7,	44.3,	12	9.1,	257.2,	324.6,	-228.5,	34.0,
13	9.1,	286.2,	313.2,	-227.4,	22.6,	14	9.1,	306.6,	292.3,	-219.4,	10.6,
15	9.1,	317.6,	262.5,	-204.7,	-1.8,	16	9.1,	319.9,	224.7,	-183.8,	-14.6,
17	9.1,	315.0,	180.1,	-157.3,	-28.2,	18	9.1,	300.5,	131.5,	-126.0,	-40.9,
19	9.1,	317.8,	176.9,	-141.7,	-51.2,	20	9.1,	326.2,	220.4,	-154.5,	-59.6,
21	9.1,	324.6,	257.2,	-162.6,	-66.2,	22	9.1,	313.2,	286.2,	-165.8,	-70.8,
23	9.1,	292.3,	306.6,	-163.9,	-73.2,	24	9.1,	262.5,	317.6,	-157.0,	-73.4,
25	9.1,	224.7,	319.9,	-145.4,	-71.4,	26	9.1,	180.1,	315.0,	-129.3,	-67.2,
27	9.1,	131.5,	300.5,	-109.3,	-60.3,	28	9.1,	176.9,	317.8,	-107.7,	-53.3,
29	9.1,	220.4,	326.2,	-103.5,	-44.3,	30	9.1,	257.2,	324.6,	-96.1,	-34.0,
31	9.1,	286.2,	313.2,	-85.8,	-22.6,	32	9.1,	306.6,	292.3,	-73.0,	-10.6,
33	9.1,	317.6,	262.5,	-57.8,	1.8,	34	9.1,	319.9,	224.7,	-41.0,	14.6,
35	9.1,	315.0,	180.1,	-22.9,	28.2,	36	9.1,	300.5,	131.5,	-5.5,	40.9,

SOURCE ID: IDLE18

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-36.7,	59.9,	2	9.1,	326.2,	220.4,	-68.9,	67.9,
3	9.1,	324.6,	257.2,	-99.1,	73.8,	4	9.1,	313.2,	286.2,	-126.2,	77.5,
5	9.1,	292.3,	306.6,	-149.5,	78.9,	6	9.1,	262.5,	317.6,	-168.2,	77.8,
7	9.1,	224.7,	319.9,	-182.9,	74.4,	8	9.1,	180.1,	315.0,	-194.4,	68.7,
9	9.1,	131.5,	300.5,	-200.0,	60.3,	10	9.1,	176.9,	317.8,	-218.8,	51.7,
11	9.1,	220.4,	326.2,	-231.0,	41.3,	12	9.1,	257.2,	324.6,	-236.2,	29.6,
13	9.1,	286.2,	313.2,	-234.2,	16.9,	14	9.1,	306.6,	292.3,	-225.1,	3.8,
15	9.1,	317.6,	262.5,	-209.1,	-9.4,	16	9.1,	319.9,	224.7,	-186.8,	-22.9,
17	9.1,	315.0,	180.1,	-158.8,	-36.9,	18	9.1,	300.5,	131.5,	-126.0,	-49.7,
19	9.1,	317.8,	176.9,	-140.2,	-59.9,	20	9.1,	326.2,	220.4,	-151.5,	-67.9,
21	9.1,	324.6,	257.2,	-158.2,	-73.8,	22	9.1,	313.2,	286.2,	-160.1,	-77.5,
23	9.1,	292.3,	306.6,	-157.1,	-78.9,	24	9.1,	262.5,	317.6,	-149.4,	-77.8,
25	9.1,	224.7,	319.9,	-137.1,	-74.4,	26	9.1,	180.1,	315.0,	-120.6,	-68.7,
27	9.1,	131.5,	300.5,	-100.5,	-60.3,	28	9.1,	176.9,	317.8,	-99.0,	-51.7,
29	9.1,	220.4,	326.2,	-95.2,	-41.3,	30	9.1,	257.2,	324.6,	-88.5,	-29.6,
31	9.1,	286.2,	313.2,	-79.1,	-16.9,	32	9.1,	306.6,	292.3,	-67.3,	-3.8,
33	9.1,	317.6,	262.5,	-53.4,	9.4,	34	9.1,	319.9,	224.7,	-37.9,	22.9,
35	9.1,	315.0,	180.1,	-21.3,	36.9,	36	9.1,	300.5,	131.5,	-5.5,	49.7,

SOURCE ID: IDLE19

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-38.2,	68.6,	2	9.1,	326.2,	220.4,	-72.0,	76.2,
3	9.1,	324.6,	257.2,	-103.5,	81.5,	4	9.1,	313.2,	286.2,	-131.9,	84.3,
5	9.1,	292.3,	306.6,	-156.2,	84.6,	6	9.1,	262.5,	317.6,	-175.9,	82.3,
7	9.1,	224.7,	319.9,	-191.2,	77.4,	8	9.1,	180.1,	315.0,	-203.1,	70.3,
9	9.1,	131.5,	300.5,	-208.8,	60.3,	10	9.1,	176.9,	317.8,	-227.5,	50.2,
11	9.1,	220.4,	326.2,	-239.3,	38.2,	12	9.1,	257.2,	324.6,	-243.8,	25.1,
13	9.1,	286.2,	313.2,	-240.9,	11.2,	14	9.1,	306.6,	292.3,	-230.7,	-3.0,
15	9.1,	317.6,	262.5,	-213.5,	-17.1,	16	9.1,	319.9,	224.7,	-189.8,	-31.2,
17	9.1,	315.0,	180.1,	-160.3,	-45.6,	18	9.1,	300.5,	131.5,	-126.0,	-58.6,
19	9.1,	317.8,	176.9,	-138.6,	-68.6,	20	9.1,	326.2,	220.4,	-148.5,	-76.2,
21	9.1,	324.6,	257.2,	-153.8,	-81.5,	22	9.1,	313.2,	286.2,	-154.4,	-84.3,
23	9.1,	292.3,	306.6,	-150.3,	-84.6,	24	9.1,	262.5,	317.6,	-141.7,	-82.3,
25	9.1,	224.7,	319.9,	-128.8,	-77.4,	26	9.1,	180.1,	315.0,	-111.9,	-70.3,
27	9.1,	131.5,	300.5,	-91.7,	-60.3,	28	9.1,	176.9,	317.8,	-90.3,	-50.2,
29	9.1,	220.4,	326.2,	-86.9,	-38.2,	30	9.1,	257.2,	324.6,	-80.8,	-25.1,
31	9.1,	286.2,	313.2,	-72.3,	-11.2,	32	9.1,	306.6,	292.3,	-61.6,	3.0,
33	9.1,	317.6,	262.5,	-49.0,	17.1,	34	9.1,	319.9,	224.7,	-34.9,	31.2,
35	9.1,	315.0,	180.1,	-19.8,	45.6,	36	9.1,	300.5,	131.5,	-5.5,	58.6,

SOURCE ID: IDLE20

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-39.8,	77.3,	2	9.1,	326.2,	220.4,	-75.0,	84.5,
3	9.1,	324.6,	257.2,	-107.9,	89.2,	4	9.1,	313.2,	286.2,	-137.6,	91.1,

5	9.1,	292.3,	306.6,	-163.0,	90.2,	6	9.1,	262.5,	317.6,	-183.5,	86.7,
7	9.1,	224.7,	319.9,	-199.5,	80.5,	8	9.1,	180.1,	315.0,	-211.8,	71.8,
9	9.1,	131.5,	300.5,	-217.6,	60.3,	10	9.1,	176.9,	317.8,	-236.2,	48.7,
11	9.1,	220.4,	326.2,	-247.6,	35.2,	12	9.1,	257.2,	324.6,	-251.5,	20.7,
13	9.1,	286.2,	313.2,	-247.7,	5.6,	14	9.1,	306.6,	292.3,	-236.4,	-9.7,
15	9.1,	317.6,	262.5,	-217.9,	-24.8,	16	9.1,	319.9,	224.7,	-192.8,	-39.5,
17	9.1,	315.0,	180.1,	-161.9,	-54.3,	18	9.1,	300.5,	131.5,	-126.0,	-67.4,
19	9.1,	317.8,	176.9,	-137.1,	-77.3,	20	9.1,	326.2,	220.4,	-145.4,	-84.5,
21	9.1,	324.6,	257.2,	-149.3,	-89.2,	22	9.1,	313.2,	286.2,	-148.7,	-91.1,
23	9.1,	292.3,	306.6,	-143.6,	-90.2,	24	9.1,	262.5,	317.6,	-134.0,	-86.7,
25	9.1,	224.7,	319.9,	-120.5,	-80.5,	26	9.1,	180.1,	315.0,	-103.2,	-71.8,
27	9.1,	131.5,	300.5,	-82.8,	-60.3,	28	9.1,	176.9,	317.8,	-81.6,	-48.7,
29	9.1,	220.4,	326.2,	-78.6,	-35.2,	30	9.1,	257.2,	324.6,	-73.2,	-20.7,
31	9.1,	286.2,	313.2,	-65.5,	-5.6,	32	9.1,	306.6,	292.3,	-55.9,	9.7,
33	9.1,	317.6,	262.5,	-44.6,	24.8,	34	9.1,	319.9,	224.7,	-31.9,	39.5,
35	9.1,	315.0,	180.1,	-18.3,	54.3,	36	9.1,	300.5,	131.5,	-5.5,	67.4,

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: ReqDFAULT CONC ELEV URBAN ADJ U

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IDLE21

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-41.3,	86.0,	2	9.1,	326.2,	220.4,	-78.0,	92.8,
3	9.1,	324.6,	257.2,	-112.3,	96.8,	4	9.1,	313.2,	286.2,	-143.2,	97.9,
5	9.1,	292.3,	306.6,	-169.8,	95.9,	6	9.1,	262.5,	317.6,	-191.2,	91.1,
7	9.1,	224.7,	319.9,	-207.8,	83.5,	8	9.1,	180.1,	315.0,	-220.5,	73.3,
9	9.1,	131.5,	300.5,	-226.5,	60.3,	10	9.1,	176.9,	317.8,	-244.9,	47.1,
11	9.1,	220.4,	326.2,	-255.9,	32.2,	12	9.1,	257.2,	324.6,	-259.1,	16.3,
13	9.1,	286.2,	313.2,	-254.5,	-0.1,	14	9.1,	306.6,	292.3,	-242.1,	-16.5,
15	9.1,	317.6,	262.5,	-222.4,	-32.4,	16	9.1,	319.9,	224.7,	-195.9,	-47.8,
17	9.1,	315.0,	180.1,	-163.4,	-63.0,	18	9.1,	300.5,	131.5,	-126.0,	-76.2,
19	9.1,	317.8,	176.9,	-135.6,	-86.0,	20	9.1,	326.2,	220.4,	-142.4,	-92.8,
21	9.1,	324.6,	257.2,	-144.9,	-96.8,	22	9.1,	313.2,	286.2,	-143.0,	-97.9,
23	9.1,	292.3,	306.6,	-136.8,	-95.9,	24	9.1,	262.5,	317.6,	-126.4,	-91.1,
25	9.1,	224.7,	319.9,	-112.1,	-83.5,	26	9.1,	180.1,	315.0,	-94.5,	-73.3,
27	9.1,	131.5,	300.5,	-74.0,	-60.3,	28	9.1,	176.9,	317.8,	-72.9,	-47.1,
29	9.1,	220.4,	326.2,	-70.3,	-32.2,	30	9.1,	257.2,	324.6,	-65.5,	-16.3,
31	9.1,	286.2,	313.2,	-58.8,	0.1,	32	9.1,	306.6,	292.3,	-50.2,	16.5,
33	9.1,	317.6,	262.5,	-40.2,	32.4,	34	9.1,	319.9,	224.7,	-28.9,	47.8,
35	9.1,	315.0,	180.1,	-16.7,	63.0,	36	9.1,	300.5,	131.5,	-5.5,	76.2,

SOURCE ID: IDLE22

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-42.8,	94.7,	2	9.1,	326.2,	220.4,	-81.0,	101.1,
3	9.1,	324.6,	257.2,	-116.8,	104.5,	4	9.1,	313.2,	286.2,	-148.9,	104.6,
5	9.1,	292.3,	306.6,	-176.6,	101.6,	6	9.1,	262.5,	317.6,	-198.8,	95.5,
7	9.1,	224.7,	319.9,	-216.1,	86.5,	8	9.1,	180.1,	315.0,	-229.2,	74.9,
9	9.1,	131.5,	300.5,	-235.3,	60.3,	10	9.1,	176.9,	317.8,	-253.6,	45.6,
11	9.1,	220.4,	326.2,	-264.2,	29.2,	12	9.1,	257.2,	324.6,	-266.8,	11.9,
13	9.1,	286.2,	313.2,	-261.2,	-5.8,	14	9.1,	306.6,	292.3,	-247.8,	-23.3,
15	9.1,	317.6,	262.5,	-226.8,	-40.1,	16	9.1,	319.9,	224.7,	-198.9,	-56.1,
17	9.1,	315.0,	180.1,	-165.0,	-71.7,	18	9.1,	300.5,	131.5,	-126.0,	-85.1,
19	9.1,	317.8,	176.9,	-134.0,	-94.7,	20	9.1,	326.2,	220.4,	-139.4,	-101.1,
21	9.1,	324.6,	257.2,	-140.5,	-104.5,	22	9.1,	313.2,	286.2,	-137.3,	-104.6,
23	9.1,	292.3,	306.6,	-130.0,	-101.6,	24	9.1,	262.5,	317.6,	-118.7,	-95.5,
25	9.1,	224.7,	319.9,	-103.8,	-86.5,	26	9.1,	180.1,	315.0,	-85.8,	-74.9,
27	9.1,	131.5,	300.5,	-65.1,	-60.3,	28	9.1,	176.9,	317.8,	-64.2,	-45.6,
29	9.1,	220.4,	326.2,	-61.9,	-29.2,	30	9.1,	257.2,	324.6,	-57.8,	-11.9,
31	9.1,	286.2,	313.2,	-52.0,	5.8,	32	9.1,	306.6,	292.3,	-44.5,	23.3,
33	9.1,	317.6,	262.5,	-35.7,	40.1,	34	9.1,	319.9,	224.7,	-25.9,	56.1,
35	9.1,	315.0,	180.1,	-15.2,	71.7,	36	9.1,	300.5,	131.5,	-5.5,	85.1,

SOURCE ID: IDLE23

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	317.8,	176.9,	-44.4,	103.4,	2	9.1,	326.2,	220.4,	-84.0,	109.4,
3	9.1,	324.6,	257.2,	-121.2,	112.1,	4	9.1,	313.2,	286.2,	-154.6,	111.4,
5	9.1,	292.3,	306.6,	-183.3,	107.3,	6	9.1,	262.5,	317.6,	-206.5,	99.9,
7	9.1,	224.7,	319.9,	-224.4,	89.5,	8	9.1,	180.1,	315.0,	-237.9,	76.4,
9	9.1,	131.5,	300.5,	-244.2,	60.3,	10	9.1,	176.9,	317.8,	-262.3,	44.0,
11	9.1,	220.4,	326.2,	-272.5,	26.2,	12	9.1,	257.2,	324.6,	-274.4,	7.5,
13	9.1,	286.2,	313.2,	-268.0,	-11.5,	14	9.1,	306.6,	292.3,	-253.5,	-30.1,
15	9.1,	317.6,	262.5,	-231.2,	-47.7,	16	9.1,	319.9,	224.7,	-201.9,	-64.4,
17	9.1,	315.0,	180.1,	-166.5,	-80.4,	18	9.1,	300.5,	131.5,	-126.0,	-93.9,
19	9.1,	317.8,	176.9,	-132.5,	-103.4,	20	9.1,	326.2,	220.4,	-136.4,	-109.4,
21	9.1,	324.6,	257.2,	-136.1,	-112.1,	22	9.1,	313.2,	286.2,	-131.7,	-111.4,
23	9.1,	292.3,	306.6,	-123.2,	-107.3,	24	9.1,	262.5,	317.6,	-111.1,	-99.9,
25	9.1,	224.7,	319.9,	-95.5,	-89.5,	26	9.1,	180.1,	315.0,	-77.1,	-76.4,
27	9.1,	131.5,	300.5,	-56.3,	-60.3,	28	9.1,	176.9,	317.8,	-55.5,	-44.0,
29	9.1,	220.4,	326.2,	-53.6,	-26.2,	30	9.1,	257.2,	324.6,	-50.2,	-7.5,
31	9.1,	286.2,	313.2,	-45.2,	11.5,	32	9.1,	306.6,	292.3,	-38.9,	30.1,
33	9.1,	317.6,	262.5,	-31.3,	47.7,	34	9.1,	319.9,	224.7,	-22.8,	64.4,
35	9.1,	315.0,	180.1,	-13.7,	80.4,	36	9.1,	300.5,	131.5,	-5.5,	93.9,

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SOURCE										TABLE 2																										
	IFV			BH			BW			BL			XADJ			YADJ			IFV			BH			BW			BL			XADJ			YADJ		
1	9.1,	317.8,	176.9,	-45.9,	112.1,		2	9.1,	326.2,	220.4,	-87.1,	117.7,		3	9.1,	324.6,	257.2,	-125.6,	119.8,	4	9.1,	313.2,	286.2,	-160.3,	118.2,											

5	9.1,	292.3,	306.6,	-190.1,	113.0,	6	9.1,	262.5,	317.6,	-214.2,	104.4,
7	9.1,	224.7,	319.9,	-232.7,	92.6,	8	9.1,	180.1,	315.0,	-246.6,	78.0,
9	9.1,	131.5,	300.5,	-253.0,	60.3,	10	9.1,	176.9,	317.8,	-271.0,	42.5,
11	9.1,	220.4,	326.2,	-280.8,	23.1,	12	9.1,	257.2,	324.6,	-282.1,	3.0,
13	9.1,	286.2,	313.2,	-274.8,	-17.2,	14	9.1,	306.6,	292.3,	-259.1,	-36.8,
15	9.1,	317.6,	262.5,	-235.6,	-55.4,	16	9.1,	319.9,	224.7,	-204.9,	-72.7,
17	9.1,	315.0,	180.1,	-168.0,	-89.1,	18	9.1,	300.5,	131.5,	-126.0,	-102.8,
19	9.1,	317.8,	176.9,	-131.0,	-112.1,	20	9.1,	326.2,	220.4,	-133.3,	-117.7,
21	9.1,	324.6,	257.2,	-131.7,	-119.8,	22	9.1,	313.2,	286.2,	-126.0,	-118.2,
23	9.1,	292.3,	306.6,	-116.5,	-113.0,	24	9.1,	262.5,	317.6,	-103.4,	-104.4,
25	9.1,	224.7,	319.9,	-87.2,	-92.6,	26	9.1,	180.1,	315.0,	-68.4,	-78.0,
27	9.1,	131.5,	300.5,	-47.5,	-60.3,	28	9.1,	176.9,	317.8,	-46.8,	-42.5,
29	9.1,	220.4,	326.2,	-45.3,	-23.1,	30	9.1,	257.2,	324.6,	-42.5,	-3.0,
31	9.1,	286.2,	313.2,	-38.4,	17.2,	32	9.1,	306.6,	292.3,	-33.2,	36.8,
33	9.1,	317.6,	262.5,	-26.9,	55.4,	34	9.1,	319.9,	224.7,	-19.8,	72.7,
35	9.1,	315.0,	180.1,	-12.1,	89.1,	36	9.1,	300.5,	131.5,	-5.5,	102.8,

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(481588.4, 3734108.3,	432.0,	432.0,	0.0);	(481693.9, 3734108.3,	432.0,	432.0,
(481799.4, 3734108.3,	432.0,	432.0,	0.0);	(481904.9, 3734108.3,	432.0,	432.0,
(482010.4, 3734108.3,	432.0,	432.0,	0.0);	(482116.0, 3734108.3,	433.0,	433.0,
(482221.5, 3734108.3,	433.0,	433.0,	0.0);	(482327.0, 3734108.3,	433.0,	433.0,
(482432.5, 3734108.3,	433.0,	433.0,	0.0);	(482538.0, 3734108.3,	433.5,	433.5,
(482643.5, 3734108.3,	434.0,	434.0,	0.0);	(482749.0, 3734108.3,	434.0,	434.0,
(482854.5, 3734108.3,	435.0,	435.0,	0.0);	(482960.0, 3734108.3,	435.0,	435.0,
(483065.5, 3734108.3,	435.0,	435.0,	0.0);	(483171.0, 3734108.3,	436.0,	436.0,
(483276.6, 3734108.3,	436.0,	436.0,	0.0);	(483382.1, 3734108.3,	437.0,	437.0,
(483487.6, 3734108.3,	438.0,	438.0,	0.0);	(483593.1, 3734108.3,	439.0,	439.0,
(483698.6, 3734108.3,	439.0,	439.0,	0.0);	(481588.4, 3734207.1,	432.0,	432.0,
(481693.9, 3734207.1,	432.0,	432.0,	0.0);	(481799.4, 3734207.1,	432.0,	432.0,
(481904.9, 3734207.1,	432.0,	432.0,	0.0);	(482010.4, 3734207.1,	432.0,	432.0,
(482116.0, 3734207.1,	433.0,	433.0,	0.0);	(482221.5, 3734207.1,	433.0,	433.0,
(482327.0, 3734207.1,	433.0,	433.0,	0.0);	(482432.5, 3734207.1,	433.0,	433.0,
(482538.0, 3734207.1,	433.0,	433.0,	0.0);	(482643.5, 3734207.1,	434.0,	434.0,
(482749.0, 3734207.1,	434.0,	434.0,	0.0);	(482854.5, 3734207.1,	435.0,	435.0,
(482960.0, 3734207.1,	435.0,	435.0,	0.0);	(483065.5, 3734207.1,	435.0,	435.0,
(483171.0, 3734207.1,	436.0,	436.0,	0.0);	(483276.6, 3734207.1,	436.0,	436.0,
(483382.1, 3734207.1,	437.0,	437.0,	0.0);	(483487.6, 3734207.1,	438.0,	438.0,
(483593.1, 3734207.1,	439.0,	439.0,	0.0);	(483698.6, 3734207.1,	439.0,	439.0,
(481588.4, 3734305.9,	432.0,	432.0,	0.0);	(481693.9, 3734305.9,	432.0,	432.0,
(481799.4, 3734305.9,	432.0,	432.0,	0.0);	(481904.9, 3734305.9,	432.0,	432.0,
(482010.4, 3734305.9,	432.0,	432.0,	0.0);	(482116.0, 3734305.9,	432.1,	432.1,
(482221.5, 3734305.9,	433.0,	433.0,	0.0);	(482327.0, 3734305.9,	433.0,	433.0,
(482432.5, 3734305.9,	433.0,	433.0,	0.0);	(482538.0, 3734305.9,	433.0,	433.0,
(482643.5, 3734305.9,	434.0,	434.0,	0.0);	(482749.0, 3734305.9,	434.0,	434.0,
(482854.5, 3734305.9,	434.5,	434.5,	0.0);	(482960.0, 3734305.9,	435.0,	435.0,
(483065.5, 3734305.9,	435.0,	435.0,	0.0);	(483171.0, 3734305.9,	436.0,	436.0,
(483276.6, 3734305.9,	436.0,	436.0,	0.0);	(483382.1, 3734305.9,	437.0,	437.0,
(483487.6, 3734305.9,	438.0,	438.0,	0.0);	(483593.1, 3734305.9,	439.0,	439.0,
(483698.6, 3734305.9,	439.0,	439.0,	0.0);	(481588.4, 3734404.8,	432.0,	432.0,
(481693.9, 3734404.8,	432.0,	432.0,	0.0);	(481799.4, 3734404.8,	432.0,	432.0,
(481904.9, 3734404.8,	432.0,	432.0,	0.0);	(482010.4, 3734404.8,	431.6,	431.6,
(482116.0, 3734404.8,	431.4,	431.4,	0.0);	(482221.5, 3734404.8,	432.3,	432.3,
(482327.0, 3734404.8,	433.0,	433.0,	0.0);	(482432.5, 3734404.8,	433.0,	433.0,
(482538.0, 3734404.8,	433.0,	433.0,	0.0);	(482643.5, 3734404.8,	434.0,	434.0,
(482749.0, 3734404.8,	434.0,	434.0,	0.0);	(482854.5, 3734404.8,	434.8,	434.8,
(482960.0, 3734404.8,	435.0,	435.0,	0.0);	(483065.5, 3734404.8,	435.8,	435.8,
(483171.0, 3734404.8,	436.0,	436.0,	0.0);	(483276.6, 3734404.8,	436.0,	436.0,
(483382.1, 3734404.8,	437.0,	437.0,	0.0);	(483487.6, 3734404.8,	438.0,	438.0,
(483593.1, 3734404.8,	439.0,	439.0,	0.0);	(483698.6, 3734404.8,	439.0,	439.0,
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(481799.4, 3734503.6,	431.0,	431.0,	0.0);	(481904.9, 3734503.6,	431.0,	431.0,
(482010.4, 3734503.6,	431.0,	431.0,	0.0);	(482116.0, 3734503.6,	431.0,	431.0,

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(482221.5, 3734503.6,	431.0,	431.0,	0.0);	(482327.0, 3734503.6,	432.0,	432.0,
(482432.5, 3734503.6,	433.0,	433.0,	0.0);	(482538.0, 3734503.6,	433.0,	433.0,
(482643.5, 3734503.6,	433.0,	433.0,	0.0);	(482749.0, 3734503.6,	433.0,	433.0,
(482854.5, 3734503.6,	434.0,	434.0,	0.0);	(482960.0, 3734503.6,	434.0,	434.0,
(483065.5, 3734503.6,	434.9,	434.9,	0.0);	(483171.0, 3734503.6,	435.4,	435.4,
(483276.6, 3734503.6,	436.0,	436.0,	0.0);	(483382.1, 3734503.6,	437.0,	437.0,
(483487.6, 3734503.6,	438.0,	438.0,	0.0);	(483593.1, 3734503.6,	439.0,	439.0,
(483698.6, 3734503.6,	439.9,	439.9,	0.0);	(481588.4, 3734602.4,	430.0,	430.0,
(481693.9, 3734602.4,	430.0,	430.0,	0.0);	(481799.4, 3734602.4,	430.9,	430.9,
(481904.9, 3734602.4,	431.0,	431.0,	0.0);	(482010.4, 3734602.4,	431.0,	431.0,
(482116.0, 3734602.4,	431.0,	431.0,	0.0);	(482221.5, 3734602.4,	431.0,	431.0,
(482327.0, 3734602.4,	432.0,	432.0,	0.0);	(482432.5, 3734602.4,	432.9,	432.9,
(482538.0, 3734602.4,	433.0,	433.0,	0.0);	(482643.5, 3734602.4,	433.0,	433.0,
(482749.0, 3734602.4,	433.0,	433.0,	0.0);	(482854.5, 3734602.4,	434.0,	434.0,
(482960.0, 3734602.4,	434.0,	434.0,	0.0);	(483065.5, 3734602.4,	434.8,	434.8,
(483171.0, 3734602.4,	435.4,	435.4,	0.0);	(483276.6, 3734602.4,	436.0,	436.0,
(483382.1, 3734602.4,	437.0,	437.0,	0.0);	(483487.6, 3734602.4,	438.0,	438.0,
(483593.1, 3734602.4,	439.0,	439.0,	0.0);	(483698.6, 3734602.4,	440.0,	440.0,
(481588.4, 3734701.2,	430.0,	430.0,	0.0);	(481693.9, 3734701.2,	430.0,	430.0,
(481799.4, 3734701.2,	430.0,	430.0,	0.0);	(481904.9, 3734701.2,	431.0,	431.0,
(482010.4, 3734701.2,	431.0,	431.0,	0.0);	(482116.0, 3734701.2,	431.0,	431.0,
(482221.5, 3734701.2,	431.4,	431.4,	0.0);	(482327.0, 3734701.2,	432.0,	432.0,
(482432.5, 3734701.2,	432.7,	442.0,	0.0);	(482538.0, 3734701.2,	433.7,	438.0,
(482643.5, 3734701.2,	433.0,	433.0,	0.0);	(482749.0, 3734701.2,	433.0,	433.0,
(482854.5, 3734701.2,	433.9,	433.9,	0.0);	(482960.0, 3734701.2,	434.0,	434.0,
(483065.5, 3734701.2,	434.8,	434.8,	0.0);	(483171.0, 3734701.2,	435.4,	435.4,
(483276.6, 3734701.2,	436.0,	436.0,	0.0);	(483382.1, 3734701.2,	437.0,	437.0,
(483487.6, 3734701.2,	437.9,	437.9,	0.0);	(483593.1, 3734701.2,	438.4,	438.4,
(483698.6, 3734701.2,	439.0,	439.0,	0.0);	(481588.4, 3734800.0,	430.0,	430.0,
(481693.9, 3734800.0,	430.0,	430.0,	0.0);	(481799.4, 3734800.0,	430.0,	430.0,
(481904.9, 3734800.0,	430.0,	430.0,	0.0);	(482010.4, 3734800.0,	431.0,	431.0,
(482116.0, 3734800.0,	431.2,	431.2,	0.0);	(482221.5, 3734800.0,	432.0,	432.0,
(482327.0, 3734800.0,	432.0,	432.0,	0.0);	(482432.5, 3734800.0,	432.7,	443.0,
(482538.0, 3734800.0,	434.1,	443.0,	0.0);	(482643.5, 3734800.0,	433.0,	433.0,
(482749.0, 3734800.0,	433.0,	433.0,	0.0);	(482854.5, 3734800.0,	433.0,	433.0,
(482960.0, 3734800.0,	434.0,	434.0,	0.0);	(483065.5, 3734800.0,	434.0,	434.0,
(483171.0, 3734800.0,	435.1,	435.1,	0.0);	(483276.6, 3734800.0,	436.0,	436.0,
(483382.1, 3734800.0,	437.0,	437.0,	0.0);	(483487.6, 3734800.0,	437.9,	437.9,
(483593.1, 3734800.0,	438.0,	438.0,	0.0);	(483698.6, 3734800.0,	439.0,	439.0,
(481588.4, 3734898.9,	430.0,	430.0,	0.0);	(481693.9, 3734898.9,	430.0,	430.0,
(481799.4, 3734898.9,	430.0,	430.0,	0.0);	(481904.9, 3734898.9,	430.0,	430.0,
(482010.4, 3734898.9,	431.0,	431.0,	0.0);	(482116.0, 3734898.9,	431.2,	431.2,
(482221.5, 3734898.9,	432.0,	432.0,	0.0);	(482327.0, 3734898.9,	432.0,	432.0,
(482432.5, 3734898.9,	433.0,	433.0,	0.0);	(482538.0, 3734898.9,	433.0,	433.0,
(482643.5, 3734898.9,	433.0,	433.0,	0.0);	(482749.0, 3734898.9,	433.0,	433.0,

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(482854.5, 3734898.9,	433.0,	433.0,	0.0);	(482960.0, 3734898.9,	434.0,	434.0,
(483065.5, 3734898.9,	434.0,	434.0,	0.0);	(483171.0, 3734898.9,	435.0,	435.0,
(483276.6, 3734898.9,	436.0,	436.0,	0.0);	(483382.1, 3734898.9,	436.4,	436.4,
(483487.6, 3734898.9,	437.0,	437.0,	0.0);	(483593.1, 3734898.9,	438.0,	438.0,
(483698.6, 3734898.9,	439.0,	439.0,	0.0);	(481588.4, 3734997.7,	430.0,	430.0,
(481693.9, 3734997.7,	430.0,	430.0,	0.0);	(481799.4, 3734997.7,	430.0,	430.0,
(481904.9, 3734997.7,	430.5,	430.5,	0.0);	(482010.4, 3734997.7,	431.0,	431.0,
(482116.0, 3734997.7,	431.0,	431.0,	0.0);	(482221.5, 3734997.7,	432.0,	432.0,
(482327.0, 3734997.7,	432.0,	432.0,	0.0);	(482432.5, 3734997.7,	433.0,	433.0,
(482538.0, 3734997.7,	433.0,	433.0,	0.0);	(482643.5, 3734997.7,	433.0,	433.0,
(482749.0, 3734997.7,	433.0,	433.0,	0.0);	(482854.5, 3734997.7,	433.0,	433.0,
(482960.0, 3734997.7,	433.3,	433.3,	0.0);	(483065.5, 3734997.7,	434.0,	434.0,
(483171.0, 3734997.7,	435.0,	435.0,	0.0);	(483276.6, 3734997.7,	435.9,	435.9,
(483382.1, 3734997.7,	436.0,	436.0,	0.0);	(483487.6, 3734997.7,	437.0,	437.0,
(483593.1, 3734997.7,	438.0,	438.0,	0.0);	(483698.6, 3734997.7,	438.0,	438.0,
(481588.4, 3735096.5,	430.0,	430.0,	0.0);	(481693.9, 3735096.5,	430.0,	430.0,
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(482010.4, 3735096.5,	431.0,	431.0,	0.0);	(482116.0, 3735096.5,	431.0,	431.0,
(482221.5, 3735096.5,	431.7,	431.7,	0.0);	(482327.0, 3735096.5,	432.0,	432.0,
(482432.5, 3735096.5,	433.0,	433.0,	0.0);	(482538.0, 3735096.5,	433.0,	433.0,
(482749.0, 3735096.5,	433.0,	433.0,	0.0);	(482854.5, 3735096.5,	433.0,	433.0,
(482960.0, 3735096.5,	433.0,	433.0,	0.0);	(483065.5, 3735096.5,	434.0,	434.0,
(483171.0, 3735096.5,	434.0,	434.0,	0.0);	(483276.6, 3735096.5,	435.0,	435.0,
(483382.1, 3735096.5,	436.0,	436.0,	0.0);	(483487.6, 3735096.5,	436.0,	436.0,
(483593.1, 3735096.5,	437.4,	437.4,	0.0);	(483698.6, 3735096.5,	438.0,	438.0,
(481588.4, 3735195.3,	430.0,	430.0,	0.0);	(481693.9, 3735195.3,	431.0,	431.0,
(481799.4, 3735195.3,	431.0,	431.0,	0.0);	(481904.9, 3735195.3,	431.0,	431.0,
(482010.4, 3735195.3,	431.0,	431.0,	0.0);	(482116.0, 3735195.3,	431.0,	431.0,
(482221.5, 3735195.3,	431.0,	431.0,	0.0);	(482327.0, 3735195.3,	432.0,	432.0,
(482432.5, 3735195.3,	433.0,	433.0,	0.0);	(482960.0, 3735195.3,	433.0,	433.0,
(483065.5, 3735195.3,	433.8,	433.8,	0.0);	(483171.0, 3735195.3,	434.0,	434.0,
(483276.6, 3735195.3,	435.0,	435.0,	0.0);	(483382.1, 3735195.3,	435.0,	435.0,
(483487.6, 3735195.3,	436.0,	436.0,	0.0);	(483593.1, 3735195.3,	437.0,	437.0,
(483698.6, 3735195.3,	438.0,	438.0,	0.0);	(481588.4, 3735294.1,	430.0,	430.0,
(481693.9, 3735294.1,	431.0,	431.0,	0.0);	(481799.4, 3735294.1,	431.0,	431.0,
(481904.9, 3735294.1,	431.0,	431.0,	0.0);	(482010.4, 3735294.1,	431.0,	431.0,
(482116.0, 3735294.1,	431.0,	431.0,	0.0);	(482221.5, 3735294.1,	431.0,	431.0,
(482327.0, 3735294.1,	432.0,	432.0,	0.0);	(482432.5, 3735294.1,	432.7,	432.7,
(482854.5, 3735294.1,	433.0,	433.0,	0.0);	(482960.0, 3735294.1,	433.0,	433.0,
(483065.5, 3735294.1,	433.0,	433.0,	0.0);	(483171.0, 3735294.1,	434.0,	434.0,
(483276.6, 3735294.1,	434.6,	434.6,	0.0);	(483382.1, 3735294.1,	435.0,	435.0,
(483487.6, 3735294.1,	436.0,	436.0,	0.0);	(483593.1, 3735294.1,	437.0,	437.0,
(483698.6, 3735294.1,	438.0,	438.0,	0.0);	(481588.4, 3735393.0,	430.0,	430.0,
(481693.9, 3735393.0,	431.0,	431.0,	0.0);	(481799.4, 3735393.0,	431.0,	431.0,
(481904.9, 3735393.0,	431.0,	431.0,	0.0);	(482010.4, 3735393.0,	431.0,	431.0,

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

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ U

(482116.0, 3735393.0,	431.0,	431.0,	0.0);	(482221.5, 3735393.0,	431.0,	431.0,
(482327.0, 3735393.0,	431.1,	431.1,	0.0);	(482432.5, 3735393.0,	432.0,	432.0,
(482538.0, 3735393.0,	432.0,	432.0,	0.0);	(482643.5, 3735393.0,	432.0,	432.0,
(482749.0, 3735393.0,	432.0,	432.0,	0.0);	(482854.5, 3735393.0,	433.0,	433.0,
(482960.0, 3735393.0,	433.0,	433.0,	0.0);	(483065.5, 3735393.0,	433.0,	433.0,
(483171.0, 3735393.0,	433.6,	433.6,	0.0);	(483276.6, 3735393.0,	434.0,	434.0,
(483382.1, 3735393.0,	435.0,	435.0,	0.0);	(483487.6, 3735393.0,	436.0,	436.0,
(483593.1, 3735393.0,	437.0,	437.0,	0.0);	(483698.6, 3735393.0,	438.0,	438.0,
(481588.4, 3735491.8,	430.0,	430.0,	0.0);	(481693.9, 3735491.8,	430.0,	430.0,
(481799.4, 3735491.8,	430.7,	430.7,	0.0);	(481904.9, 3735491.8,	431.0,	431.0,
(482010.4, 3735491.8,	431.0,	431.0,	0.0);	(482116.0, 3735491.8,	431.0,	431.0,
(482221.5, 3735491.8,	431.0,	431.0,	0.0);	(482327.0, 3735491.8,	431.0,	431.0,
(482432.5, 3735491.8,	431.0,	431.0,	0.0);	(482538.0, 3735491.8,	432.0,	432.0,
(482643.5, 3735491.8,	432.0,	432.0,	0.0);	(482749.0, 3735491.8,	432.0,	432.0,
(482854.5, 3735491.8,	432.8,	432.8,	0.0);	(482960.0, 3735491.8,	433.0,	433.0,
(483065.5, 3735491.8,	433.0,	433.0,	0.0);	(483171.0, 3735491.8,	433.0,	433.0,
(483276.6, 3735491.8,	434.0,	434.0,	0.0);	(483382.1, 3735491.8,	435.0,	435.0,
(483487.6, 3735491.8,	436.0,	436.0,	0.0);	(483593.1, 3735491.8,	437.0,	437.0,
(483698.6, 3735491.8,	438.0,	438.0,	0.0);	(481588.4, 3735590.6,	430.0,	430.0,
(481693.9, 3735590.6,	430.0,	430.0,	0.0);	(481799.4, 3735590.6,	430.0,	430.0,
(481904.9, 3735590.6,	431.0,	431.0,	0.0);	(482010.4, 3735590.6,	431.0,	431.0,
(482116.0, 3735590.6,	431.0,	431.0,	0.0);	(482221.5, 3735590.6,	431.0,	431.0,
(482327.0, 3735590.6,	431.0,	431.0,	0.0);	(482432.5, 3735590.6,	431.0,	431.0,
(482538.0, 3735590.6,	432.0,	432.0,	0.0);	(482643.5, 3735590.6,	432.0,	432.0,
(482749.0, 3735590.6,	432.0,	432.0,	0.0);	(482854.5, 3735590.6,	432.0,	432.0,
(482960.0, 3735590.6,	433.0,	433.0,	0.0);	(483065.5, 3735590.6,	433.0,	433.0,
(483171.0, 3735590.6,	433.0,	433.0,	0.0);	(483276.6, 3735590.6,	434.0,	434.0,
(483382.1, 3735590.6,	435.0,	435.0,	0.0);	(483487.6, 3735590.6,	436.0,	436.0,
(483593.1, 3735590.6,	436.9,	436.9,	0.0);	(483698.6, 3735590.6,	438.0,	438.0,
(481588.4, 3735689.4,	430.0,	430.0,	0.0);	(481693.9, 3735689.4,	430.0,	430.0,
(481799.4, 3735689.4,	430.0,	430.0,	0.0);	(481904.9, 3735689.4,	431.0,	431.0,
(482010.4, 3735689.4,	431.0,	431.0,	0.0);	(482116.0, 3735689.4,	431.0,	431.0,
(482221.5, 3735689.4,	431.0,	431.0,	0.0);	(482327.0, 3735689.4,	431.0,	431.0,
(482432.5, 3735689.4,	431.9,	431.9,	0.0);	(482538.0, 3735689.4,	432.0,	432.0,
(482643.5, 3735689.4,	432.0,	432.0,	0.0);	(482749.0, 3735689.4,	432.0,	432.0,
(482854.5, 3735689.4,	432.0,	432.0,	0.0);	(482960.0, 3735689.4,	433.0,	433.0,
(483065.5, 3735689.4,	433.0,	433.0,	0.0);	(483171.0, 3735689.4,	433.0,	433.0,
(483276.6, 3735689.4,	434.0,	434.0,	0.0);	(483382.1, 3735689.4,	435.0,	435.0,
(483487.6, 3735689.4,	436.0,	436.0,	0.0);	(483593.1, 3735689.4,	436.0,	436.0,
(483698.6, 3735689.4,	437.0,	437.0,	0.0);	(481588.4, 3735788.2,	430.0,	430.0,
(481693.9, 3735788.2,	430.0,	430.0,	0.0);	(481799.4, 3735788.2,	430.0,	430.0,
(481904.9, 3735788.2,	430.3,	430.3,	0.0);	(482010.4, 3735788.2,	430.3,	430.3,
(482116.0, 3735788.2,	431.0,	431.0,	0.0);	(482221.5, 3735788.2,	431.0,	431.0,
(482327.0, 3735788.2,	431.0,	431.0,	0.0);	(482432.5, 3735788.2,	432.0,	432.0,
(482538.0, 3735788.2,	432.0,	432.0,	0.0);	(482643.5, 3735788.2,	432.0,	432.0,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ U

(482749.0, 3735788.2,	432.0,	432.0,	0.0);	(482854.5, 3735788.2,	432.0,	432.0,	0.
(482960.0, 3735788.2,	432.5,	432.5,	0.0);	(483065.5, 3735788.2,	433.0,	433.0,	0.0)
(483171.0, 3735788.2,	433.0,	433.0,	0.0);	(483276.6, 3735788.2,	433.9,	433.9,	0.0)
(483382.1, 3735788.2,	434.1,	434.1,	0.0);	(483487.6, 3735788.2,	435.0,	435.0,	0.0)
(483593.1, 3735788.2,	436.0,	436.0,	0.0);	(483698.6, 3735788.2,	436.0,	436.0,	0.0)
(481588.4, 3735887.1,	430.0,	430.0,	0.0);	(481693.9, 3735887.1,	430.0,	430.0,	0.0)
(481799.4, 3735887.1,	430.0,	430.0,	0.0);	(481904.9, 3735887.1,	430.0,	430.0,	0.0)
(482010.4, 3735887.1,	430.0,	430.0,	0.0);	(482116.0, 3735887.1,	430.0,	430.0,	0.0)
(482221.5, 3735887.1,	431.0,	431.0,	0.0);	(482327.0, 3735887.1,	431.0,	431.0,	0.0)
(482432.5, 3735887.1,	432.0,	432.0,	0.0);	(482538.0, 3735887.1,	432.0,	432.0,	0.0)
(482643.5, 3735887.1,	432.0,	432.0,	0.0);	(482749.0, 3735887.1,	432.0,	432.0,	0.0)
(482854.5, 3735887.1,	432.0,	432.0,	0.0);	(482960.0, 3735887.1,	432.3,	432.3,	0.0)
(483065.5, 3735887.1,	433.0,	433.0,	0.0);	(483171.0, 3735887.1,	433.0,	433.0,	0.0)
(483276.6, 3735887.1,	433.0,	433.0,	0.0);	(483382.1, 3735887.1,	434.0,	434.0,	0.0)
(483487.6, 3735887.1,	435.0,	435.0,	0.0);	(483593.1, 3735887.1,	435.4,	435.4,	0.0)
(483698.6, 3735887.1,	436.0,	436.0,	0.0);	(481588.4, 3735985.9,	430.0,	430.0,	0.0)
(481693.9, 3735985.9,	430.0,	430.0,	0.0);	(481799.4, 3735985.9,	430.0,	430.0,	0.0)
(481904.9, 3735985.9,	430.0,	430.0,	0.0);	(482010.4, 3735985.9,	430.0,	430.0,	0.0)
(482116.0, 3735985.9,	430.0,	430.0,	0.0);	(482221.5, 3735985.9,	431.0,	431.0,	0.0)
(482327.0, 3735985.9,	431.0,	431.0,	0.0);	(482432.5, 3735985.9,	431.9,	431.9,	0.0)
(482538.0, 3735985.9,	432.0,	432.0,	0.0);	(482643.5, 3735985.9,	432.0,	432.0,	0.0)
(482749.0, 3735985.9,	432.0,	432.0,	0.0);	(482854.5, 3735985.9,	432.0,	432.0,	0.0)
(482960.0, 3735985.9,	432.0,	432.0,	0.0);	(483065.5, 3735985.9,	433.0,	433.0,	0.0)
(483171.0, 3735985.9,	433.0,	433.0,	0.0);	(483276.6, 3735985.9,	433.0,	433.0,	0.0)
(483382.1, 3735985.9,	434.0,	434.0,	0.0);	(483487.6, 3735985.9,	434.9,	434.9,	0.0)
(483593.1, 3735985.9,	435.0,	435.0,	0.0);	(483698.6, 3735985.9,	436.0,	436.0,	0.0)
(481588.4, 3736084.7,	430.0,	430.0,	0.0);	(481693.9, 3736084.7,	430.0,	430.0,	0.0)
(481799.4, 3736084.7,	430.0,	430.0,	0.0);	(481904.9, 3736084.7,	430.0,	430.0,	0.0)
(482010.4, 3736084.7,	430.0,	430.0,	0.0);	(482116.0, 3736084.7,	430.0,	430.0,	0.0)
(482221.5, 3736084.7,	431.0,	431.0,	0.0);	(482327.0, 3736084.7,	431.0,	431.0,	0.0)
(482432.5, 3736084.7,	431.0,	431.0,	0.0);	(482538.0, 3736084.7,	431.4,	431.4,	0.0)
(482643.5, 3736084.7,	432.0,	432.0,	0.0);	(482749.0, 3736084.7,	432.0,	432.0,	0.0)
(482854.5, 3736084.7,	432.0,	432.0,	0.0);	(482960.0, 3736084.7,	432.0,	432.0,	0.0)
(483065.5, 3736084.7,	432.0,	432.0,	0.0);	(483171.0, 3736084.7,	433.0,	433.0,	0.0)
(483276.6, 3736084.7,	433.0,	433.0,	0.0);	(483382.1, 3736084.7,	434.0,	434.0,	0.0)
(483487.6, 3736084.7,	434.0,	434.0,	0.0);	(483593.1, 3736084.7,	435.0,	435.0,	0.0)
(483698.6, 3736084.7,	435.4,	435.4,	0.0);	(483331.1, 3735269.8,	435.0,	435.0,	0.0)
(483317.0, 3735209.9,	435.0,	435.0,	0.0);	(483324.1, 3735165.4,	435.0,	435.0,	0.0)
(483323.6, 3735114.2,	435.0,	435.0,	0.0);	(483322.0, 3735061.4,	435.7,	435.7,	0.0)
(483329.5, 3735015.6,	436.0,	436.0,	0.0);	(483351.9, 3734939.4,	436.0,	436.0,	0.0)
(483318.2, 3734861.6,	436.0,	436.0,	0.0);	(483319.1, 3734809.6,	436.0,	436.0,	0.0)
(483315.3, 3734719.3,	436.0,	436.0,	0.0);	(483315.0, 3734663.4,	436.0,	436.0,	0.0)
(483316.2, 3734512.8,	436.2,	436.2,	0.0);	(483344.0, 3734456.4,	437.0,	437.0,	0.0)
(483322.2, 3734417.6,	436.4,	436.4,	0.0);	(482514.6, 3735297.2,	432.6,	432.6,	0.0)
(482877.7, 3735293.7,	433.0,	433.0,	0.0);	(482877.0, 3735128.9,	433.0,	433.0,	0.0)

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U

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

(482870.7, 3735119.9, 433.0, 433.0, 0.0); (482719.8, 3735119.9, 433.0, 433.0, 0.0)
 (482719.1, 3735003.7, 433.0, 433.0, 0.0); (482623.8, 3735004.4, 433.0, 433.0, 0.0)
 (482519.5, 3735163.0, 433.0, 433.0, 0.0); (482511.2, 3735195.0, 433.0, 433.0, 0.0)
 (482504.9, 3735286.8, 433.0, 433.0, 0.0);

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
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*** MODELOPTS: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

SOURCE ID	- - RECEPTOR LOCATION - -	DISTANCE (METERS)
	XR (METERS) YR (METERS)	(METERS)
TRKRTE01	482719.8 3735119.9	-0.82
TRKRTE02	482719.8 3735119.9	-8.67
TRKRTE03	482749.0 3735096.5	-3.72
TRKRTE04	482749.0 3735096.5	-0.38
TRKRTE09	482854.5 3735096.5	-4.66
TRKRTE09	482870.7 3735119.9	-1.95
TRKRTE10	482877.0 3735128.9	-0.77
TRKRTE10	482870.7 3735119.9	-8.79
TRKRTE33	482854.5 3734701.2	-2.10
NBND07	482643.5 3734898.9	-15.72
NBND08	482643.5 3734898.9	-9.89
NBND11	482623.8 3735004.4	-6.21
NBND12	482623.8 3735004.4	-0.86
NBND16	482538.0 3735096.5	-20.47
NBND17	482538.0 3735096.5	-0.86
NBND18	482519.5 3735163.0	-5.15
NBND19	482519.5 3735163.0	-8.25
NBND20	482511.2 3735195.0	-10.69
NBND23	482504.9 3735286.8	0.28
NBND24	482504.9 3735286.8	-6.39
SBND03	482643.5 3734800.0	-13.92
SBND04	482643.5 3734800.0	-9.39
SBND08	482538.0 3734898.9	-0.38
SBND09	482538.0 3734898.9	-10.39
SBND30	482432.5 3735195.3	-1.52
SBND31	482432.5 3735195.3	-8.02
SBND34	482432.5 3735096.5	-3.88
SBND35	482432.5 3735096.5	-3.32
SBND38	482432.5 3734997.7	-5.31

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*** MODELOPTs: ReqDFAULT CONC ELEV URBAN ADJ U

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

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

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

1.54, 3.09, 5.14, 8.23, 10.80,

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

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*** MODELOPTs: ReqDFAULT CONC ELEV URBAN ADJ U

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

Surface file: PERI_V9_ADJU\PERI_v9.SFC
Profile file: PERI_V9_ADJU\PERI_v9.PFI

Met Version: 1621

Surface format: FREE

Profile format: FBEE

Profile format: FREE
Surface station no.:

Surface station no.: 3171
Name: BERRIS

Upper air station no.: 3190

Name: MTRAMADE

Name: PERRIS
Year: 2010

Year: 201

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF TA	H
10	01	01	1	01	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	1.00	1.30	335.	9.1	282.5	5.		
10	01	01	1	02	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	142.	9.1	280.9	5.		
10	01	01	1	03	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	324.	9.1	280.4	5.		
10	01	01	1	04	-1.3	0.064	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	294.	9.1	278.8	5.		
10	01	01	1	05	-3.9	0.088	-9.000	-9.000	-999.	62.	15.0	0.19	0.61	1.00	0.90	205.	9.1	278.1	5.		
10	01	01	1	06	-1.3	0.065	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	3.	9.1	277.0	5.		
10	01	01	1	07	-8.0	0.125	-9.000	-9.000	-999.	106.	21.0	0.19	0.61	1.00	1.30	99.	9.1	277.0	5.		
10	01	01	1	08	-3.3	0.086	-9.000	-9.000	-999.	61.	16.8	0.19	0.61	0.54	0.90	319.	9.1	278.8	5.		
10	01	01	1	09	20.1	0.128	0.307	0.010	49.	110.	-9.0	0.19	0.61	0.33	0.90	239.	9.1	284.2	5.		
10	01	01	1	10	56.7	0.087	0.560	0.010	107.	62.	-1.0	0.19	0.61	0.26	0.40	188.	9.1	289.2	5.		
10	01	01	1	11	81.5	0.323	0.867	0.008	277.	441.	-35.9	0.19	0.61	0.23	2.70	310.	9.1	290.9	5.		
10	01	01	1	12	97.1	0.281	1.058	0.008	421.	357.	-19.7	0.19	0.61	0.22	2.20	357.	9.1	293.1	5.		
10	01	01	1	13	92.2	0.279	1.117	0.008	523.	354.	-20.4	0.19	0.61	0.22	2.20	356.	9.1	293.8	5.		
10	01	01	1	14	77.6	0.275	1.102	0.008	595.	347.	-23.2	0.19	0.61	0.23	2.20	50.	9.1	294.2	5.		
10	01	01	1	15	54.9	0.230	1.006	0.008	640.	266.	-19.2	0.19	0.61	0.27	1.80	53.	9.1	293.8	5.		
10	01	01	1	16	12.3	0.206	0.613	0.008	648.	225.	-61.5	0.19	0.61	0.36	1.80	11.	9.1	292.5	5.		
10	01	01	1	17	-3.6	0.087	-9.000	-9.000	-999.	71.	15.6	0.19	0.61	0.64	0.90	351.	9.1	290.4	5.		
10	01	01	1	18	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	1.00	0.90	186.	9.1	287.5	5.		
10	01	01	1	19	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	1.00	0.90	275.	9.1	285.9	5.		
10	01	01	1	20	-1.2	0.064	-9.000	-9.000	-999.	39.	18.1	0.19	0.61	1.00	0.40	181.	9.1	285.4	5.		
10	01	01	1	21	-7.8	0.125	-9.000	-9.000	-999.	106.	21.3	0.19	0.61	1.00	1.30	318.	9.1	284.9	5.		
10	01	01	1	22	-3.8	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	196.	9.1	283.1	5.		
10	01	01	1	23	-3.8	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	330.	9.1	281.4	5.		
10	01	01	1	24	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	1.00	1.30	332.	9.1	280.9	5.		

First hour of profile data

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

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

*** AERMOD - VERSION 21112 *** *** Mapes and Trumble Warehouse HRA
*** AERMET - VERSION 16216 *** ***

*** 06/15/22
*** 16:32:23
PAGE 2272

*** 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 298 Warning Message(s)
A Total of 2028 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 978 Calm Hours Identified

A Total of 1050 Missing Hours Identified (2.40 Percent)

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

*** NONE ***

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

ME W186	2079	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	2079	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
OU W565	2160	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2161	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2162	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2163	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2164	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2165	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2166	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2167	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2168	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2169	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2170	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2171	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2172	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2173	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2174	OUPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE

OU W565	2445	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2446	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2447	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2448	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2449	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2450	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2451	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2452	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
OU W565	2453	PERPLT: Possible Conflict With Dynamically Allocated FUNIT	PLOTFILE
MX W450	17521	CHKDAT: Record Out of Sequence in Meteorological File at:	14010101
MX W450	17521	CHKDAT: Record Out of Sequence in Meteorological File at:	2 year gap

*** AERMOD Finishes Successfully ***

HARP2 - HRACalc (dated 22118) 11/15/2022 6:46:53 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

***** EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

***** PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

***** INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Warm

HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\30-Yr-RTC CancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\30-Yr-RTC CancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\30-Yr-RTC NCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\30-Yr-RTC NCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\30-Yr-RTC NCAcuteRisk.csv

Acute risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\30-Yr-RTC NCAcuteRiskSumByRec.csv

HRA ran successfully

HARP2 - HRACalc (dated 22118) 11/15/2022 6:56:07 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

***** EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 9

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 7
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

***** PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

***** INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Warm

HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden

Fraction leafy: 0.137

Fraction exposed: 0.137

Fraction protected: 0.137

Fraction root: 0.137

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\9-Yr-RTC CancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\9-Yr-RTC CancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\9-Yr-RTC NCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\9-Yr-RTC NCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\9-Yr-RTC NCAcuteRisk.csv

Acute risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\9-Yr-RTC NCAcuteRiskSumByRec.csv

HRA ran successfully

HARP2 - HRACalc (dated 22118) 11/15/2022 6:50:33 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: NCChronic8HR
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER
Exposure duration are only adjusted for cancer assessments

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

TIER 2 SETTINGS
Tier2 not used.

Calculating chronic 8hr risk
Chronic 8-hr risk breakdown by pollutant and receptor saved to:
C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\8-Hr-RTC NCChronic8HrRisk.csv
Chronic 8-hr risk total by receptor saved to: C:\Users\RonaldB\Local
AERMOD\BAV2101-HARP\hra\8-Hr-RTC NCChronic8HrRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 11/15/2022 6:51:42 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

***** EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 25

***** PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

***** INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Warm

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\25-Yr-RTC CancerRisk.csv

Cancer risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\25-Yr-RTC CancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\25-Yr-RTC NCChronicRisk.csv

Chronic risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\25-Yr-RTC NCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\25-Yr-RTC NCAcuteRisk.csv

Acute risk total by receptor saved to: C:\Users\RonaldB\Local AERMOD\BAV2101-HARP\hra\25-Yr-RTC NCAcuteRiskSumByRec.csv

HRA ran successfully