TO: Meghan Truman, EPDS
FROM: Vince Mirabella
DATE: July 27, 2021

SUBJECT: Health Risk Assessment of the Alessandro Boulevard and I215 Industrial Project
City of Moreno Valley, CA

SECTION 1: PROJECT INFORMATION

1.1 - Project Name

Alessandro Boulevard and I215 Industrial Project (Project)

1.2 - Project Location

The proposed Project site is located within the western portion of the City of Moreno Valley, directly to east of the city boundary with City of Riverside, comprising ten parcels south of Bay Avenue and east of the Old 215 Frontage Road. The Project site is within the March Air Reserve Base Airport Influence Area. Regional access to the Project site is provided by Interstate 215 (I-215) and the Interstate 215 Alessandro Boulevard exit. Local access to the site is provided from Alessandro Boulevard, an urban arterial, the Old 215 Frontage Road, a secondary roadway, and Bay Avenue. The Project site comprises ten parcels encompassing approximately 11.46 acres. The site is relatively flat with a gentle slope in the southerly direction. The Project site contains multiple ornamental trees, including eucalyptus, and moderate vegetation consisting of grasses and weeds.

The Project site has a General Plan Land Use designation of Business Park/Light Industrial (BP) and zoning district of Business Park District (BP). According to Moreno Valley Municipal Code Section 9.05.020, the primary purpose of the Business Park District (BP) zoning district is to provide for light industrial, research and development, office-based firms, and limited supportive commercial in an attractive and pleasant working environment and a prestigious location. This district intends to transition between residential and other sensitive uses and more intense industrial and warehousing uses. Figure 1: Regional Location of the Project Site shows the regional location of the Project.

1.3 - Project Description

The applicant for the proposed Project requests approval from the City of Moreno Valley to demolish the existing structures on the site and construct six warehouse buildings totaling 197,008 square feet (SF) with an associated car and truck parking lot, ornamental landscaping, and onsite infrastructure. The proposed buildings would result in an FAR of 0.40. The Project includes a total of 197,008 SF of speculative warehouse space within six buildings, ranging from 23,289 SF to 49,999 SF as shown in Table 1.

All buildings would include ground floor office space and warehouse space. Building A would be in the center of the space, surrounded by drive aisles. Building B would be setback from adjacent properties to the north by 10 feet. Building C would be setback from adjacent properties to the north by 12 feet and adjacent properties to the east by 10 feet. Building D and E would be setback from adjacent properties to the south by 10 feet. Building F would be setback from adjacent properties to the south and east by 10 feet. All buildings would be 38 feet in height, with the parapet extending to a maximum of 41 feet. Figure 2 shows the site plan. No refrigerated uses are planned for the buildings.

Table 1: Project Building Space

Building Number	Total Building Size (square feet)	Number of Dock Doors
Building A	49,999	6
Building B	26,368	3
Building C	29,750	3
Building D	44,037	5
Building E	23,567	3
Building F	23,289	3
Total	197,008	23
Source: Project Description		

1.4 - Purpose of the Report

This report evaluates the potential health impacts to sensitive receptors from the operation of the Project. In particular, this health risk assessment (HRA) focuses on the emissions of diesel particulate matter (DPM) from the operation of the heavy-duty diesel vehicles that would serve the Project on a day-to-day basis. DPM has been identified by the California Air Resources Board (ARB) as a carcinogenic substance responsible for nearly 70 percent of the airborne cancer risk in California.[1] The estimated health risk impacts from the Project operation were compared to the health risk significance thresholds recommended by the South Coast Air Quality Management District (SCAQMD) for use in CEQA assessments.

This HRA employed the following tools to estimate the health impacts of the Project:

- The California Air Resources Board (ARB) EMFAC2017 mobile emission source model[2] to calculate exhaust and idling emissions from mobile sources such as diesel trucks
- The U.S. Environmental Protection Agency (EPA) AMS/EPA Regulatory Model (AERMOD Version 21112) air dispersion model[3] to estimate DPM impacts to sensitive receptors)
- Cancer Risk Methodology from the California Office of Environmental Health Hazards Assessment (OEHHA)[4] and the SCAQMD[5].

[1] California Air Resources Board 2017. Study Links California Regulations, Dramatic Declines in Cancer Risk from Exposure to Air Toxics. Website: https://ww2.arb.ca.gov/news/study-links-california-regulations-dramatic-declines-cancer-risk-exposure-air-toxics

[2] California Air Resources Board 2017. EMFAC2017 User's Guide. Website: https://ww3.arb.ca.gov/msei/downloads/emfac2017_users_guide_final.pdf

[3] US Environmental Protection Agency 2019. AERMOD Quick Reference Guide. Website: https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models

[4] California Office of Environmental Health Hazards Assessment 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

[5] SCAQMD 2017. Risk Assessment Procedures for Rules 1401, 1401.1, 1402, and 212, Version 8.1/

- The California Air Pollution Control Officers Association (CAPCOA)[6] CalEEMod land-use emission model (Version 2020.4.0) to estimate DPM emissions from the operation of fire pumps used as part of the fire suppression system.

1.5 - Conclusion

The Project's operation would generate a lifetime cancer risk at the maximum impacted receptors as provided below. All cancer risks as less than the SCAQMD health risk significance threshold of 10 in one million. Therefore, the operation of the Project would result in a less than significant project-level and cumulative health risk impact.

- Sensitive/residential receptor for the 30-year exposure duration: 5.3 in one million,
- Worker Receptor: 0.4 in one million

[6] CAPCOA 2021. California EmissionsEstimator Model Version 2020.4.0. Website: hppt://www.caleemod.com

Figure 1
Regional Location Map

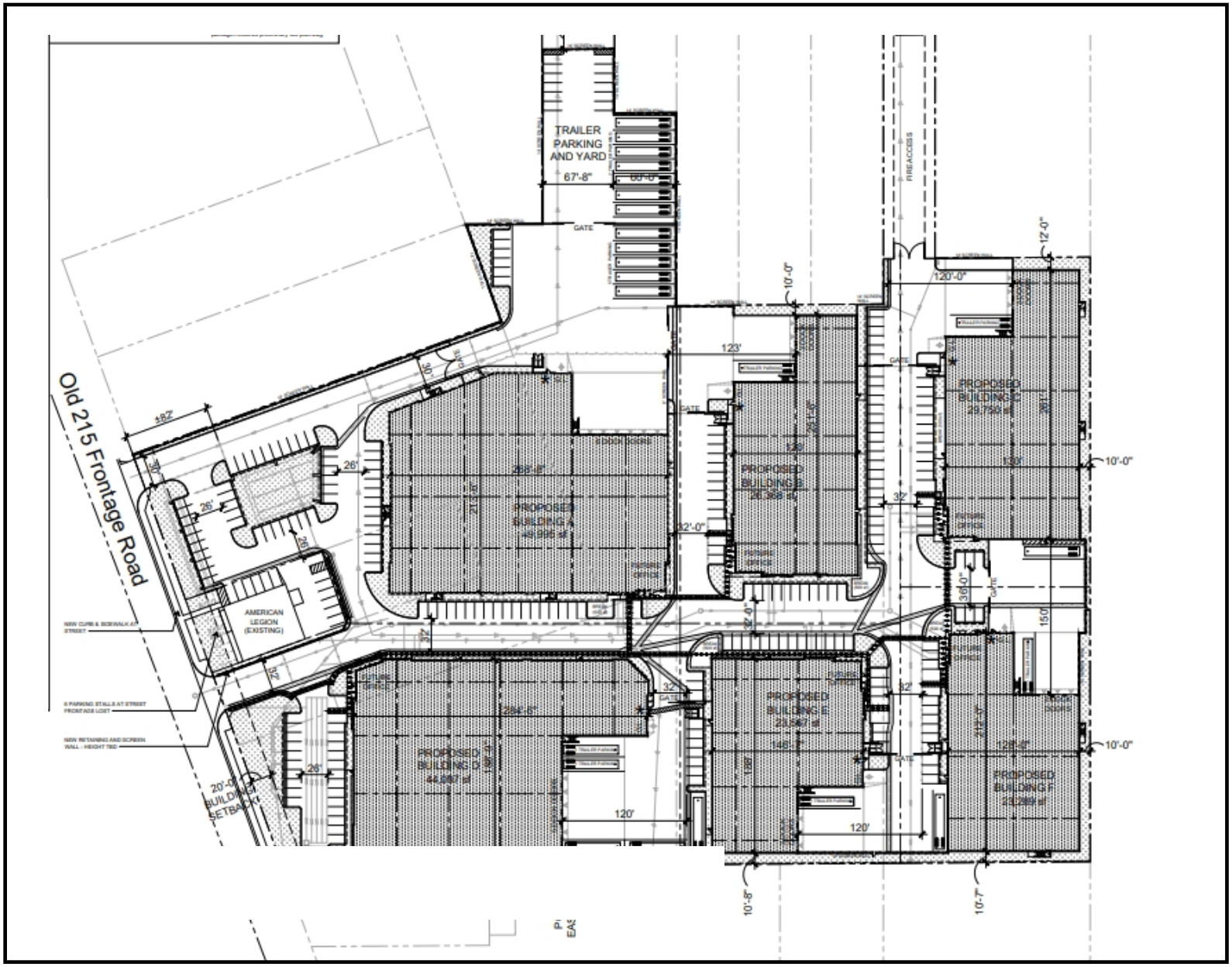


Figure 2
Project Site Plan

SECTION 2: HEALTH RISK ASSESSMENT

An HRA is a guide that helps determine whether the risks from current or future exposures to a toxic chemical or substance in the environment could affect the health of a population. In general, the quantification of risk from the development of a project depends on the following factors:

- Identification of the toxic air contaminants (TACs) that may be present in the air;
- Estimation of the amount of TACs released from all emission sources using emission models;
- Estimation of the airborne concentrations of TACs in the geographic area of concern using air dispersion models using information about emissions, source locations, weather, and other factors; and
- Estimation of the level of exposure to different concentrations of the TACs at different geographic locations and their consequential health impacts.

Thus, an HRA identifies the TACs that could affect public health, identifies the sources and their quantities of the TAC emissions, estimates where the emissions are transported by prevailing meteorological conditions, and assesses the consequential health impacts due to the identified exposures.

The State of California Office of Environmental Health Hazards Assessment (OEHHA) has developed methods for conducting health risk assessments. As defined under the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588 [Chapter 1252, Statutes of 1987, California Health and Safety Code Section 44306]),

> "A health risk assessment means a detailed, comprehensive analysis prepared pursuant to Section 44361 to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure."

Estimates of health risk and hazards that could potentially affect nearby sensitive receptors from the emissions of TACs were made using the methodology described below. The methodology included assumptions regarding emission source quantification, configurations and locations, receptor locations, air dispersion modeling, and health risk modeling. As noted above, this HRA focused on DPM emissions that the ARB has identified as the principal airborne carcinogenic substance in California. For purposes of this HRA, DPM was assumed to be comprised of PM_{10} exhaust emissions.

2.1 - Emission Inventory Development

The first requirement to carry out the HRA involves identifying and quantifying the sources of operational DPM air emissions from the Project, also termed an emission inventory. Each piece of equipment that emits DPM is identified in terms of its location and physical characteristics (release height, release temperature, etc.) and the chemical nature of the emissions. The predominant sources of DPM emissions resulting from the Project operation derive from the heavy-duty diesel trucks that travel to and from and within the project site each day. Other potential DPM emission sources include the maintenance and testing of fire pumps used for fire protection. These emission sources are identified below.

2.1.1 Estimation of Mobile Source Emissions

Estimates of mobile source emissions are based on an emission factor and an activity level. An emission factor quantifies the amount of air emission for a specific activity, such as a gram of DPM (as PM_{10} exhaust) emitted per vehicle mile traveled or per hour of idling, while the activity level is defined as the vehicle trip, number of miles traveled, or the amount of time a vehicle spends idling.

Emissions from motor vehicles can be characterized as follows:

- DPM Combustion emissions (grams/mile or grams/hour for idling) resulting from the combustion of diesel fuel from heavy-duty trucks are the primary source of DPM emissions. The ARB EMFAC2017 mobile source emission model provides emission rates for user-defined heavy-duty truck speeds, fuel type, vehicle class, and model year.

The emissions of DPM from mobile sources are calculated as follows for running exhaust emissions and idling emissions:

$$\text{Running Exhaust Emissions}_{RE} = \sum_{i=1}^{n} (VMT_i \times EF_i) \qquad \text{(EQ-1)}$$

$$\text{Idling Emissions}_{ID} = \sum_{i=1}^{n} (IdNum_i \times T_i \times EF_i) \qquad \text{(EQ-2)}$$

Where:

$Emissions_{RE}$ = running exhaust emissions summed over all vehicle classes
$Emissions_{ID}$ = idling emissions summed over all vehicle classes
EF_i = running exhaust emission factor for each vehicle type at a specific vehicle speed (g/mi)
EF_{idling} = idling emission factor for each vehicle class (g/idle-hour)
VMT_i = total number of vehicle miles summed over all vehicle classes (miles per day)
$IdNum_i$ = number of idling vehicles by vehicle class
T_i = idling hours summed over all vehicle classes (hours per day)
n = number of vehicle classes
$_i$ = vehicle class

Mobile Source Activity Levels

The motor vehicle activity levels were estimated using the vehicle trip information provided in the Project Trip Generation Report[7].

Table 2 summarizes the daily motor vehicle trips from the Project based on information derived from the Project Trip Generation Report. The trip estimates shown in Table 2 refer to both gasoline and diesel-fueled vehicles. Table 3 provides a vehicle fleet mix split for each land use by separating the vehicle trips into passenger vehicles, 2-axle trucks, 3-axle trucks, and 4-axle trucks. Table 4 presents the percentage of diesel vehicle trips by heavy-duty vehicle class for Riverside County in 2022, as derived from the EMFAC2017 mobile source emission model. The focus of this HRA was on quantifying the DPM emissions from heavy-duty trucks since the DPM emissions from these vehicles comprise about 99 percent of the total DPM emissions all vehicle emissions. This HRA also assumed that the onsite diesel vehicle truck trips and consequently the DPM emissions were split equally between the six buildings. Finally, Table 5

[7] Translutions July 2021. Traffic Impact Analysis Scoping Agreement

presents the number of heavy-duty diesel trips for the Project operation based on the total number of vehicle trips and the diesel vehicle percentages as provided in the EMFAC2017 emission model.

Table 2: Project Daily Operational Vehicle Trips

Building	Daily Trip Rate (trips/TSF)	Daily Trips (trips/day)
Building A - Warehouse	1.74	87
Building B - General Light Industrial	4.96	131
Building C - General Light Industrial	4.96	148
Building D - Warehouse	1.74	77
Building E - General Light Industrial	4.96	117
Building F - General Light Industrial	4.96	116
Total		674
Source: Translutions July 2021. Traffic Impact Scoping Agreement		

Table 3: Vehicle Fleet Mix

Land Use	Vehicle Class	Classification Percentage	Daily Vehicle Trips
Warehouse (Buildings A and D)	Passenger Vehicles	69.20	113
	2-axle trucks	5.15	8
	3-axle trucks	6.38	10
	4-axle trucks	19.26	32
	Total	100.0	164
General Light Industrial (Buildings B, C, E, and F)	Passenger Vehicles	78.60	401
	2-axle trucks	8.00	41
	3-axle trucks	3.90	20
	4-axle trucks	9.50	49
	Total	100.0	511
Total Trips	Passenger Vehicles	76.30	515
	2-axle trucks	7.30	49
	3-axle trucks	4.50	30
	4-axle trucks	11.90	80
	Total	100.0	674
Source: Translutions July 2021. Traffic Impact Scoping Agreement			

Table 4: Diesel Heavy-Duty Truck Vehicle Fleet

Type of Vehicle	Diesel Fuel Vehicles (% of Vehicle Trips)
Light-heavy duty truck (LHDT1)	51.5
Light-heavy duty truck (LHDT2)	73.7
Medium-heavy duty truck (MHDT)	94.2
Heavy-heavy duty truck (HHDT)	100.0
Source: see Data Attachment	

Table 5: Number of Daily Project Diesel Truck Vehicle Trips

Building	2-axle Daily Diesel Trips (LHDT1)	2-axle Daily Diesel Trips (LHDT2)	3-axle Daily Diesel Trips (MHDT)	4-axle Daily Diesel Trips (HHDT)
Building A - Warehouse	2	1	5	17
Building B - General Light Industrial	4	2	5	12
Building C - General Light Industrial	5	2	5	14
Building D - Warehouse	2	1	5	15
Building E - General Light Industrial	4	1	4	11
Building F - General Light Industrial	4	1	4	11
Total	20	8	28	80
Note: 2-axle trucks were comprised of 79% LHDT1 and 21% LHDT2 vehicle classes as per EMFAC2017 Source: see Data Attachment				

The Project's operational heavy-duty diesel truck emissions were estimated for vehicle travel while on the Project site and offsite as the Project's vehicles travel on the local roadway network. All vehicles were assumed to travel at 5 miles per hour for travel within the Project site. For travel offsite, all heavy-duty diesel trucks were assumed to travel at 25 miles per hour. Also, all heavy-duty diesel trucks were assumed to idle for 15 minutes per day at the loading docks, following the recommendations from the SCAQMD[8]. The Project was assumed to operate 24 hours per day.

The offsite vehicle trip distribution on the local roadway network was based on information presented in the Project's Traffic Impact Scoping Agreement by Translutions.

- Offsite Route 1:From I215 > east on Alessandro Boulevard >north on Old 215 Frontage Road to the Project entrance

[8] See for Example. SCAQMD 2011. Website: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2011/july/palm-industrial-distribution-center.pdf?sfvrsn=4

- Offsite Route 2:Project exit on Old 215 Frontage Road > north on Old 215 Frontage Road > west on Eucalyptus Ave to I215

DPM Truck Emission Factors

The DPM emission factors (as PM_{10} exhaust) were derived from the ARB EMFAC2017 mobile source emission model in terms of grams per mile (grams/VMT) for the running exhaust emissions and grams per idle-hour (g/idle-hr) for idling emissions. The DPM emission factors were obtained for Riverside County for the Project's opening year of 2022 and were assumed to remain constant for the entire duration of the cancer risk exposure. The use of 2022 emission factors would overstate potential impacts since this approach assumes that the emissions remain constant at their 2022 levels. However, heavy-duty truck emissions are expected[9] to decrease in future years due to the requirement to comply with existing and future emission regulations requiring vehicle fleet replacement with cleaner technologies.

Table 6 presents the DPM (as PM_{10} exhaust) emission factors that were applied in this HRA.

Table 6: DPM Diesel Truck Emission Factors

Type of Vehicle	Idling Emission Factor (g/idle-hr)	Running Exhaust @ 5 mph (g/mi)	Running Exhaust @ 25 mph (g/mi)
Light-heavy duty truck (LHDT1)	0.467	0.077	0.028
Light-heavy duty truck (LHDT2)	0.625	0.068	0.026
Medium-heavy duty truck (MHDT)	0.142	0.070	0.036
Heavy-heavy duty truck (HHDT)	0.015	0.043	0.018
EMFAC2017 PM_{10} Exhaust Emission factors for Riverside County in 2022 Source: see Data Attachment			

2.1.2 Support Equipment

The Project's operation will require the use of several pieces of support equipment, including a diesel-fueled fire pump, one for each building. Based on the information from similar warehouse land-use projects, a 238 horsepower diesel fire pump was assigned to each building[10]. The fire pump was assumed for testing and maintenance purposes to operate for 50 hours per year[11]. The fire pump DPM emissions were estimated using the CalEEMod model. No standby electrical generators are anticipated for Project operation, and all material handling equipment (e.g., forklifts) was assumed to be either electric or natural gas-fueled.

2.1.3 Project DPM Emissions

Table 5 presents the Project's operational DPM emissions from the various onsite and offsite operational DPM emission sources. Figure 3 provides the locations of the onsite and offsite DPM emission sources.

[9] California Air Resources Board 2021. Measures for Reducing Emissions from On-Road Heavy Duty Vehicles. Website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/heavy-duty-trucks-presentations-06-03-21.pdf

[10] The fire pump model assumed was a Peerless Diesel Engine Driven Fire Pump, peak horsepower of 238 hp.

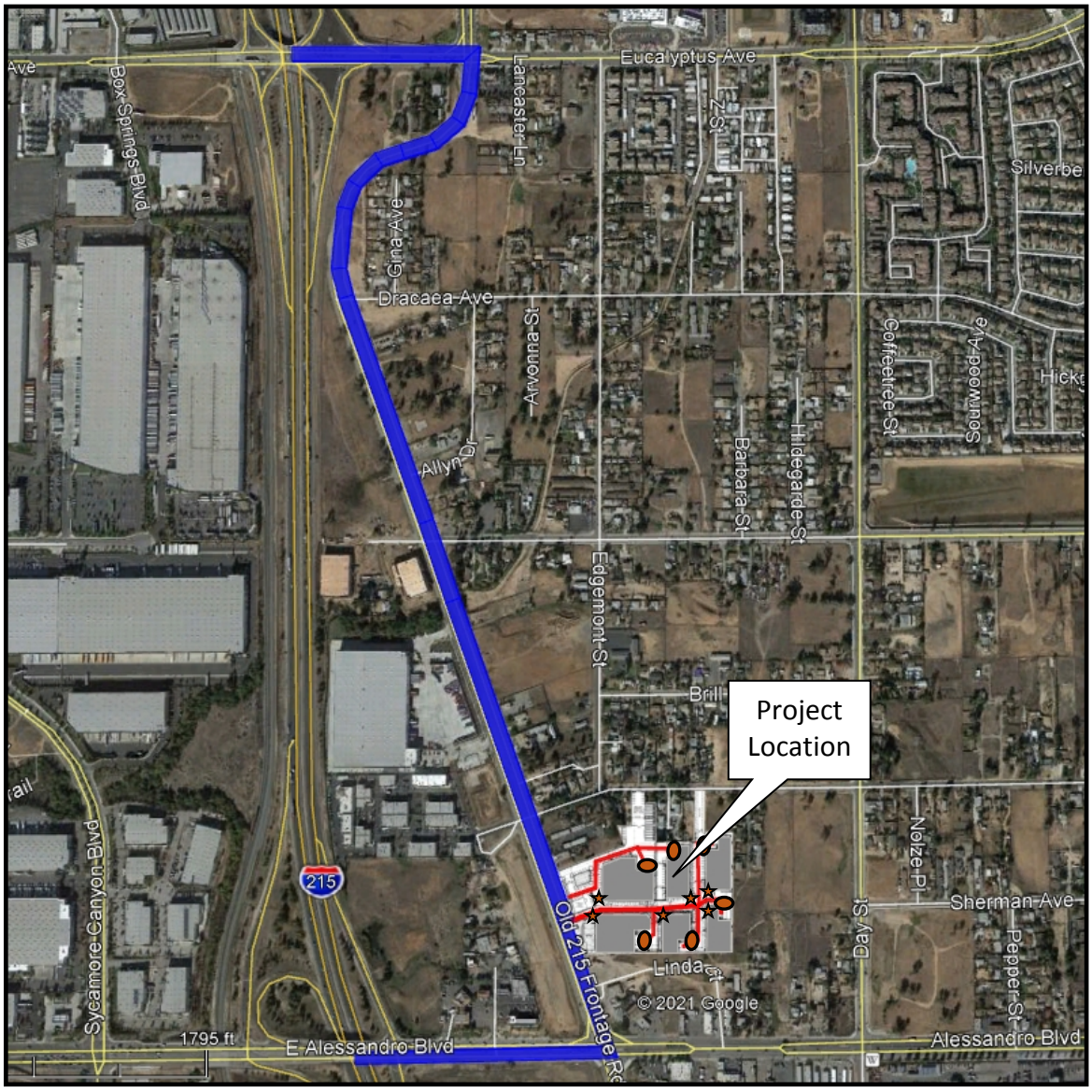
[11] Maintenance hours limited by SCAQMD Rule 1470

Table 7: DPM Emissions from Project Diesel Emission Sources (2022 Analysis Year)

Building	Onsite Travel Emissions (grams/sec)	Onsite Idling Emissions at Loading Docks (grams/sec)	Fire Pump Emissions (grams/sec)	Total Emissions (g/sec)
Onsite Emissions				
Building A - Warehouse	1.70E-06	3.30E-06	4.26E-05	4.76E-05
Building B - General Light Industrial	2.02E-06	5.60E-06	4.26E-05	5.02E-05
Building C - General Light Industrial	3.50E-06	6.32E-06	4.26E-05	5.24E-05
Building D - Warehouse	1.59E-06	2.90E-06	4.26E-05	4.71E-05
Building E - General Light Industrial	2.41E-06	5.01E-06	4.26E-05	5.00E-05
Building F - General Light Industrial	2.20E-06	4.95E-06	4.26E-05	4.98E-05
Total	1.34E-05	2.85E-05	2.56E-04	2.98E-04
Offsite Emissions				
	Emissions (grams/sec)			
Offsite 1	7.16E-06			
Offsite 2	2.20E-05			
Total	2.91E-05			
Total Emissions				
	Emissions (grams/sec)			
All Sources	3.26E-04			

2.2 - Atmospheric Dispersion Methodology

Atmospheric dispersion modeling is the mathematical simulation of how air pollutants disperse in the ambient atmosphere. The modeling is performed with computer programs that solve the mathematical equations and algorithms that simulate the movement and dispersion of air pollutants. The air dispersion model uses emissions from various emission sources and meteorological data such as wind speed and direction, air temperature, and atmospheric mixing rates to estimate the air pollutant impacts at various geographic locations (referred to as receptor locations).



Onsite Travel Routes
Offsite Travel Routes
Fire Pumps
Truck Idle Areas

Figure 3
Location of DPM Emission Sources

Table 8 provides the general assumptions applied in the AERMOD model. Table 9 summarizes the assumptions used to configure the various operational emission sources analyzed in this HRA. The meteorological data were taken from the SCAQMD Perris monitoring station for the time period 2010 and 2011, and 2014 to 2016 and is considered representative of the meteorological conditions at the project site.

Table 8: General Modeling Assumptions

Feature	Assumption
Terrain processing	● Complex terrain; elevations were obtained for the Project site using the EPA AERMAP terrain data pre-processor
Land Use	● Urban based on land use patterns surrounding the Project site
Meteorological Data	● Perris, CA for the years 2010 and 2011 and 2014 to 2016 from the SCAQMD as representative of meteorological conditions at the Project site
Receptor locations and heights	● A network grid was used to include all existing residences and worker locations surrounding the Project site and along the offsite truck routes ●Additional receptors were located at nearby residences ● Receptors placed a ground-level
Building	● A building height of 41 feet was assumed as per the Project description

Table 9: Summary of Operational Emission Source Configurations

Emission Source Type	Geometric Configuration	Relevant Assumptions
Onsite Diesel Vehicle Traffic	Line Source	• Stack release: height – 3 meters (10 feet) and plume height 6.1 meters (20 feet) (EPA Haul Roads Calculator); width – 3.7 meters (12 feet) • Building access to all buildings from Old 215 Frontage Road • Vehicle types: see Table 5 • Emission factor: ARB EMFAC 2017; DPM (as PM_{10} exhaust) emission factors at 5 mph for 2022 for Riverside County; no credit for future emission factor reductions, see Table 6. • Operations: 24/7
Onsite Diesel Truck Idling	Point Sources located at loading docks	• Stack release characteristics ➢ Stack height: 3.7 meters (12 feet) ➢ Stack diameter: 0.1 meter (0.1 feet) ➢ Stack velocity: 51.7 meters per second (115 miles per hour) ➢ Stack temperature: 366^{o}K (200^{o}F) • Idle time: 15 minutes per truck per day • Vehicle type: heavy-duty diesel haul trucks • Emission factor: ARB EMFAC 2017; idle emission factor for 2022 for Riverside County; no credit for future emission factors, see Table 6 • Operations: 24/7
Offsite Vehicle Traffic	Line sources	• Stack release: height – 3 meters (10 feet) and plume height 6.1 meters (20 feet) (EPA Haul Roads Calculator); width – 3.7 meters (12 feet) • Offsite truck routes north and south on Old 215 Frontage Road • Vehicle types: see Table 5 • Emission factor: ARB EMFAC 2017; DPM (as PM_{10} exhaust) emission factors at 25 mph for 2022 for Riverside County; no credit for future emission factor reductions, see Table 6. • Operations: 24/7

Emission Source Type	Geometric Configuration	Relevant Assumptions
Fire Pumps	Point Sources	• Diesel powered • 238 horsepower • Testing and maintenance: 50 hours/year • Emissions derived from CalEEMod
Source: see Data Attachment		

2.2.1 Receptors

The SCAQMD defines a sensitive receptor any residence, including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long-term care hospitals, hospices, prisons, and dormitories, or similar live-in housing. For purposes of this HRA sensitive receptors were placed within the air dispersion model at the location of existing residences and locations along the offsite Project vehicle travel routes. In addition, a regular grid network of receptors was placed over the Project site to complete the receptor network. The nearest sensitive receptors were located at existing residences adjacent to the trailer parking yard and to the north of the Project property across Bay Avenue. The nearest worker receptor was located at the industrial building adjacent to the north boundary of the Project. Figure 4 shows the receptor locations included in the HRA.

2.3 - Health Risk Estimation Methodology

2.3.1 Significance Thresholds

Project-Level

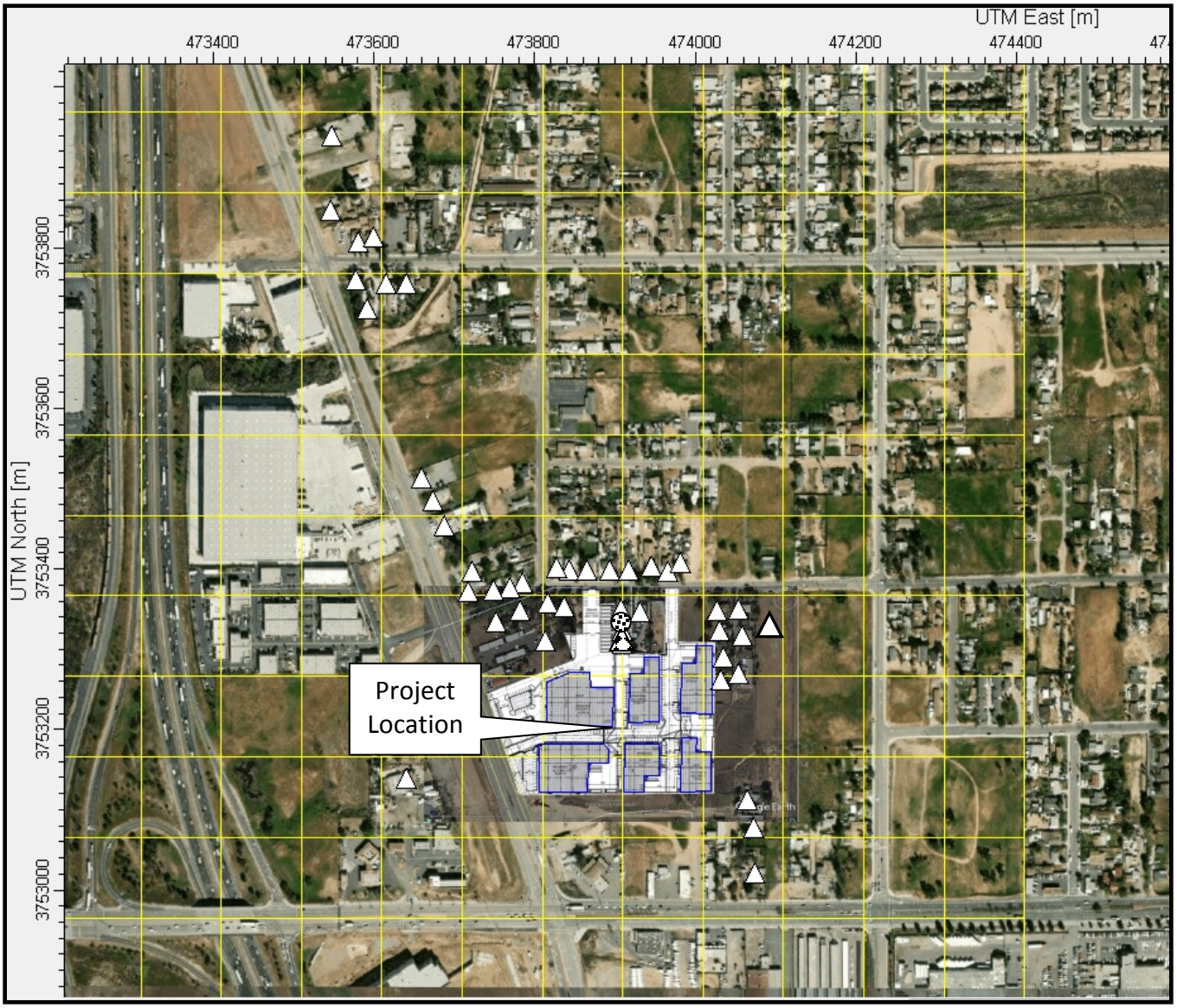
The City of Moreno Valley has not adopted a numerical significance threshold for cancer risk or non-cancer hazards. Therefore, the significance thresholds recommended by the SCAQMD were adopted for this assessment. The relevant significance thresholds are provided below:

- Cancer Risk: ten (10) persons per million population as the maximum acceptable incremental cancer risk due to exposure to toxic air contaminants (TAC)
- Non-cancer Hazard Index: 1.0

Cumulative

The SCAQMD has published a report on addressing cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (SCAQMD 2003)[12]. The SCAQMD considers projects that exceed the project-specific significance thresholds to be cumulatively considerable. Therefore, the project-specific (noted above) and cumulative significance thresholds are the same. As a result, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant.

[12] South Coast Air Quality Management District (SCAQMD) 2003. White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution



Location of Sensitive/Residential Receptors

Location of Maximum Impacted Sensitive Receptor

Location of Maximum Impacted Worker Receptor

Grid of Model Receptors (expanded view)

Figure 4
Location of Air Dispersion Model Receptors

2.3.2 Cancer Risk

Cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer due to exposure to potential carcinogens over a specified exposure duration. The estimated risk is expressed as a probability since there is no level below which some level of impact may occur. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in a million implies a likelihood that up to ten people in a population of one million equally exposed people could contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk is an excess cancer risk in addition to any environmental cancer risk borne by a person not exposed to these air toxics.

The exposure dose is the amount of a chemical taken into the body at a given time. In particular, the exposure dose through inhalation ($Dose_{air}$) is a function of the breathing rate, the exposure frequency, and the concentration of exposures. Breathing rates change over time for different age groups and are determined for specific age groups. The $Dose_{air}$ is calculated for each of the following age groups: 3rd trimester to birth, 0 to 2, 2 to 16, and 16 to 30 years of age. The OEHHA recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans[13] as the key indicator of long-term health risk impacts. The risks for each age group are summed together to provide a total estimate of lifetime cancer risks for sensitive receptors. To estimate the cancer risk, the $Dose_{air}$ is estimated by applying the following equation to the DPM concentration at each receptor as calculated by the air dispersion model:

$$Dose_{air} = C_{DPM} \times DBR_i \times A \times EF_i \qquad \text{(EQ-3)}$$

Where:

$Dose_{air}$ = dose through inhalation (mg/kg/day)
C_{DPM} = period average concentration of DPM as estimated by the air dispersion model ($\mu g/m^3$)
DBR = daily breathing rate for each age group (liters/kg-day)—see Table 10
A = Inhalation absorption factor (unitless = 1)
EF = exposure frequency (days per year)
i – number of age groups

The dose is multiplied by the cancer potency factor, the age sensitivity factors (ASF), the exposure duration (ED), and the frequency of time spent at home (FAH, for sensitive/residential receptors only) divided by averaging time (AT) to arrive at an estimate of cancer risk:

$$\text{Cancer Risk} = \sum_{I=1}^{n} Dose_{air,\,i} \times CPF \times ASF_i \times ED_i \times FAH_i/AT \qquad \text{(EQ-4)}$$

Where:

Cancer Risk = Total individual excess inhalation cancer risk, defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for

[13] California Office of Environmental Health Hazards Assessment 2015. Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments. Page 8-6.

specified exposure durations; this risk is summed over all age groups; cancer risk is expressed in terms of risk per million exposed individuals.

$Dose_{air,i}$ = inhalation dose through inhalation (mg/kg-day)
CPF = inhalation cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF_i = age sensitivity factors (see Table 8)
ED_i = exposure duration (years)—(see Table 10)
AT = averaging time of lifetime cancer risk (70 years)
FAH_i = fraction of time spent at home—(see Table 10)
n = number of age groups

For purposes of this HRA, the 30-year exposure duration for sensitive/residential receptors, consistent with the OEHHA/SCAQMD guidance, was assumed to span the time period of the third trimester birth in 2022 (the Project's opening year) to the year 2051. Estimates of cancer risk were also provided for informational purposes for a child exposure (3rd trimester pre-birth to 9-years), adult exposures (30-years), and a full lifetime exposure (3rd trimester pre-birth to 70 years)

Table 8 provides the values for the various cancer risk parameters shown in Equation 1 and Equation 2 for the receptor types examined in this assessment. For DPM, the value of the CPF is 1.1 milligrams per kilogram per day.

Table 10: Exposure Assumptions for Cancer Risk – OEHHA/SCAQMD Guidance

Age Group	Exposure Frequency, EF		Exposure Duration, ED (years)	Age Sensitivity Factors (ASF)	Time at Home Factor (TAH)	Daily Breathing Rate[(1)] (DBR) (L/kg-day)
	Hours/day	Days/year				
Sensitive/Residential Receptor—Pre-birth to Adult (30-years duration)						
3rd Trimester to Birth	24	350	0.25	10	0.85	361
0 to 2 years	24	350	2	10	0.85	1,090
2 to 16 years	24	350	14	3	0.72	745
16 to 30 years	24	350	14	1	0.73	335
Sensitive Receptor/Residential Child (9-years duration)						
3rd Trimester to Birth	24	350	0.25	10	0.85	361
0 to 2 years	24	350	2	10	0.85	1,090
2 – 9 years old	24	350	9	3	0.72	861
Sensitive Receptor/Residential Receptor – Adult (30-years duration)						
17 years and older	24	350	30	1	0.73	335
Sensitive Receptor/Residential Receptor - Pre-birth to Adult (70-years duration)						
3rd Trimester to Birth	24	350	0.25	10	0.85	361
0 to 2 years	24	350	2	10	0.85	1,090
2 to 16 years	24	350	14	3	0.72	745
16 to 70 years	24	350	54	1	0.73	290
Worker Receptor (25-years duration)						

Age Group	Exposure Frequency, EF		Exposure Duration, ED (years)	Age Sensitivity Factors (ASF)	Time at Home Factor (TAH)	Daily Breathing Rate[(1)] (DBR) (L/kg-day)
	Hours/day	Days/year				
17 years and older	8	250	25	1	1	230

Note:
[(1)] Daily breathing rates are representative of the 95th percentile for sensitive/residential receptors
(L/kg-day) = liters per kilogram body weight per day
Source: SCAQMD Rule 1401.

2.3.3 Chronic Non-cancer Hazard

TACs can also cause chronic (long-term) effects on non-cancer illnesses such as reproductive effects, birth defects, or adverse environmental effects. Non-cancer health risks are conveyed in terms of the hazard index (HI). A ratio of the predicted concentration of the facility's reported TAC emissions to a concentration is considered acceptable to public health professionals. A significant risk is defined as an HI of 1 or greater. A HI of less than 1 indicates that no significant health risks are expected from the facility's TAC emissions. The following equation gives the relationship for the non-cancer hazards for TACs.

$$HI = C_{ann}/REL \qquad \text{(EQ-5)}$$

Where:

HI = Hazard Index: an expression of the potential for chronic non-cancer health risks
C_{ann} = Annual average TAC concentration ($\mu g/m^3$)
REL = Reference Exposure Level: the DPM concentration at which no adverse health effects are anticipated

As predicted by the air dispersion model, annual concentrations of DPM are used to estimate chronic non-cancer hazards. The OEHHA has defined a REL for DPM of 5 $\mu g/m^3$.

2.4 - Results of the Health Risk Assessment

2.4.1 Project-Level Risk Results

Table 11 presents a summary of the cancer risks and chronic non-cancer hazards resulting from the Project's operational DPM emissions along with the SCAQMD health risk significance thresholds. As noted from Table 11, the estimated maximum cancer risk is 5.3 in one million for sensitive/residential receptors, less than the 10 in one million significance threshold. In addition, the estimated non-cancer hazard index is less than the significance threshold as well. Therefore, the operation of the Project would not result in a significant health impact.

Table 1: Summary of Proposed Project Health Risk Assessment

Location[(1)]	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor- Infant - Adult	5.3	10	No
Maximum Impacted Sensitive Receptor - Child	3.7	10	No
Maximum Impacted Sensitive Receptor – Adult	0.9	10	No
Maximum Impacted Sensitive Receptor – 70-years	6.2	10	No
Maximum Impacted Worker Receptor	0.4	10	No
Location[(1)]	**Chronic Non-Cancer Hazard Index**		**Exceeds Significance Threshold?**
	Estimated Hazard Index	**Significance Threshold**	
Maximum Impacted Sensitive Receptor- Infant	<0.002	1.0	No
Maximum Impacted Sensitive Receptor - Child	<0.002	1.0	No
Maximum Impacted Sensitive Receptor – Adult	<0.002	1.0	No
Maximum Impacted Sensitive Receptor – 70-years	<0.002	1.0	No
Maximum Impacted Worker Receptor	<0.002	1.0	No

Note:
[(1)] The maximum impacted sensitive receptor is located at an existing residence along the northern boundary of the Project
The maximum impacted worker receptor is located along the northern boundary of the Project
Source:See Data Attachment

2.4.2 Cumulative Impact Results

The SCAQMD has conducted an analysis of the cumulative effects of toxic air contaminants (TACs) within the South Coast Air Basin as part of its *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V,* the draft version of this MATES study series[1]*)*. The MATES studies express cumulative TAC impacts in terms of potential increased cancer risks. The MATES-V Study estimates of the cumulative TAC-source cancer risk for the localized area encompassing the Project site ranges from 300 to 400 in one million. DPM-source cancer risks are reflected in the area's ambient cumulative cancer risk along with all other TAC-source risks and accounts for the predominance (68%) of the total risk shown in MATES-V for the Project site area. The cancer risk upper limit of 400 in a million was assumed to comprise the impact from existing TAC emission sources in the region without the impacts from the Project. Because the existing cancer risk levels already exceed the 10 in one million cumulative significance threshold, a cumulatively significant impact already exists at the Project site.

The TAC emission inventory used in the MATES-V study to estimate health impacts was representative of emissions for the year 2018. In addition to the MATES-V cumulative TAC-source cancer risk noted above, other new or proposed potential TAC-generating projects (related projects) in the Project area not included in the MATES V study could contribute to cumulative TAC impacts. The SCAQMD has applied a 1,000-foot distance from a proposed project to identify other development projects that could contribute to cumulative impacts with the proposed project[2]. The 1,000-foot evaluation distance is supported by

[1] SCAQMD 2021. *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V).* Website: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v
[2] SCAQMD 2019. CEQA Comment Letter, Mitigated Negative Declaration (MND) for the Proposed Alder II Warehouse Project. Website: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/SBC181221-08.pdf?sfvrsn=8

search radius for this Project was extended to 0.25 miles (1,320 feet) to identify potential cumulative sources.

Within a region of approximately 0.25 miles, four potential projects could add to the overall TAC emission burden within the region[16]. Table 12 identifies these cumulative projects.

Table 12: List of Cumulative Projects Within 0.25 miles of the Project

Project	Location	Land Use	Size
Gateway Business Park	South of Alessandro Blvd between Old Frontage Rd & Day St.	Light Industrial	184.0 TSF
Rev Wheel Industrial Park	West of Old 215 Frontage Rd between Cottonwood Ave & Alessandro Blvd	Light Industrial	176.0 TSF
Freeway Business Center	Southwest Corner of Old 215 Frontage Rd and Alessandro Blvd	Warehouse	709.00 TSF
Day Street Apartments	Southwest Corner of Old 215 215 Frontage Rd and Alessandro Blvd	Apartments	200 DU

TSF = thousands of square feet
DU = dwelling unit
Source: Cumulative Projects Trip Generation, Traffic Impact Assessment Scoping Agreement, Translutions July 2021

Appropriate information is not available to perform a health risk assessment for these planned and foreseeable projects. However, the impacts from these related projects would add to the risks quantified in the MATES-V study that already exceed the 10 in one million cancer risk significance threshold.

Project-level TACs would incrementally increase the background cancer risk by a maximum of 5.3 incidents per million population at the maximum-impacted sensitive receptor. The maximum cancer risk is less than the 10 in one million project-level and cumulative significance thresholds. Therefore, the Project's health risk impacts are neither individually significant nor cumulatively considerable.

[16] Translutions July 2021. Traffic Impact Analysis Scoping Agreement, Exhbit B Cummlative Map

Health Risk Assessment
Data Attachment

Alessandro Boulevard and I215 Old Industrial Project **2022**
Emission Assumptions **DPM** Emissions

1) Vehicle Emissions

(a) Truck and Auto Traffic	EMFAC2017	
(b) Location	Riverside County (SC)	
(c) Truck Mix		
Project Trip Generation Memo		
EMFAC2017 to derive the % of diesel truck vehicles		
(d) Vehicle Travel Speed		
Onsite Travel	5	mph
Offsite Travel	25	mph
(e) Truck Idle time:	15	minutes (truck idling)
		for LHDT, MHDT, and HHDT diesel trucks)
(f) Emission factors for	DPM	emissions
(g) Emissions calculated for	2022	

2) Refrigerated Land Uses

Percentage of Buildings used for Refrigeration (applies to DSL LHDT, MHDT and HHDT)	
Building A - Warehouse	0%
Building B - General Light Industrial	0%
Building C - General Light Industrial	0%
Building D - Warehouse	0%
Building E - General Light Industrial	0%
Building F - General Light Industrial	0%
Average TRU Horsepower	34
TRULoad Factor	46%
TRU On/Off Cycle Factor	50%
TRU Onsite Operating Time	0.5 hours

3) Traffic Allocation

1) Onsite travel emssions generated from vehicles traveling to building loading docks
2) Onsite idling emissions generated only for heavy duty diesel trucks
3) Offsite travel trips allocated in accordance with the Traffic Impact Memorandum

4) Trip Allocation	**Building Size**	**%Total**
Building A - Warehouse	49,999	25%
Building B - General Light Industrial	26,368	13%
Building C - General Light Industrial	29,750	15%
Building D - Warehouse	44,023	22%
Building E - General Light Industrial	23,567	12%
Building F - General Light Industrial	23,289	12%
	196,996	100%

4) Emission Source Configuration

1) Vehicle traffic represented by a line source
2) Onsite idling represented as a series of point sources

5) Venicle Trip Lengths

Onsite Travel Links

	Travel Distance (m)	**Trip Distance (mi)**
Building A driveway to Loading Docks	185	0.115
Building B driveway to Loading Docks	214	0.133
Building C driveway to Loading Docks	329	0.204
Building D driveway to Loading Docks	196	0.122
Building E driveway to Loading Docks	286	0.178
Building F driveway to Loading Docks	264	0.164

Off site Travel Links

	Travel Distance (m)	**Travel Distance (mi)**	**% of Truck Travel**
Offsite 1: North from I215 > East on Alessandro Boulevard >North on Old 215 Frontage Road to the Project driveway	619	0.385	100%
Offsite 2: Project driveway on Old 215 Frontage Road > North on Old 215 Frontage Road > West on Eucalyptus Ave to I215 Old Frontage Road to I215	1894	1.177	100%

6) Other Input Parameters

Facility Operations for Warehouses (hr/day):	24
Annual Operations (days/year)	365

Alessandro Boulevard and I215 Old Industrial Project **2022**

Building	Building Size Total (sq-ft)
Building A - Warehouse	49,999
Building B - General Light Industrial	26,368
Building C - General Light Industrial	29,750
Building D - Warehouse	44,023
Building E - General Light Industrial	23,567
Building F - General Light Industrial	23,289
Total	196,996

Trip Generation

Building	Daily Trip Rate (trips/TSF)	Daily Trips trips/day (Non-PCE)
Building A - Warehouse	1.74	87
Building B - General Light Industrial	4.96	131
Building C - General Light Industrial	4.96	148
Building D - Warehouse	1.74	77
Building E - General Light Industrial	4.96	117
Building F - General Light Industrial	4.96	116
Total		674

Vehlcle Fleet Mix

Land Use	Vehicle Class	Classification Percentage	Vehicle Trips
Warehousing	Passenger Cars	69.20%	113
(Buildings A and D)	2-axle Trucks (LHDT)	5.15%	8
	3-axle Trucks (MHDT)	6.38%	10
	4-axle Trucks (HHDT)	19.26%	32
	Total	99.99%	164
General Light Industrial	Passenger Cars	78.60%	401
(Buildings B, C, E, and F)	2-axle Trucks (LHDT)	8.00%	41
	3-axle Trucks (MHDT)	3.90%	20
	4-axle Trucks (HHDT)	9.50%	49
	Total	100.00%	511
Total Trips	Passenger Cars	76.3%	515
	2-axle Trucks (LHDT)	7.3%	49
	3-axle Trucks (MHDT)	4.5%	30
	4-axle Trucks (HHDT)	11.9%	80
	Total	100.0%	674

Number of Daily Truck Trips

Building	2-axle Truck Trips (LHDT)	3-axle Truck Trips (MHDT)	4-axle Truck Trips (HHDT)	
Building A - Warehouse	4	6	17	
Building B - General Light Industrial	10	5	12	
Building C - General Light Industrial	12	6	14	
Building D - Warehouse	4	5	15	
Building E - General Light Industrial	9	5	11	
Building F - General Light Industrial	9	5	11	
Total	**49**	**30**	**80**	**160**

Light Heavy Duty Truck Split (2-axle Trucks) from EMFAC2017

LHDT1	78.7%
LHDT2	21.3%

% of Diesel Vehicles from EMFAC2017

Vehicle	% Diesel
LHDT1 - 2-axle Truck	**51.5%**
LHDT2 - 2 axle Truck	**73.7%**
MHDT - 3-axle Truck	**93.2%**
HHDT - 4-axle Truck	**100.0%**

Number of Daily Diesel Trucks

Building	2-axle DSL Truck Trips (LHDT1)	2-axle DSL Truck Trips (LHDT2)	3-axle DSL Truck Trips (MHDT)	4-axle DSL Truck Trips (HHDT)
Building A - Warehouse	2	1	5	17
Building B - General Light Industrial	4	2	5	12
Building C - General Light Industrial	5	2	5	14
Building D - Warehouse	2	1	5	15
Building E - General Light Industrial	4	1	4	11
Building F - General Light Industrial	4	1	4	11
Total	**20**	**8**	**28**	**80**

Alessandro Boulevard and I215 Old Industrial Project

Pollutant: DPM
Year: 2022

Emission Summary

Onsite Emissions	Emissions (g/sec)	Emissions (lbs/day)
Building A - Warehouse	1.70E-06	3.23E-04
Building B - General Light Industrial	2.02E-06	3.84E-04
Building C - General Light Industrial	3.50E-06	6.65E-04
Building D - Warehouse	1.59E-06	3.02E-04
Building E - General Light Industrial	2.41E-06	4.58E-04
Building F - General Light Industrial	2.20E-06	4.18E-04
Total	1.34E-05	2.55E-03

Idling Emissions	Emissions (g/sec)	Emissions (lbs/day)	Idling Locations	Emissions per Idling Location (g/sec)
Building A - Warehouse	3.30E-06	6.27E-04	4	8.24E-07
Building B - General Light Industrial	5.60E-06	1.07E-03	3	1.87E-06
Building C - General Light Industrial	6.32E-06	1.20E-03	3	2.11E-06
Building D - Warehouse	2.90E-06	5.52E-04	4	7.26E-07
Building E - General Light Industrial	5.01E-06	9.53E-04	3	1.67E-06
Building F - General Light Industrial	4.95E-06	9.42E-04	3	1.65E-06
Total	2.81E-05	5.34E-03		

Offsite Emissions	Emissons (g/sec)	Emissions (lb/day)
Offsite 1	7.18E-06	1.37E-03
Offsite 2	2.20E-05	4.18E-03
Total	2.91E-05	5.55E-03

Fire Pum p Emissions	Emissions (g/sec)	Emissions (lbs/day)
Building A - Warehouse	4.26E-05	5.75E-02
Building B - General Light Industrial	4.26E-05	5.75E-02
Building C - General Light Industrial	4.26E-05	5.75E-02
Building D - Warehouse	4.26E-05	5.75E-02
Building E - General Light Industrial	4.26E-05	5.75E-02
Building F - General Light Industrial	4.26E-05	5.75E-02
Total	2.56E-04	3.45E-01

Total All Sources	3.26E-04	3.58E-01

Alessandro Boulevard and I215 Old Industrial Project

CalEEMod Estimated DPM Emissions from The Fire Pumps

Pump	238	hp
Emission Factor:	0.15	g/hp-hr
Usage Rate:	50	hours/year
Load Factor	0.73	

Annual Emission from CalEEMod:	0.00148	tons/year		
	2.96	pounds/year		
	0.0575	pounds/hour		
	4.26E-05	grams/sec		
Building A	4.26E-05	grams/sec	5.75E-02	pounds/day
Building B	4.26E-05	grams/sec	5.75E-02	pounds/day
Building C	4.26E-05	grams/sec	5.75E-02	pounds/day
Building D	4.26E-05	grams/sec	5.75E-02	pounds/day
Building E	4.26E-05	grams/sec	5.75E-02	pounds/day
Building F	4.26E-05	grams/sec	5.75E-02	pounds/day
Total	2.56E-04	grams/sec	3.45E-01	pounds/day

Manufactu Peerless Pump Model 6AEF14Q
John Deer Model 6068HFC48B
Diesel Fuel

Rated Power:	187	hp		
Peak Pump Power:	228	hp		
Engine Power:	238	hp		
Exhaust Flow:	1513	cf/min		
Exhaust Temp:	453	c or	847	k
Stack Dia.	6	in or	0.15	m
Stack Height	5.50	m		
Maintenance Hours:	50	hours/year		
Load Factor	0.73			

Alessandro Boulevard and I215 Old Industrial Project **Year: 2022**
Emissions from Onsite Delivery and TRU Travel
DPM Emissions

Truck Operations

		Onsite		DSL Daily	DSL Daily	DSL Daily	DSL Daily	DSL Daily	DSL Daily	DSL Daily	DSL Daily	DSL Daily	DSL Daily Total	DSL Daily	DSL Daily Total	DSL Daily Total	DSL Total
		Trip Length	Operations	HHDT	MHDT	LHDT1	LHDT2	TRU	HHDT	MHDT	LHDT1	LHDT2	Trucks	TRU	Truck+TRU	Truck+TRU	Truck+TRU
AERMOD ID	On-Site Truck Delivery Emissions	(mi)	(hours)	Trips	Trips	Trips	Trips	Trips	(g/day)	(g/day)	(g/day)	(g/day)	(g/day)	(g/day)	(g/day)	(lb/day)	(g/sec)
Onsite A	Exhaust Emissions - Truck Travel to Building A	0.115	24	17	5	2	1	0	8.35E-02	4.17E-02	1.60E-02	5.52E-03	1.47E-01	0.00E+00	1.47E-01	3.23E-04	1.70E-06
Onsite B	Exhaust Emissions - Truck Travel to Building B	0.133	24	12	5	4	2	0	7.17E-02	4.44E-02	4.32E-02	1.49E-02	1.74E-01	0.00E+00	1.74E-01	3.84E-04	2.02E-06
Onsite C	Exhaust Emissions - Truck Travel to Building C	0.204	24	14	5	5	2	0	1.24E-01	7.70E-02	7.50E-02	2.58E-02	3.02E-01	0.00E+00	3.02E-01	6.65E-04	3.50E-06
Onsite D	Exhaust Emissions - Truck Travel to Building D	0.122	24	15	5	2	1	0	7.79E-02	3.89E-02	1.49E-02	5.14E-03	1.37E-01	0.00E+00	1.37E-01	3.02E-04	1.59E-06
Onsite E	Exhaust Emissions - Truck Travel to Building E	0.178	24	11	4	4	1	0	8.56E-02	5.30E-02	5.17E-02	1.78E-02	2.08E-01	0.00E+00	2.08E-01	4.58E-04	2.41E-06
Onsite F	Exhaust Emissions - Truck Travel to Building F	0.164	24	11	4	4	1	0	7.81E-02	4.84E-02	4.71E-02	1.62E-02	1.90E-01	0.00E+00	1.90E-01	4.18E-04	2.20E-06
				80	28	20	8	0	5.21E-01	3.03E-01	2.48E-01	8.54E-02	1.16E+00	0.00E+00	1.16E+00	2.55E-03	1.34E-05

Operation Days = 365
Delivery Truck Hours (hrs/day) = 24
Delivery Truck Speed (mph) = 5

Daily Truck Emissions = Emission Factor (g/mi) x Trips/day x miles/trip

Diesel Truck Emission Factors (EMFAC2017)
2-Axle (LHDT1) = 0.077
2-axle (LHDT2) 0.068
3-Axle MHDT (g/mi) = 0.070
4-Axle HHD (g/mi) = 0.043
Truck emissions for trucks based on EMFAC 2017 for truck speed of 5 mph Riverside County (SC) 2022
Truck emissions (lb/hr) = EF (g/mi) * Road Length (mi) * No. Trips / Hours per day * conversion factors

Notes:
Emission factor derived from CARB EMFAC2017 model as the fleet average for Riverside County (SC) 2022

Alessandro Boulevard and I215 Old Industri 2022
Onsite Truck Delivery Iding and TRU Operational Emissions
DPM Emissions

Truck Onsite Idling and TRU Operations

		Average Daily Truck Deliveries					Idle Time	HHDT	MHDT	LHDT1	LHDT2	Total	TRU	TRU	Total	Emissions	Emissions
AERMOD ID	User/ Location	HHDT Trucks	MHDT Trucks	LHDT1 Trucks	LHDT2 Trucks	TRU Number	per Event (hour)	Emissions (g/day)	Emissions (g/day)	Emissions (g/day)	Emissions (g/day)	Truck (g/day)	OP Time (hours/day)	Emissions (g/day)	Emissions (g/day)	Average (lb/day)	Average (g/sec)
Truck Idling Sources																	
IBA	Idling Sources - Building A	8	3	1	0	0	0.250	3.19E-02	9.19E-02	1.06E-01	5.50E-02	2.85E-01	0.500	0.00E+00	2.85E-01	6.27E-04	3.30E-06
IBB	Idling Sources - Building B	6	2	2	1	0	0.250	2.37E-02	8.45E-02	2.47E-01	1.28E-01	4.84E-01	0.500	0.00E+00	4.84E-01	1.07E-03	5.60E-06
IBC	Idling Sources - Building C	7	3	2	1	0	0.250	2.67E-02	9.53E-02	2.79E-01	1.45E-01	5.46E-01	0.500	0.00E+00	5.46E-01	1.20E-03	6.32E-06
IBD	Idling Sources - Building D	7	2	1	0	0	0.250	2.81E-02	8.09E-02	9.33E-02	4.84E-02	2.51E-01	0.500	0.00E+00	2.51E-01	5.52E-04	2.90E-06
IBE	Idling Sources - Building F	6	2	2	1	0	0.250	2.12E-02	7.55E-02	2.21E-01	1.15E-01	4.33E-01	0.500	0.00E+00	4.33E-01	9.53E-04	5.01E-06
IBF	Idling Sources - Building F	5	2	2	1	0	0.250	2.09E-02	7.46E-02	2.19E-01	1.13E-01	4.28E-01	0.500	0.00E+00	4.28E-01	9.42E-04	4.95E-06
Totals		**40**	**14**	**10**	**4**	**0**		**5.56E-02**	**1.76E-01**	**3.53E-01**	**1.83E-01**	**7.69E-01**		**0.00E+00**	**7.69E-01**	**1.69E-03**	**8.90E-06**

Daily Operation = 24 per day
Operation Days = 365 days/year

Diesel Truck Emission Factors[b]

LHDT1 Truck Idle Emissions (g/hr)= 0.467 g/hr
LHDT2 Truck Idle Emissions (g/hr)= 0.625 g/hr
MHDT Truck Idle Emissions (g/hr) = 0.142 g/hr
HHD Truck Idle Emissions (g/hr) = 0.015 g,hr

Truck idle time (min) = 15 min

Truck idle emissions (g/sec) = Idle EF (g/hr) * idle time (min)/60 / daily hours (hr)/3600 * No. trucks

Notes:
TRU emission factor from OFFROAD2017

Idling emission factor derived from CARB EMFAC2017 model as the fleet average for Riverside County in 2022

Alessandro Boulevard and I215 Old Industrial Project **Year: 2022**
Emissions from Offsite Vehicle Travel

Truck Operations

Off-Site Truck Delivery Emissions

AERMOD ID		Trip Length	Operations	Number of HHDT	Number of MHDT	Number of LHDT1	Number of LHDT2	Number of TRU	HHDT Emissions	MHDT Emissions	LHDT1 Emissions	LHDT2 Emissions	Total Emissions			
Trip Name	**Trip Description**	**(mi)**	**(hr)**	**(trucks/day)**	**(trucks/day)**	**(trucks/day)**	**(trucks/day)**	**(number)**	**(grams/day)**	**(grams/day)**	**(grams/day)**	**(grams/day)**	**Truck Emissions (g/day)**	**TRU Total (grams/day)**	**Daily Total (lbs/day)**	**Hourly Ave (grams/sec)**
OFFSITE1	Offsite 1: North from I215 > East on Alessandro Boulevard >North on Old 215 Frontage Road to the Project driveway	0.385	24	40	14	10	4	0	2.82E-01	1.94E-01	1.06E-01	3.88E-02	6.20E-01	0.00E+00	1.37E-03	7.18E-06
OFFSITE2	Offsite 2: Project driveway on Old 215 Frontage Road > North on Old 215 Frontage Road > West on Eucalyptus Ave to I215 Old Frontage Road to I215	1.177	24	40	14	10	4	0	8.62E-01	5.94E-01	3.23E-01	1.19E-01	1.90E+00	0.00E+00	4.18E-03	2.20E-05
Total				**80**	**28**	**20**	**8**	**0**	**1.14E+00**	**7.88E-01**	**4.29E-01**	**1.58E-01**	**2.52E+00**	**0.00E+00**	**5.55E-03**	**2.91E-05**

Operation Days = 365
Delivery Truck Hours (hrs/day) = 24
Delivery Truck Speed (mph) = 25
Diesel Truck Emission Factors (EMFAC2017)
2-axle LHDT1 (g/mi)= 0.028
2-axle LHDT2 (g/mi) = 0.026
3-Axle MHDT (g/mi) = 0.036
4-Axle HHD (g/mi) = 0.018

Truck emissions for trucks based on EMFAC 2017 for truck speed of 25 mph and Riverside County (SC) 2022
Truck emissions (lb/hr) = EF (g/mi) * Road Length (mi) * No. Trips / Hours per day * conversion factors

Source: EMFAC Riverside County (SC)
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	VMT
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Diesel	239612.1
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Diesel	601.668
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Diesel	48028.56
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Diesel	530194.9
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Diesel	205588.3
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Diesel	137165.9
Riverside (SC)	2022	T6-MHDT	Aggregate	Aggregate	Diesel	740259.9
Riverside (SC)	2022	T7-HHDT	Aggregate	Aggregate	Diesel	1943054
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Electricity	374200.2
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Electricity	14552.99
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Electricity	52184.74
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Electricity	29245.37
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Gasoline	23700815
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Gasoline	2261930
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Gasoline	7165411
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Gasoline	499086.1
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Gasoline	73474.64
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Gasoline	5597390
Riverside (SC)	2022	T6-MHDT	Aggregate	Aggregate	Gasoline	54049.91
Riverside (SC)	2022	T7-HHDT	Aggregate	Aggregate	Gasoline	469.2901

	DSL-VMT	GAS-VMT	%DSL-VMT
LDA	239612.1	23700815	0.010009
LDT1	601.668	2261930	0.000266
LDT2	48028.56	7165411	0.006658
LHDT1	530194.9	499086.1	0.515112
LHDT2	205588.3	73474.64	0.736709
MDV	137165.9	5597390	0.023919
T6-MHDT	740259.9	54049.91	0.931954
T7-HHDT	1943054	469.2901	0.999759
Total	3844505	39352626	43197131

	VMT-DSL	VMT-GAS	VMT-Total	% Total
LHDT1	530194.9	499086.1	1029281	0.786705
LHDT2	205588.3	73474.64	279062.9	0.213295
	735783.2	572560.7	1308344	

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	VMT	NOx_RUNE	PM2.5_RU	PM10_RUI	CO2_RUNE	CH4_RUNE	N2O_RUNI	ROG_RUNI	TOG_RUNI	CO_RUNEX	SOx_RUNEX
Riverside (SC)	2022	LHDT1	Aggregate	5	Diesel	913.1152	2.061171	0.073399	0.076718	1231.332	0.035676	0.193548	0.768091	0.87442	3.179126	0.011641
Riverside (SC)	2022	LHDT2	Aggregate	5	Diesel	354.0694	1.760751	0.065215	0.068164	1301.353	0.035329	0.204555	0.760614	0.865908	3.230212	0.012302
Riverside (SC)	2022	T6-MHDT	Aggregate	5	Diesel	1658.394	7.838315	0.067185	0.070223	2376.486	0.030909	0.373551	0.665454	0.757569	1.635134	0.022452
Riverside (SC)	2022	T7-HHDT	Aggregate	5	Diesel	3508.63	14.9926	0.041514	0.043391	3689.988	0.023241	0.580015	0.500369	0.569631	2.674518	0.034861
Riverside (SC)	2022	LHDT1	Aggregate	25	Diesel	9481.661	2.200071	0.026325	0.027515	511.0423	0.006156	0.080329	0.132534	0.150882	0.614222	0.004831
Riverside (SC)	2022	LHDT2	Aggregate	25	Diesel	3676.607	1.769049	0.024954	0.026082	585.1806	0.005454	0.091982	0.117413	0.133666	0.54821	0.005532
Riverside (SC)	2022	T6-MHDT	Aggregate	25	Diesel	14987.53	2.966699	0.034159	0.035704	1181.216	0.004869	0.185671	0.104827	0.119338	0.367141	0.01116
Riverside (SC)	2022	T7-HHDT	Aggregate	25	Diesel	35994.02	5.2185	0.017516	0.018308	1749.633	0.005358	0.275018	0.115349	0.131316	0.588739	0.01653

Idling Emission Factors

2022	Annual	Riverside (S	HHDT	IDLEX	PM10	0.015241
2022	Annual	Riverside (S	LHDT1	IDLEX	PM10	0.466914
2022	Annual	Riverside (S	LHDT2	IDLEX	PM10	0.625075
2022	Annual	Riverside (S	MHDT	IDLEX	PM10	0.142127

♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

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

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

**Model Uses URBAN Dispersion Algorithm for the SBL for 542 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 2000000.0 ; Urban Roughness Length = 1.000 m

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

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

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: DPM

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

**This Run Includes: 542 Source(s); 1 Source Group(s); and 63 Receptor(s)

with: 26 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 516 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

**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) = 450.00 ; 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 = 4.5 MB of RAM.

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

**Detailed Error/Message File: FrontageRd_DPM.err
**File for Summary of Results: FrontageRd_DPM.sum
♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	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 VARY BY	EMIS RATE SCALAR
IBA1	0	0.82400E-06	473876.1	3753266.2	470.5	3.66	366.48	51.70	0.10	YES	YES	NO	
IBA2	0	0.82400E-06	473882.9	3753266.1	470.7	3.66	366.48	51.70	0.10	YES	YES	NO	
IBA3	0	0.82400E-06	473888.7	3753266.4	470.9	3.66	366.48	51.70	0.10	YES	YES	NO	
IBA4	0	0.82400E-06	473893.8	3753266.3	471.1	3.66	366.48	51.70	0.10	YES	YES	NO	
IBB1	0	0.18700E-05	473919.3	3753273.0	471.5	3.66	366.48	51.70	0.10	YES	YES	NO	
IBB2	0	0.18700E-05	473919.3	3753280.0	471.6	3.66	366.48	51.70	0.10	YES	YES	NO	
IBB3	0	0.18700E-05	473919.0	3753286.5	471.7	3.66	366.48	51.70	0.10	YES	YES	NO	

IBC1	0	0.21100E-05	473984.5	3753287.1	470.8	3.66	366.48	51.70	0.10	YES	YES	NO
IBC2	0	0.21100E-05	473984.5	3753294.1	470.8	3.66	366.48	51.70	0.10	YES	YES	NO
IBC3	0	0.21100E-05	473984.2	3753300.6	470.8	3.66	366.48	51.70	0.10	YES	YES	NO
IBD1	0	0.72600E-06	473884.8	3753128.9	469.4	3.66	366.48	51.70	0.10	YES	YES	NO
IBD2	0	0.72600E-06	473884.8	3753136.0	469.7	3.66	366.48	51.70	0.10	YES	YES	NO
IBD3	0	0.72600E-06	473884.5	3753142.4	469.9	3.66	366.48	51.70	0.10	YES	YES	NO
IBD4	0	0.72600E-06	473884.4	3753150.8	470.2	3.66	366.48	51.70	0.10	YES	YES	NO
IBE1	0	0.16700E-05	473955.8	3753123.8	468.9	3.66	366.48	51.70	0.10	YES	YES	NO
IBE2	0	0.16700E-05	473955.8	3753130.8	468.9	3.66	366.48	51.70	0.10	YES	YES	NO
IBE3	0	0.16700E-05	473955.5	3753137.2	469.1	3.66	366.48	51.70	0.10	YES	YES	NO
IBF1	0	0.16500E-05	474005.3	3753187.6	469.8	3.66	366.48	51.70	0.10	YES	YES	NO
IBF2	0	0.16500E-05	474012.0	3753187.0	469.8	3.66	366.48	51.70	0.10	YES	YES	NO
IBF3	0	0.16500E-05	474017.8	3753187.3	469.7	3.66	366.48	51.70	0.10	YES	YES	NO
FPA	0	0.41300E-04	473818.5	3753199.7	469.1	5.50	847.00	40.18	0.15	YES	YES	NO
FPB	0	0.41300E-04	473957.5	3753205.2	470.5	5.50	847.00	40.18	0.15	YES	YES	NO
FPC	0	0.41300E-04	473978.9	3753215.1	470.5	5.50	847.00	40.18	0.15	YES	YES	NO
FPD	0	0.41300E-04	473801.6	3753173.7	468.5	5.50	847.00	40.18	0.15	YES	YES	NO
FPE	0	0.41300E-04	473909.3	3753181.5	470.9	5.50	847.00	40.18	0.15	YES	YES	NO
FPF	0	0.41300E-04	473980.4	3753191.9	470.0	5.50	847.00	40.18	0.15	YES	YES	NO

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	BASE X (METERS)	Y (METERS)	ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001703	0	0.21120E-06	473430.5	3752956.6	463.9	3.11	8.37	1.45	YES	
L0001704	0	0.21120E-06	473448.5	3752957.0	465.9	3.11	8.37	1.45	YES	
L0001705	0	0.21120E-06	473466.5	3752957.4	468.2	3.11	8.37	1.45	YES	
L0001706	0	0.21120E-06	473484.5	3752957.9	468.7	3.11	8.37	1.45	YES	

L0001707	0	0.21120E-06	473502.5	3752958.3	468.3	3.11	8.37	1.45	YES
L0001708	0	0.21120E-06	473520.5	3752958.7	467.9	3.11	8.37	1.45	YES
L0001709	0	0.21120E-06	473538.5	3752959.1	467.7	3.11	8.37	1.45	YES
L0001710	0	0.21120E-06	473556.5	3752959.5	467.7	3.11	8.37	1.45	YES
L0001711	0	0.21120E-06	473574.5	3752959.9	467.7	3.11	8.37	1.45	YES
L0001712	0	0.21120E-06	473592.5	3752960.4	467.8	3.11	8.37	1.45	YES
L0001713	0	0.21120E-06	473610.5	3752960.8	467.9	3.11	8.37	1.45	YES
L0001714	0	0.21120E-06	473628.5	3752961.2	468.2	3.11	8.37	1.45	YES
L0001715	0	0.21120E-06	473646.5	3752961.6	468.4	3.11	8.37	1.45	YES
L0001716	0	0.21120E-06	473664.4	3752962.0	468.8	3.11	8.37	1.45	YES
L0001717	0	0.21120E-06	473682.4	3752962.4	469.1	3.11	8.37	1.45	YES
L0001718	0	0.21120E-06	473700.4	3752962.8	469.3	3.11	8.37	1.45	YES
L0001719	0	0.21120E-06	473718.4	3752963.3	469.5	3.11	8.37	1.45	YES
L0001720	0	0.21120E-06	473736.4	3752963.7	469.5	3.11	8.37	1.45	YES
L0001721	0	0.21120E-06	473754.4	3752964.1	469.5	3.11	8.37	1.45	YES
L0001722	0	0.21120E-06	473772.4	3752964.5	469.4	3.11	8.37	1.45	YES
L0001723	0	0.21120E-06	473790.4	3752964.9	469.0	3.11	8.37	1.45	YES
L0001724	0	0.21120E-06	473808.4	3752965.3	468.9	3.11	8.37	1.45	YES
L0001725	0	0.21120E-06	473826.4	3752965.8	468.8	3.11	8.37	1.45	YES
L0001726	0	0.21120E-06	473821.0	3752982.3	468.5	3.11	8.37	1.45	YES
L0001727	0	0.21120E-06	473815.0	3752999.2	468.2	3.11	8.37	1.45	YES
L0001728	0	0.21120E-06	473809.0	3753016.2	468.1	3.11	8.37	1.45	YES
L0001729	0	0.21120E-06	473803.0	3753033.2	467.9	3.11	8.37	1.45	YES
L0001730	0	0.21120E-06	473797.0	3753050.1	467.7	3.11	8.37	1.45	YES
L0001731	0	0.21120E-06	473791.0	3753067.1	467.7	3.11	8.37	1.45	YES
L0001732	0	0.21120E-06	473784.9	3753084.0	467.7	3.11	8.37	1.45	YES
L0001733	0	0.21120E-06	473778.9	3753101.0	467.7	3.11	8.37	1.45	YES
L0001734	0	0.21120E-06	473772.9	3753118.0	467.8	3.11	8.37	1.45	YES
L0001735	0	0.21120E-06	473766.9	3753134.9	467.9	3.11	8.37	1.45	YES
L0001736	0	0.21120E-06	473760.9	3753151.9	468.0	3.11	8.37	1.45	YES
L0001737	0	0.27470E-06	473753.4	3753179.7	468.1	3.11	11.16	1.45	YES
L0001738	0	0.27470E-06	473745.2	3753202.2	468.2	3.11	11.16	1.45	YES
L0001739	0	0.27470E-06	473737.1	3753224.8	468.4	3.11	11.16	1.45	YES
L0001740	0	0.27470E-06	473728.9	3753247.4	468.6	3.11	11.16	1.45	YES
L0001741	0	0.27470E-06	473720.8	3753270.0	468.7	3.11	11.16	1.45	YES
L0001742	0	0.27470E-06	473712.6	3753292.5	468.8	3.11	11.16	1.45	YES

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001743	0	0.27470E-06	473704.5	3753315.1	468.9	3.11	11.16	1.45	YES	
L0001744	0	0.27470E-06	473696.3	3753337.7	468.9	3.11	11.16	1.45	YES	
L0001745	0	0.27470E-06	473688.2	3753360.3	468.9	3.11	11.16	1.45	YES	
L0001746	0	0.27470E-06	473680.0	3753382.8	468.8	3.11	11.16	1.45	YES	
L0001747	0	0.27470E-06	473671.9	3753405.4	468.7	3.11	11.16	1.45	YES	
L0001748	0	0.27470E-06	473663.7	3753428.0	468.6	3.11	11.16	1.45	YES	

L0001749	0	0.27470E-06	473655.6	3753450.6	468.5	3.11	11.16	1.45	YES
L0001750	0	0.27470E-06	473647.4	3753473.1	468.4	3.11	11.16	1.45	YES
L0001751	0	0.27470E-06	473639.3	3753495.7	468.3	3.11	11.16	1.45	YES
L0001752	0	0.27470E-06	473631.1	3753518.3	468.1	3.11	11.16	1.45	YES
L0001753	0	0.27470E-06	473623.0	3753540.8	468.0	3.11	11.16	1.45	YES
L0001754	0	0.27470E-06	473614.8	3753563.4	467.9	3.11	11.16	1.45	YES
L0001755	0	0.27470E-06	473606.7	3753586.0	467.7	3.11	11.16	1.45	YES
L0001756	0	0.27470E-06	473598.5	3753608.6	467.5	3.11	11.16	1.45	YES
L0001757	0	0.27470E-06	473590.4	3753631.1	467.1	3.11	11.16	1.45	YES
L0001758	0	0.27470E-06	473582.2	3753653.7	466.4	3.11	11.16	1.45	YES
L0001759	0	0.27470E-06	473574.1	3753676.3	466.2	3.11	11.16	1.45	YES
L0001760	0	0.27470E-06	473566.1	3753698.9	466.1	3.11	11.16	1.45	YES
L0001761	0	0.27470E-06	473558.3	3753721.6	466.0	3.11	11.16	1.45	YES
L0001762	0	0.27470E-06	473550.4	3753744.3	466.3	3.11	11.16	1.45	YES
L0001763	0	0.27470E-06	473542.5	3753767.0	466.6	3.11	11.16	1.45	YES
L0001764	0	0.27470E-06	473534.7	3753789.6	466.8	3.11	11.16	1.45	YES
L0001765	0	0.27470E-06	473526.8	3753812.3	467.0	3.11	11.16	1.45	YES
L0001766	0	0.27470E-06	473518.6	3753834.9	466.9	3.11	11.16	1.45	YES
L0001767	0	0.27470E-06	473510.4	3753857.4	466.9	3.11	11.16	1.45	YES
L0001768	0	0.27470E-06	473502.2	3753880.0	466.8	3.11	11.16	1.45	YES
L0001769	0	0.27470E-06	473494.0	3753902.5	466.9	3.11	11.16	1.45	YES
L0001770	0	0.27470E-06	473485.8	3753925.1	467.0	3.11	11.16	1.45	YES
L0001771	0	0.27470E-06	473477.6	3753947.6	467.3	3.11	11.16	1.45	YES
L0001772	0	0.27470E-06	473469.4	3753970.2	467.6	3.11	11.16	1.45	YES
L0001773	0	0.27470E-06	473461.1	3753992.7	467.8	3.11	11.16	1.45	YES
L0001774	0	0.27470E-06	473452.9	3754015.3	468.0	3.11	11.16	1.45	YES
L0001775	0	0.27470E-06	473444.7	3754037.8	468.4	3.11	11.16	1.45	YES
L0001776	0	0.27470E-06	473436.5	3754060.4	468.7	3.11	11.16	1.45	YES
L0001777	0	0.27470E-06	473428.3	3754082.9	469.0	3.11	11.16	1.45	YES
L0001778	0	0.27470E-06	473420.1	3754105.5	469.3	3.11	11.16	1.45	YES
L0001779	0	0.27470E-06	473411.9	3754128.0	469.7	3.11	11.16	1.45	YES
L0001780	0	0.27470E-06	473403.7	3754150.6	470.0	3.11	11.16	1.45	YES
L0001781	0	0.27470E-06	473395.5	3754173.1	470.4	3.11	11.16	1.45	YES
L0001782	0	0.27470E-06	473388.5	3754196.1	470.7	3.11	11.16	1.45	YES

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001783	0	0.27470E-06	473382.3	3754219.3	470.8	3.11	11.16	1.45	YES	
L0001784	0	0.27470E-06	473380.8	3754242.9	470.9	3.11	11.16	1.45	YES	
L0001785	0	0.27470E-06	473382.8	3754266.8	471.1	3.11	11.16	1.45	YES	
L0001786	0	0.27470E-06	473384.9	3754290.7	471.2	3.11	11.16	1.45	YES	
L0001787	0	0.27470E-06	473386.9	3754314.6	471.4	3.11	11.16	1.45	YES	
L0001788	0	0.27470E-06	473391.2	3754338.0	471.7	3.11	11.16	1.45	YES	
L0001789	0	0.27470E-06	473399.8	3754360.4	471.8	3.11	11.16	1.45	YES	
L0001790	0	0.27470E-06	473412.8	3754380.0	471.9	3.11	11.16	1.45	YES	

L0001791	0	0.27470E-06	473429.6	3754397.1	471.8	3.11	11.16	1.45	YES
L0001792	0	0.27470E-06	473447.5	3754412.6	471.8	3.11	11.16	1.45	YES
L0001793	0	0.27470E-06	473470.3	3754420.2	471.9	3.11	11.16	1.45	YES
L0001794	0	0.27470E-06	473493.1	3754427.6	472.0	3.11	11.16	1.45	YES
L0001795	0	0.27470E-06	473516.0	3754434.7	472.1	3.11	11.16	1.45	YES
L0001796	0	0.27470E-06	473537.9	3754443.6	472.3	3.11	11.16	1.45	YES
L0001797	0	0.27470E-06	473556.0	3754459.4	472.5	3.11	11.16	1.45	YES
L0001798	0	0.27470E-06	473574.1	3754475.2	472.5	3.11	11.16	1.45	YES
L0001799	0	0.27470E-06	473582.8	3754497.5	472.5	3.11	11.16	1.45	YES
L0001800	0	0.27470E-06	473591.2	3754519.9	472.6	3.11	11.16	1.45	YES
L0001801	0	0.27470E-06	473593.9	3754543.7	472.7	3.11	11.16	1.45	YES
L0001802	0	0.27470E-06	473595.7	3754567.6	472.6	3.11	11.16	1.45	YES
L0001803	0	0.27470E-06	473595.6	3754589.7	472.6	3.11	11.16	1.45	YES
L0001804	0	0.27470E-06	473571.6	3754589.8	472.4	3.11	11.16	1.45	YES
L0001805	0	0.27470E-06	473547.6	3754589.8	472.1	3.11	11.16	1.45	YES
L0001806	0	0.27470E-06	473523.6	3754589.9	472.0	3.11	11.16	1.45	YES
L0001807	0	0.27470E-06	473499.6	3754589.9	472.2	3.11	11.16	1.45	YES
L0001808	0	0.27470E-06	473475.6	3754589.9	472.4	3.11	11.16	1.45	YES
L0001809	0	0.27470E-06	473451.6	3754590.0	472.6	3.11	11.16	1.45	YES
L0001810	0	0.27470E-06	473427.6	3754590.0	472.8	3.11	11.16	1.45	YES
L0001811	0	0.27470E-06	473403.6	3754590.1	473.3	3.11	11.16	1.45	YES
L0001812	0	0.27470E-06	473379.6	3754590.1	473.9	3.11	11.16	1.45	YES
L0001813	0	0.27470E-06	473355.6	3754590.1	474.3	3.11	11.16	1.45	YES
L0001814	0	0.27470E-06	473331.6	3754590.2	473.1	3.11	11.16	1.45	YES
L0001815	0	0.27470E-06	473307.6	3754590.2	469.7	3.11	11.16	1.45	YES
L0001816	0	0.33330E-07	473763.8	3753209.9	468.2	3.66	1.70	0.85	YES
L0001817	0	0.33330E-07	473767.3	3753211.0	468.3	3.66	1.70	0.85	YES
L0001818	0	0.33330E-07	473770.8	3753212.1	468.3	3.66	1.70	0.85	YES
L0001819	0	0.33330E-07	473774.3	3753213.2	468.3	3.66	1.70	0.85	YES
L0001820	0	0.33330E-07	473777.8	3753214.3	468.3	3.66	1.70	0.85	YES
L0001821	0	0.33330E-07	473781.3	3753215.4	468.4	3.66	1.70	0.85	YES
L0001822	0	0.33330E-07	473784.8	3753216.5	468.4	3.66	1.70	0.85	YES

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	BASE X (METERS)	Y (METERS)	ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001823	0	0.33330E-07	473788.3	3753217.6	468.4	3.66	1.70	0.85	YES	
L0001824	0	0.33330E-07	473791.7	3753218.7	468.4	3.66	1.70	0.85	YES	
L0001825	0	0.33330E-07	473795.2	3753219.8	468.5	3.66	1.70	0.85	YES	
L0001826	0	0.33330E-07	473798.7	3753220.9	468.5	3.66	1.70	0.85	YES	
L0001827	0	0.33330E-07	473802.2	3753222.0	468.6	3.66	1.70	0.85	YES	
L0001828	0	0.33330E-07	473804.0	3753224.3	468.7	3.66	1.70	0.85	YES	
L0001829	0	0.33330E-07	473804.1	3753228.0	468.7	3.66	1.70	0.85	YES	
L0001830	0	0.33330E-07	473804.1	3753231.6	468.7	3.66	1.70	0.85	YES	
L0001831	0	0.33330E-07	473804.2	3753235.3	468.7	3.66	1.70	0.85	YES	
L0001832	0	0.33330E-07	473804.2	3753238.9	468.7	3.66	1.70	0.85	YES	

L0001833	0	0.33330E-07	473804.3	3753242.6	468.7	3.66	1.70	0.85	YES
L0001834	0	0.33330E-07	473804.3	3753246.2	468.8	3.66	1.70	0.85	YES
L0001835	0	0.33330E-07	473804.4	3753249.9	468.8	3.66	1.70	0.85	YES
L0001836	0	0.33330E-07	473804.4	3753253.6	468.9	3.66	1.70	0.85	YES
L0001837	0	0.33330E-07	473804.5	3753257.2	468.9	3.66	1.70	0.85	YES
L0001838	0	0.33330E-07	473804.5	3753260.9	469.0	3.66	1.70	0.85	YES
L0001839	0	0.33330E-07	473804.6	3753264.5	469.0	3.66	1.70	0.85	YES
L0001840	0	0.33330E-07	473807.3	3753266.2	469.1	3.66	1.70	0.85	YES
L0001841	0	0.33330E-07	473810.8	3753267.4	469.1	3.66	1.70	0.85	YES
L0001842	0	0.33330E-07	473814.3	3753268.5	469.1	3.66	1.70	0.85	YES
L0001843	0	0.33330E-07	473817.7	3753269.7	469.2	3.66	1.70	0.85	YES
L0001844	0	0.33330E-07	473821.2	3753270.8	469.2	3.66	1.70	0.85	YES
L0001845	0	0.33330E-07	473824.7	3753272.0	469.3	3.66	1.70	0.85	YES
L0001846	0	0.33330E-07	473828.1	3753273.1	469.3	3.66	1.70	0.85	YES
L0001847	0	0.33330E-07	473831.6	3753274.3	469.4	3.66	1.70	0.85	YES
L0001848	0	0.33330E-07	473835.1	3753275.4	469.4	3.66	1.70	0.85	YES
L0001849	0	0.33330E-07	473838.6	3753276.6	469.4	3.66	1.70	0.85	YES
L0001850	0	0.33330E-07	473842.0	3753277.7	469.5	3.66	1.70	0.85	YES
L0001851	0	0.33330E-07	473845.5	3753278.9	469.5	3.66	1.70	0.85	YES
L0001852	0	0.33330E-07	473849.0	3753280.0	469.6	3.66	1.70	0.85	YES
L0001853	0	0.33330E-07	473852.5	3753281.1	469.7	3.66	1.70	0.85	YES
L0001854	0	0.33330E-07	473855.9	3753282.3	469.9	3.66	1.70	0.85	YES
L0001855	0	0.33330E-07	473859.4	3753283.4	470.0	3.66	1.70	0.85	YES
L0001856	0	0.33330E-07	473862.9	3753284.6	470.2	3.66	1.70	0.85	YES
L0001857	0	0.33330E-07	473866.4	3753285.7	470.3	3.66	1.70	0.85	YES
L0001858	0	0.33330E-07	473869.8	3753286.9	470.4	3.66	1.70	0.85	YES
L0001859	0	0.33330E-07	473872.2	3753285.5	470.5	3.66	1.70	0.85	YES
L0001860	0	0.33330E-07	473873.7	3753282.1	470.5	3.66	1.70	0.85	YES
L0001861	0	0.33330E-07	473875.3	3753278.8	470.5	3.66	1.70	0.85	YES
L0001862	0	0.33330E-07	473876.8	3753275.5	470.5	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001863	0	0.33330E-07	473878.3	3753272.2	470.6	3.66	1.70	0.85	YES	
L0001864	0	0.33330E-07	473879.9	3753268.9	470.6	3.66	1.70	0.85	YES	
L0001865	0	0.33330E-07	473881.4	3753265.6	470.7	3.66	1.70	0.85	YES	
L0001866	0	0.33330E-07	473883.0	3753262.2	470.8	3.66	1.70	0.85	YES	
L0001867	0	0.34830E-07	473762.9	3753209.6	468.2	3.66	1.70	0.85	YES	
L0001868	0	0.34830E-07	473766.4	3753210.8	468.3	3.66	1.70	0.85	YES	
L0001869	0	0.34830E-07	473769.8	3753212.0	468.3	3.66	1.70	0.85	YES	
L0001870	0	0.34830E-07	473773.3	3753213.2	468.3	3.66	1.70	0.85	YES	
L0001871	0	0.34830E-07	473776.8	3753214.3	468.3	3.66	1.70	0.85	YES	
L0001872	0	0.34830E-07	473780.2	3753215.5	468.4	3.66	1.70	0.85	YES	
L0001873	0	0.34830E-07	473783.7	3753216.7	468.4	3.66	1.70	0.85	YES	
L0001874	0	0.34830E-07	473787.1	3753217.8	468.4	3.66	1.70	0.85	YES	

L0001875	0	0.34830E-07	473790.6	3753219.0	468.4	3.66	1.70	0.85	YES
L0001876	0	0.34830E-07	473794.1	3753220.2	468.5	3.66	1.70	0.85	YES
L0001877	0	0.34830E-07	473797.5	3753221.4	468.5	3.66	1.70	0.85	YES
L0001878	0	0.34830E-07	473801.0	3753222.5	468.6	3.66	1.70	0.85	YES
L0001879	0	0.34830E-07	473803.7	3753224.3	468.7	3.66	1.70	0.85	YES
L0001880	0	0.34830E-07	473803.7	3753227.9	468.7	3.66	1.70	0.85	YES
L0001881	0	0.34830E-07	473803.7	3753231.6	468.7	3.66	1.70	0.85	YES
L0001882	0	0.34830E-07	473803.8	3753235.2	468.7	3.66	1.70	0.85	YES
L0001883	0	0.34830E-07	473803.8	3753238.9	468.7	3.66	1.70	0.85	YES
L0001884	0	0.34830E-07	473803.8	3753242.5	468.7	3.66	1.70	0.85	YES
L0001885	0	0.34830E-07	473803.9	3753246.2	468.8	3.66	1.70	0.85	YES
L0001886	0	0.34830E-07	473803.9	3753249.9	468.8	3.66	1.70	0.85	YES
L0001887	0	0.34830E-07	473803.9	3753253.5	468.9	3.66	1.70	0.85	YES
L0001888	0	0.34830E-07	473803.9	3753257.2	468.9	3.66	1.70	0.85	YES
L0001889	0	0.34830E-07	473804.0	3753260.8	468.9	3.66	1.70	0.85	YES
L0001890	0	0.34830E-07	473804.0	3753264.5	469.0	3.66	1.70	0.85	YES
L0001891	0	0.34830E-07	473807.0	3753266.0	469.1	3.66	1.70	0.85	YES
L0001892	0	0.34830E-07	473810.4	3753267.2	469.1	3.66	1.70	0.85	YES
L0001893	0	0.34830E-07	473813.9	3753268.3	469.1	3.66	1.70	0.85	YES
L0001894	0	0.34830E-07	473817.4	3753269.5	469.2	3.66	1.70	0.85	YES
L0001895	0	0.34830E-07	473820.8	3753270.6	469.2	3.66	1.70	0.85	YES
L0001896	0	0.34830E-07	473824.3	3753271.7	469.3	3.66	1.70	0.85	YES
L0001897	0	0.34830E-07	473827.8	3753272.9	469.3	3.66	1.70	0.85	YES
L0001898	0	0.34830E-07	473831.3	3753274.0	469.4	3.66	1.70	0.85	YES
L0001899	0	0.34830E-07	473834.7	3753275.2	469.4	3.66	1.70	0.85	YES
L0001900	0	0.34830E-07	473838.2	3753276.3	469.4	3.66	1.70	0.85	YES
L0001901	0	0.34830E-07	473841.7	3753277.5	469.5	3.66	1.70	0.85	YES
L0001902	0	0.34830E-07	473845.2	3753278.6	469.5	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001903	0	0.34830E-07	473848.6	3753279.8	469.6	3.66	1.70	0.85	YES	
L0001904	0	0.34830E-07	473852.1	3753280.9	469.7	3.66	1.70	0.85	YES	
L0001905	0	0.34830E-07	473855.6	3753282.1	469.9	3.66	1.70	0.85	YES	
L0001906	0	0.34830E-07	473859.0	3753283.2	470.0	3.66	1.70	0.85	YES	
L0001907	0	0.34830E-07	473862.5	3753284.4	470.2	3.66	1.70	0.85	YES	
L0001908	0	0.34830E-07	473866.0	3753285.5	470.3	3.66	1.70	0.85	YES	
L0001909	0	0.34830E-07	473869.5	3753286.4	470.4	3.66	1.70	0.85	YES	
L0001910	0	0.34830E-07	473873.2	3753286.4	470.6	3.66	1.70	0.85	YES	
L0001911	0	0.34830E-07	473876.8	3753286.4	470.7	3.66	1.70	0.85	YES	
L0001912	0	0.34830E-07	473880.5	3753286.3	470.8	3.66	1.70	0.85	YES	
L0001913	0	0.34830E-07	473884.1	3753286.3	471.0	3.66	1.70	0.85	YES	
L0001914	0	0.34830E-07	473887.8	3753286.3	471.1	3.66	1.70	0.85	YES	
L0001915	0	0.34830E-07	473891.4	3753286.2	471.2	3.66	1.70	0.85	YES	
L0001916	0	0.34830E-07	473895.1	3753286.2	471.4	3.66	1.70	0.85	YES	

L0001917	0	0.34830E-07	473898.8	3753286.1	471.5	3.66	1.70	0.85	YES
L0001918	0	0.34830E-07	473902.4	3753286.1	471.6	3.66	1.70	0.85	YES
L0001919	0	0.34830E-07	473906.1	3753286.1	471.6	3.66	1.70	0.85	YES
L0001920	0	0.34830E-07	473909.7	3753286.0	471.6	3.66	1.70	0.85	YES
L0001921	0	0.34830E-07	473913.4	3753286.0	471.7	3.66	1.70	0.85	YES
L0001922	0	0.34830E-07	473917.0	3753285.9	471.7	3.66	1.70	0.85	YES
L0001923	0	0.34830E-07	473920.7	3753285.9	471.7	3.66	1.70	0.85	YES
L0001924	0	0.34830E-07	473924.4	3753285.9	471.8	3.66	1.70	0.85	YES
L0001925	0	0.38890E-07	473767.8	3753172.9	468.0	3.66	1.70	0.85	YES
L0001926	0	0.38890E-07	473771.2	3753174.2	468.0	3.66	1.70	0.85	YES
L0001927	0	0.38890E-07	473774.7	3753175.4	468.0	3.66	1.70	0.85	YES
L0001928	0	0.38890E-07	473778.1	3753176.6	468.1	3.66	1.70	0.85	YES
L0001929	0	0.38890E-07	473781.6	3753177.8	468.2	3.66	1.70	0.85	YES
L0001930	0	0.38890E-07	473785.0	3753179.0	468.2	3.66	1.70	0.85	YES
L0001931	0	0.38890E-07	473788.5	3753180.2	468.3	3.66	1.70	0.85	YES
L0001932	0	0.38890E-07	473791.9	3753181.4	468.3	3.66	1.70	0.85	YES
L0001933	0	0.38890E-07	473795.4	3753182.6	468.4	3.66	1.70	0.85	YES
L0001934	0	0.38890E-07	473798.8	3753183.8	468.5	3.66	1.70	0.85	YES
L0001935	0	0.38890E-07	473802.3	3753185.1	468.6	3.66	1.70	0.85	YES
L0001936	0	0.38890E-07	473805.7	3753186.3	468.7	3.66	1.70	0.85	YES
L0001937	0	0.38890E-07	473809.2	3753187.5	468.9	3.66	1.70	0.85	YES
L0001938	0	0.38890E-07	473812.7	3753188.6	469.0	3.66	1.70	0.85	YES
L0001939	0	0.38890E-07	473816.3	3753188.6	469.1	3.66	1.70	0.85	YES
L0001940	0	0.38890E-07	473820.0	3753188.7	469.2	3.66	1.70	0.85	YES
L0001941	0	0.38890E-07	473823.6	3753188.7	469.4	3.66	1.70	0.85	YES
L0001942	0	0.38890E-07	473827.3	3753188.8	469.5	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001943	0	0.38890E-07	473831.0	3753188.8	469.7	3.66	1.70	0.85	YES	
L0001944	0	0.38890E-07	473834.6	3753188.9	469.8	3.66	1.70	0.85	YES	
L0001945	0	0.38890E-07	473838.3	3753188.9	469.9	3.66	1.70	0.85	YES	
L0001946	0	0.38890E-07	473841.9	3753189.0	470.1	3.66	1.70	0.85	YES	
L0001947	0	0.38890E-07	473845.6	3753189.0	470.2	3.66	1.70	0.85	YES	
L0001948	0	0.38890E-07	473849.2	3753189.1	470.4	3.66	1.70	0.85	YES	
L0001949	0	0.38890E-07	473852.9	3753189.1	470.5	3.66	1.70	0.85	YES	
L0001950	0	0.38890E-07	473856.6	3753189.2	470.6	3.66	1.70	0.85	YES	
L0001951	0	0.38890E-07	473860.2	3753189.3	470.8	3.66	1.70	0.85	YES	
L0001952	0	0.38890E-07	473863.9	3753189.3	470.9	3.66	1.70	0.85	YES	
L0001953	0	0.38890E-07	473867.5	3753189.4	471.0	3.66	1.70	0.85	YES	
L0001954	0	0.38890E-07	473871.2	3753189.4	471.1	3.66	1.70	0.85	YES	
L0001955	0	0.38890E-07	473874.8	3753189.5	471.2	3.66	1.70	0.85	YES	
L0001956	0	0.38890E-07	473878.5	3753189.5	471.3	3.66	1.70	0.85	YES	
L0001957	0	0.38890E-07	473882.2	3753189.6	471.3	3.66	1.70	0.85	YES	
L0001958	0	0.38890E-07	473885.8	3753189.6	471.3	3.66	1.70	0.85	YES	

L0001959	0	0.38890E-07	473889.5	3753189.7	471.3	3.66	1.70	0.85	YES
L0001960	0	0.38890E-07	473893.1	3753189.7	471.4	3.66	1.70	0.85	YES
L0001961	0	0.38890E-07	473896.8	3753189.9	471.4	3.66	1.70	0.85	YES
L0001962	0	0.38890E-07	473900.4	3753190.1	471.4	3.66	1.70	0.85	YES
L0001963	0	0.38890E-07	473904.1	3753190.4	471.3	3.66	1.70	0.85	YES
L0001964	0	0.38890E-07	473907.7	3753190.7	471.2	3.66	1.70	0.85	YES
L0001965	0	0.38890E-07	473911.4	3753191.0	471.1	3.66	1.70	0.85	YES
L0001966	0	0.38890E-07	473915.0	3753191.3	471.0	3.66	1.70	0.85	YES
L0001967	0	0.38890E-07	473918.7	3753191.6	470.9	3.66	1.70	0.85	YES
L0001968	0	0.38890E-07	473922.3	3753191.9	470.7	3.66	1.70	0.85	YES
L0001969	0	0.38890E-07	473926.0	3753192.1	470.6	3.66	1.70	0.85	YES
L0001970	0	0.38890E-07	473929.6	3753192.4	470.6	3.66	1.70	0.85	YES
L0001971	0	0.38890E-07	473933.2	3753192.7	470.5	3.66	1.70	0.85	YES
L0001972	0	0.38890E-07	473936.9	3753193.0	470.5	3.66	1.70	0.85	YES
L0001973	0	0.38890E-07	473940.5	3753193.3	470.4	3.66	1.70	0.85	YES
L0001974	0	0.38890E-07	473944.2	3753193.6	470.4	3.66	1.70	0.85	YES
L0001975	0	0.38890E-07	473947.8	3753193.8	470.3	3.66	1.70	0.85	YES
L0001976	0	0.38890E-07	473951.5	3753194.1	470.3	3.66	1.70	0.85	YES
L0001977	0	0.38890E-07	473955.1	3753194.4	470.3	3.66	1.70	0.85	YES
L0001978	0	0.38890E-07	473958.8	3753194.7	470.2	3.66	1.70	0.85	YES
L0001979	0	0.38890E-07	473962.4	3753195.0	470.2	3.66	1.70	0.85	YES
L0001980	0	0.38890E-07	473966.1	3753195.3	470.2	3.66	1.70	0.85	YES
L0001981	0	0.38890E-07	473969.7	3753195.6	470.2	3.66	1.70	0.85	YES
L0001982	0	0.38890E-07	473970.0	3753198.8	470.2	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0001983	0	0.38890E-07	473970.0	3753202.5	470.3	3.66	1.70	0.85	YES	
L0001984	0	0.38890E-07	473969.9	3753206.2	470.4	3.66	1.70	0.85	YES	
L0001985	0	0.38890E-07	473969.8	3753209.8	470.5	3.66	1.70	0.85	YES	
L0001986	0	0.38890E-07	473969.7	3753213.5	470.5	3.66	1.70	0.85	YES	
L0001987	0	0.38890E-07	473969.6	3753217.1	470.6	3.66	1.70	0.85	YES	
L0001988	0	0.38890E-07	473969.6	3753220.8	470.6	3.66	1.70	0.85	YES	
L0001989	0	0.38890E-07	473969.5	3753224.4	470.6	3.66	1.70	0.85	YES	
L0001990	0	0.38890E-07	473969.4	3753228.1	470.7	3.66	1.70	0.85	YES	
L0001991	0	0.38890E-07	473969.3	3753231.8	470.7	3.66	1.70	0.85	YES	
L0001992	0	0.38890E-07	473969.2	3753235.4	470.7	3.66	1.70	0.85	YES	
L0001993	0	0.38890E-07	473969.2	3753239.1	470.8	3.66	1.70	0.85	YES	
L0001994	0	0.38890E-07	473969.1	3753242.7	470.8	3.66	1.70	0.85	YES	
L0001995	0	0.38890E-07	473969.0	3753246.4	470.8	3.66	1.70	0.85	YES	
L0001996	0	0.38890E-07	473968.9	3753250.0	470.8	3.66	1.70	0.85	YES	
L0001997	0	0.38890E-07	473968.8	3753253.7	470.9	3.66	1.70	0.85	YES	
L0001998	0	0.38890E-07	473968.8	3753257.4	470.9	3.66	1.70	0.85	YES	
L0001999	0	0.38890E-07	473968.7	3753261.0	470.9	3.66	1.70	0.85	YES	
L0002000	0	0.38890E-07	473968.6	3753264.7	470.9	3.66	1.70	0.85	YES	

L0002001	0	0.38890E-07	473968.5	3753268.3	470.9	3.66	1.70	0.85	YES
L0002002	0	0.38890E-07	473968.4	3753272.0	470.9	3.66	1.70	0.85	YES
L0002003	0	0.38890E-07	473968.4	3753275.6	470.9	3.66	1.70	0.85	YES
L0002004	0	0.38890E-07	473968.3	3753279.3	471.0	3.66	1.70	0.85	YES
L0002005	0	0.38890E-07	473968.2	3753283.0	471.0	3.66	1.70	0.85	YES
L0002006	0	0.38890E-07	473968.1	3753286.6	471.0	3.66	1.70	0.85	YES
L0002007	0	0.38890E-07	473968.0	3753290.3	471.1	3.66	1.70	0.85	YES
L0002008	0	0.38890E-07	473969.0	3753292.9	471.1	3.66	1.70	0.85	YES
L0002009	0	0.38890E-07	473972.7	3753293.1	470.9	3.66	1.70	0.85	YES
L0002010	0	0.38890E-07	473976.3	3753293.2	470.8	3.66	1.70	0.85	YES
L0002011	0	0.38890E-07	473980.0	3753293.3	470.8	3.66	1.70	0.85	YES
L0002012	0	0.38890E-07	473983.6	3753293.5	470.8	3.66	1.70	0.85	YES
L0002013	0	0.38890E-07	473987.3	3753293.6	470.8	3.66	1.70	0.85	YES
L0002014	0	0.38890E-07	473990.9	3753293.7	470.8	3.66	1.70	0.85	YES
L0002015	0	0.29440E-07	473768.7	3753173.0	468.0	3.66	1.70	0.85	YES
L0002016	0	0.29440E-07	473772.1	3753174.3	468.0	3.66	1.70	0.85	YES
L0002017	0	0.29440E-07	473775.5	3753175.6	468.1	3.66	1.70	0.85	YES
L0002018	0	0.29440E-07	473778.9	3753176.9	468.1	3.66	1.70	0.85	YES
L0002019	0	0.29440E-07	473782.3	3753178.2	468.2	3.66	1.70	0.85	YES
L0002020	0	0.29440E-07	473785.8	3753179.5	468.2	3.66	1.70	0.85	YES
L0002021	0	0.29440E-07	473789.2	3753180.9	468.3	3.66	1.70	0.85	YES
L0002022	0	0.29440E-07	473792.6	3753182.2	468.4	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0002023	0	0.29440E-07	473796.0	3753183.5	468.4	3.66	1.70	0.85	YES	
L0002024	0	0.29440E-07	473799.4	3753184.8	468.5	3.66	1.70	0.85	YES	
L0002025	0	0.29440E-07	473802.8	3753186.1	468.6	3.66	1.70	0.85	YES	
L0002026	0	0.29440E-07	473806.2	3753187.4	468.8	3.66	1.70	0.85	YES	
L0002027	0	0.29440E-07	473809.7	3753188.7	468.9	3.66	1.70	0.85	YES	
L0002028	0	0.29440E-07	473813.2	3753189.5	469.0	3.66	1.70	0.85	YES	
L0002029	0	0.29440E-07	473816.8	3753189.5	469.1	3.66	1.70	0.85	YES	
L0002030	0	0.29440E-07	473820.5	3753189.5	469.2	3.66	1.70	0.85	YES	
L0002031	0	0.29440E-07	473824.2	3753189.5	469.4	3.66	1.70	0.85	YES	
L0002032	0	0.29440E-07	473827.8	3753189.5	469.5	3.66	1.70	0.85	YES	
L0002033	0	0.29440E-07	473831.5	3753189.5	469.7	3.66	1.70	0.85	YES	
L0002034	0	0.29440E-07	473835.1	3753189.6	469.8	3.66	1.70	0.85	YES	
L0002035	0	0.29440E-07	473838.8	3753189.6	470.0	3.66	1.70	0.85	YES	
L0002036	0	0.29440E-07	473842.4	3753189.6	470.1	3.66	1.70	0.85	YES	
L0002037	0	0.29440E-07	473846.1	3753189.6	470.3	3.66	1.70	0.85	YES	
L0002038	0	0.29440E-07	473849.8	3753189.6	470.4	3.66	1.70	0.85	YES	
L0002039	0	0.29440E-07	473853.4	3753189.6	470.5	3.66	1.70	0.85	YES	
L0002040	0	0.29440E-07	473857.1	3753189.6	470.7	3.66	1.70	0.85	YES	
L0002041	0	0.29440E-07	473860.7	3753189.6	470.8	3.66	1.70	0.85	YES	
L0002042	0	0.29440E-07	473864.4	3753189.7	470.9	3.66	1.70	0.85	YES	

L0002043	0	0.29440E-07	473868.0	3753189.7	471.0	3.66	1.70	0.85	YES
L0002044	0	0.29440E-07	473871.7	3753189.7	471.2	3.66	1.70	0.85	YES
L0002045	0	0.29440E-07	473875.4	3753189.7	471.2	3.66	1.70	0.85	YES
L0002046	0	0.29440E-07	473879.0	3753189.7	471.3	3.66	1.70	0.85	YES
L0002047	0	0.29440E-07	473882.7	3753189.7	471.3	3.66	1.70	0.85	YES
L0002048	0	0.29440E-07	473886.3	3753189.7	471.3	3.66	1.70	0.85	YES
L0002049	0	0.29440E-07	473890.0	3753189.7	471.3	3.66	1.70	0.85	YES
L0002050	0	0.29440E-07	473893.6	3753189.8	471.4	3.66	1.70	0.85	YES
L0002051	0	0.29440E-07	473897.3	3753189.8	471.4	3.66	1.70	0.85	YES
L0002052	0	0.29440E-07	473898.1	3753187.0	471.4	3.66	1.70	0.85	YES
L0002053	0	0.29440E-07	473898.0	3753183.4	471.3	3.66	1.70	0.85	YES
L0002054	0	0.29440E-07	473897.8	3753179.7	471.2	3.66	1.70	0.85	YES
L0002055	0	0.29440E-07	473897.7	3753176.1	471.1	3.66	1.70	0.85	YES
L0002056	0	0.29440E-07	473897.6	3753172.4	471.0	3.66	1.70	0.85	YES
L0002057	0	0.29440E-07	473897.4	3753168.8	470.9	3.66	1.70	0.85	YES
L0002058	0	0.29440E-07	473897.3	3753165.1	470.8	3.66	1.70	0.85	YES
L0002059	0	0.29440E-07	473897.1	3753161.5	470.7	3.66	1.70	0.85	YES
L0002060	0	0.29440E-07	473897.0	3753157.8	470.6	3.66	1.70	0.85	YES
L0002061	0	0.29440E-07	473896.9	3753154.1	470.5	3.66	1.70	0.85	YES
L0002062	0	0.29440E-07	473896.7	3753150.5	470.3	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	BASE X (METERS)	BASE Y (METERS)	RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0002063	0	0.29440E-07	473894.6	3753147.9	470.2	3.66	1.70	0.85	YES	
L0002064	0	0.29440E-07	473891.7	3753145.7	470.1	3.66	1.70	0.85	YES	
L0002065	0	0.29440E-07	473888.8	3753143.5	470.0	3.66	1.70	0.85	YES	
L0002066	0	0.29440E-07	473885.8	3753141.3	469.9	3.66	1.70	0.85	YES	
L0002067	0	0.29440E-07	473882.9	3753139.2	469.8	3.66	1.70	0.85	YES	
L0002068	0	0.29440E-07	473879.9	3753137.0	469.7	3.66	1.70	0.85	YES	
L0002069	0	0.30900E-07	473768.7	3753173.3	468.0	3.66	1.70	0.85	YES	
L0002070	0	0.30900E-07	473772.1	3753174.5	468.0	3.66	1.70	0.85	YES	
L0002071	0	0.30900E-07	473775.6	3753175.8	468.1	3.66	1.70	0.85	YES	
L0002072	0	0.30900E-07	473779.0	3753177.0	468.1	3.66	1.70	0.85	YES	
L0002073	0	0.30900E-07	473782.4	3753178.3	468.2	3.66	1.70	0.85	YES	
L0002074	0	0.30900E-07	473785.9	3753179.6	468.2	3.66	1.70	0.85	YES	
L0002075	0	0.30900E-07	473789.3	3753180.8	468.3	3.66	1.70	0.85	YES	
L0002076	0	0.30900E-07	473792.7	3753182.1	468.4	3.66	1.70	0.85	YES	
L0002077	0	0.30900E-07	473796.2	3753183.3	468.4	3.66	1.70	0.85	YES	
L0002078	0	0.30900E-07	473799.6	3753184.6	468.5	3.66	1.70	0.85	YES	
L0002079	0	0.30900E-07	473803.0	3753185.9	468.6	3.66	1.70	0.85	YES	
L0002080	0	0.30900E-07	473806.5	3753187.1	468.8	3.66	1.70	0.85	YES	
L0002081	0	0.30900E-07	473809.9	3753188.4	468.9	3.66	1.70	0.85	YES	
L0002082	0	0.30900E-07	473813.5	3753188.6	469.0	3.66	1.70	0.85	YES	
L0002083	0	0.30900E-07	473817.2	3753188.6	469.1	3.66	1.70	0.85	YES	
L0002084	0	0.30900E-07	473820.8	3753188.7	469.3	3.66	1.70	0.85	YES	

L0002085	0	0.30900E-07	473824.5	3753188.8	469.4	3.66	1.70	0.85	YES
L0002086	0	0.30900E-07	473828.2	3753188.8	469.6	3.66	1.70	0.85	YES
L0002087	0	0.30900E-07	473831.8	3753188.9	469.7	3.66	1.70	0.85	YES
L0002088	0	0.30900E-07	473835.5	3753188.9	469.8	3.66	1.70	0.85	YES
L0002089	0	0.30900E-07	473839.1	3753189.0	470.0	3.66	1.70	0.85	YES
L0002090	0	0.30900E-07	473842.8	3753189.0	470.1	3.66	1.70	0.85	YES
L0002091	0	0.30900E-07	473846.4	3753189.1	470.3	3.66	1.70	0.85	YES
L0002092	0	0.30900E-07	473850.1	3753189.1	470.4	3.66	1.70	0.85	YES
L0002093	0	0.30900E-07	473853.8	3753189.2	470.5	3.66	1.70	0.85	YES
L0002094	0	0.30900E-07	473857.4	3753189.2	470.7	3.66	1.70	0.85	YES
L0002095	0	0.30900E-07	473861.1	3753189.3	470.8	3.66	1.70	0.85	YES
L0002096	0	0.30900E-07	473864.7	3753189.3	470.9	3.66	1.70	0.85	YES
L0002097	0	0.30900E-07	473868.4	3753189.4	471.0	3.66	1.70	0.85	YES
L0002098	0	0.30900E-07	473872.0	3753189.4	471.2	3.66	1.70	0.85	YES
L0002099	0	0.30900E-07	473875.7	3753189.5	471.2	3.66	1.70	0.85	YES
L0002100	0	0.30900E-07	473879.4	3753189.5	471.3	3.66	1.70	0.85	YES
L0002101	0	0.30900E-07	473883.0	3753189.6	471.3	3.66	1.70	0.85	YES
L0002102	0	0.30900E-07	473886.7	3753189.6	471.3	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0002103	0	0.30900E-07	473890.3	3753189.7	471.3	3.66	1.70	0.85	YES	
L0002104	0	0.30900E-07	473894.0	3753189.7	471.4	3.66	1.70	0.85	YES	
L0002105	0	0.30900E-07	473897.6	3753189.8	471.4	3.66	1.70	0.85	YES	
L0002106	0	0.30900E-07	473901.3	3753190.0	471.4	3.66	1.70	0.85	YES	
L0002107	0	0.30900E-07	473904.9	3753190.4	471.3	3.66	1.70	0.85	YES	
L0002108	0	0.30900E-07	473908.6	3753190.7	471.2	3.66	1.70	0.85	YES	
L0002109	0	0.30900E-07	473912.2	3753191.0	471.0	3.66	1.70	0.85	YES	
L0002110	0	0.30900E-07	473915.9	3753191.3	470.9	3.66	1.70	0.85	YES	
L0002111	0	0.30900E-07	473919.5	3753191.6	470.8	3.66	1.70	0.85	YES	
L0002112	0	0.30900E-07	473923.2	3753191.9	470.7	3.66	1.70	0.85	YES	
L0002113	0	0.30900E-07	473926.8	3753192.2	470.6	3.66	1.70	0.85	YES	
L0002114	0	0.30900E-07	473930.4	3753192.6	470.6	3.66	1.70	0.85	YES	
L0002115	0	0.30900E-07	473934.1	3753192.9	470.5	3.66	1.70	0.85	YES	
L0002116	0	0.30900E-07	473937.7	3753193.2	470.5	3.66	1.70	0.85	YES	
L0002117	0	0.30900E-07	473941.4	3753193.5	470.4	3.66	1.70	0.85	YES	
L0002118	0	0.30900E-07	473945.0	3753193.8	470.4	3.66	1.70	0.85	YES	
L0002119	0	0.30900E-07	473948.7	3753194.1	470.3	3.66	1.70	0.85	YES	
L0002120	0	0.30900E-07	473952.3	3753194.4	470.3	3.66	1.70	0.85	YES	
L0002121	0	0.30900E-07	473956.0	3753194.8	470.3	3.66	1.70	0.85	YES	
L0002122	0	0.30900E-07	473959.6	3753195.1	470.2	3.66	1.70	0.85	YES	
L0002123	0	0.30900E-07	473963.2	3753195.4	470.2	3.66	1.70	0.85	YES	
L0002124	0	0.30900E-07	473966.9	3753195.7	470.2	3.66	1.70	0.85	YES	
L0002125	0	0.30900E-07	473969.2	3753194.6	470.2	3.66	1.70	0.85	YES	
L0002126	0	0.30900E-07	473969.1	3753190.9	470.1	3.66	1.70	0.85	YES	

L0002127	0	0.30900E-07	473969.0	3753187.2	470.0	3.66	1.70	0.85	YES
L0002128	0	0.30900E-07	473968.9	3753183.6	469.9	3.66	1.70	0.85	YES
L0002129	0	0.30900E-07	473968.8	3753179.9	469.9	3.66	1.70	0.85	YES
L0002130	0	0.30900E-07	473968.7	3753176.3	469.8	3.66	1.70	0.85	YES
L0002131	0	0.30900E-07	473968.6	3753172.6	469.7	3.66	1.70	0.85	YES
L0002132	0	0.30900E-07	473968.5	3753169.0	469.6	3.66	1.70	0.85	YES
L0002133	0	0.30900E-07	473968.4	3753165.3	469.5	3.66	1.70	0.85	YES
L0002134	0	0.30900E-07	473968.3	3753161.6	469.4	3.66	1.70	0.85	YES
L0002135	0	0.30900E-07	473968.2	3753158.0	469.4	3.66	1.70	0.85	YES
L0002136	0	0.30900E-07	473968.1	3753154.3	469.3	3.66	1.70	0.85	YES
L0002137	0	0.30900E-07	473968.0	3753150.7	469.2	3.66	1.70	0.85	YES
L0002138	0	0.30900E-07	473967.9	3753147.0	469.2	3.66	1.70	0.85	YES
L0002139	0	0.30900E-07	473967.8	3753143.4	469.1	3.66	1.70	0.85	YES
L0002140	0	0.30900E-07	473967.7	3753139.7	469.1	3.66	1.70	0.85	YES
L0002141	0	0.30900E-07	473964.3	3753138.4	469.0	3.66	1.70	0.85	YES
L0002142	0	0.30900E-07	473960.9	3753137.1	469.0	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0002143	0	0.30900E-07	473957.5	3753135.8	469.0	3.66	1.70	0.85	YES	
L0002144	0	0.30900E-07	473954.0	3753134.6	469.0	3.66	1.70	0.85	YES	
L0002145	0	0.30900E-07	473950.6	3753133.3	469.0	3.66	1.70	0.85	YES	
L0002146	0	0.30900E-07	473947.2	3753132.1	469.0	3.66	1.70	0.85	YES	
L0002147	0	0.30560E-07	473769.3	3753172.1	468.0	3.66	1.70	0.85	YES	
L0002148	0	0.30560E-07	473772.7	3753173.4	468.0	3.66	1.70	0.85	YES	
L0002149	0	0.30560E-07	473776.1	3753174.7	468.1	3.66	1.70	0.85	YES	
L0002150	0	0.30560E-07	473779.5	3753176.1	468.1	3.66	1.70	0.85	YES	
L0002151	0	0.30560E-07	473782.9	3753177.4	468.2	3.66	1.70	0.85	YES	
L0002152	0	0.30560E-07	473786.3	3753178.7	468.2	3.66	1.70	0.85	YES	
L0002153	0	0.30560E-07	473789.7	3753180.0	468.3	3.66	1.70	0.85	YES	
L0002154	0	0.30560E-07	473793.2	3753181.4	468.4	3.66	1.70	0.85	YES	
L0002155	0	0.30560E-07	473796.6	3753182.7	468.4	3.66	1.70	0.85	YES	
L0002156	0	0.30560E-07	473800.0	3753184.0	468.5	3.66	1.70	0.85	YES	
L0002157	0	0.30560E-07	473803.4	3753185.3	468.7	3.66	1.70	0.85	YES	
L0002158	0	0.30560E-07	473806.8	3753186.7	468.8	3.66	1.70	0.85	YES	
L0002159	0	0.30560E-07	473810.2	3753187.9	468.9	3.66	1.70	0.85	YES	
L0002160	0	0.30560E-07	473813.9	3753188.0	469.0	3.66	1.70	0.85	YES	
L0002161	0	0.30560E-07	473817.5	3753188.1	469.2	3.66	1.70	0.85	YES	
L0002162	0	0.30560E-07	473821.2	3753188.1	469.3	3.66	1.70	0.85	YES	
L0002163	0	0.30560E-07	473824.8	3753188.2	469.4	3.66	1.70	0.85	YES	
L0002164	0	0.30560E-07	473828.5	3753188.3	469.6	3.66	1.70	0.85	YES	
L0002165	0	0.30560E-07	473832.2	3753188.3	469.7	3.66	1.70	0.85	YES	
L0002166	0	0.30560E-07	473835.8	3753188.4	469.9	3.66	1.70	0.85	YES	
L0002167	0	0.30560E-07	473839.5	3753188.4	470.0	3.66	1.70	0.85	YES	
L0002168	0	0.30560E-07	473843.1	3753188.5	470.1	3.66	1.70	0.85	YES	

L0002169	0	0.30560E-07	473846.8	3753188.6	470.3	3.66	1.70	0.85	YES
L0002170	0	0.30560E-07	473850.4	3753188.6	470.4	3.66	1.70	0.85	YES
L0002171	0	0.30560E-07	473854.1	3753188.7	470.6	3.66	1.70	0.85	YES
L0002172	0	0.30560E-07	473857.8	3753188.8	470.7	3.66	1.70	0.85	YES
L0002173	0	0.30560E-07	473861.4	3753188.8	470.8	3.66	1.70	0.85	YES
L0002174	0	0.30560E-07	473865.1	3753188.9	470.9	3.66	1.70	0.85	YES
L0002175	0	0.30560E-07	473868.7	3753188.9	471.0	3.66	1.70	0.85	YES
L0002176	0	0.30560E-07	473872.4	3753189.0	471.2	3.66	1.70	0.85	YES
L0002177	0	0.30560E-07	473876.0	3753189.1	471.2	3.66	1.70	0.85	YES
L0002178	0	0.30560E-07	473879.7	3753189.1	471.3	3.66	1.70	0.85	YES
L0002179	0	0.30560E-07	473883.4	3753189.2	471.3	3.66	1.70	0.85	YES
L0002180	0	0.30560E-07	473887.0	3753189.2	471.3	3.66	1.70	0.85	YES
L0002181	0	0.30560E-07	473890.7	3753189.3	471.3	3.66	1.70	0.85	YES
L0002182	0	0.30560E-07	473894.3	3753189.4	471.4	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	BASE X (METERS)	BASE Y (METERS)	RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0002183	0	0.30560E-07	473898.0	3753189.4	471.4	3.66	1.70	0.85	YES	
L0002184	0	0.30560E-07	473901.6	3753189.6	471.4	3.66	1.70	0.85	YES	
L0002185	0	0.30560E-07	473905.3	3753189.9	471.2	3.66	1.70	0.85	YES	
L0002186	0	0.30560E-07	473908.9	3753190.2	471.1	3.66	1.70	0.85	YES	
L0002187	0	0.30560E-07	473912.6	3753190.5	471.0	3.66	1.70	0.85	YES	
L0002188	0	0.30560E-07	473916.2	3753190.7	470.9	3.66	1.70	0.85	YES	
L0002189	0	0.30560E-07	473919.9	3753191.0	470.8	3.66	1.70	0.85	YES	
L0002190	0	0.30560E-07	473923.5	3753191.3	470.7	3.66	1.70	0.85	YES	
L0002191	0	0.30560E-07	473927.2	3753191.6	470.6	3.66	1.70	0.85	YES	
L0002192	0	0.30560E-07	473930.8	3753191.9	470.6	3.66	1.70	0.85	YES	
L0002193	0	0.30560E-07	473934.4	3753192.2	470.5	3.66	1.70	0.85	YES	
L0002194	0	0.30560E-07	473938.1	3753192.5	470.5	3.66	1.70	0.85	YES	
L0002195	0	0.30560E-07	473941.7	3753192.8	470.4	3.66	1.70	0.85	YES	
L0002196	0	0.30560E-07	473945.4	3753193.1	470.4	3.66	1.70	0.85	YES	
L0002197	0	0.30560E-07	473949.0	3753193.4	470.3	3.66	1.70	0.85	YES	
L0002198	0	0.30560E-07	473952.7	3753193.7	470.3	3.66	1.70	0.85	YES	
L0002199	0	0.30560E-07	473956.3	3753194.0	470.2	3.66	1.70	0.85	YES	
L0002200	0	0.30560E-07	473960.0	3753194.3	470.2	3.66	1.70	0.85	YES	
L0002201	0	0.30560E-07	473963.6	3753194.6	470.2	3.66	1.70	0.85	YES	
L0002202	0	0.30560E-07	473967.3	3753194.8	470.2	3.66	1.70	0.85	YES	
L0002203	0	0.30560E-07	473970.5	3753196.2	470.2	3.66	1.70	0.85	YES	
L0002204	0	0.30560E-07	473973.5	3753198.3	470.2	3.66	1.70	0.85	YES	
L0002205	0	0.30560E-07	473976.5	3753200.4	470.2	3.66	1.70	0.85	YES	
L0002206	0	0.30560E-07	473979.4	3753202.6	470.2	3.66	1.70	0.85	YES	
L0002207	0	0.30560E-07	473982.8	3753203.6	470.2	3.66	1.70	0.85	YES	
L0002208	0	0.30560E-07	473986.4	3753203.6	470.2	3.66	1.70	0.85	YES	
L0002209	0	0.30560E-07	473990.1	3753203.7	470.2	3.66	1.70	0.85	YES	
L0002210	0	0.30560E-07	473993.8	3753203.7	470.2	3.66	1.70	0.85	YES	

L0002211	0	0.30560E-07	473997.4	3753203.8	470.2	3.66	1.70	0.85	YES
L0002212	0	0.30560E-07	474001.1	3753203.8	470.2	3.66	1.70	0.85	YES
L0002213	0	0.30560E-07	474003.6	3753202.6	470.1	3.66	1.70	0.85	YES
L0002214	0	0.30560E-07	474003.9	3753198.9	470.0	3.66	1.70	0.85	YES
L0002215	0	0.30560E-07	474004.3	3753195.3	470.0	3.66	1.70	0.85	YES
L0002216	0	0.30560E-07	474004.6	3753191.7	469.9	3.66	1.70	0.85	YES
L0002217	0	0.30560E-07	474005.0	3753188.0	469.8	3.66	1.70	0.85	YES
L0002218	0	0.30560E-07	474005.4	3753184.4	469.8	3.66	1.70	0.85	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	L0001703 , L0001704 , L0001705 , L0001706 , L0001707 , L0001708 , L0001709 , L0001710 , L0001711 , L0001712 , L0001713 , L0001714 , L0001715 , L0001716 , L0001717 , L0001718 , L0001719 , L0001720 , L0001721 , L0001722 , L0001723 , L0001724 , L0001725 , L0001726 , L0001727 , L0001728 , L0001729 , L0001730 , L0001731 , L0001732 , L0001733 , L0001734 , L0001735 , L0001736 , L0001737 , L0001738 , L0001739 , L0001740 , L0001741 , L0001742 , L0001743 , L0001744 , L0001745 , L0001746 , L0001747 , L0001748 , L0001749 , L0001750 , L0001751 , L0001752 , L0001753 , L0001754 , L0001755 , L0001756 , L0001757 , L0001758 , L0001759 , L0001760 , L0001761 , L0001762 , L0001763 , L0001764 , L0001765 , L0001766 , L0001767 , L0001768 , L0001769 , L0001770 , L0001771 , L0001772 , L0001773 , L0001774 , L0001775 , L0001776 , L0001777 , L0001778 , L0001779 , L0001780 , L0001781 , L0001782 , L0001783 , L0001784 , L0001785 , L0001786 , L0001787 , L0001788 , L0001789 , L0001790 , L0001791 , L0001792 , L0001793 , L0001794 , L0001795 , L0001796 , L0001797 , L0001798 ,

L0001799 , L0001800 , L0001801 , L0001802 , L0001803 , L0001804 , L0001805 , L0001806 ,

L0001807 , L0001808 , L0001809 , L0001810 , L0001811 , L0001812 , L0001813 , L0001814 ,

L0001815 , L0001816 , L0001817 , L0001818 , L0001819 , L0001820 , L0001821 , L0001822 ,

L0001823 , L0001824 , L0001825 , L0001826 , L0001827 , L0001828 , L0001829 , L0001830 ,

L0001831 , L0001832 , L0001833 , L0001834 , L0001835 , L0001836 , L0001837 , L0001838 ,

L0001839 , L0001840 , L0001841 , L0001842 , L0001843 , L0001844 , L0001845 , L0001846 ,

L0001847 , L0001848 , L0001849 , L0001850 , L0001851 , L0001852 , L0001853 , L0001854 ,

L0001855 , L0001856 , L0001857 , L0001858 , L0001859 , L0001860 , L0001861 , L0001862 ,

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*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

L0001863 , L0001864 , L0001865 , L0001866 , L0001867 , L0001868 , L0001869 , L0001870 ,

L0001871 , L0001872 , L0001873 , L0001874 , L0001875 , L0001876 , L0001877 , L0001878 ,

L0001879 , L0001880 , L0001881 , L0001882 , L0001883 , L0001884 , L0001885 , L0001886 ,

L0001887 , L0001888 , L0001889 , L0001890 , L0001891 , L0001892 , L0001893 , L0001894 ,

L0001895 , L0001896 , L0001897 , L0001898 , L0001899 , L0001900 , L0001901 , L0001902 ,

L0001903 , L0001904 , L0001905 , L0001906 , L0001907 , L0001908 , L0001909 , L0001910 ,

L0001911 , L0001912 , L0001913 , L0001914 , L0001915 , L0001916 , L0001917 ,

L0001918 ,

L0001919 , L0001920 , L0001921 , L0001922 , L0001923 , L0001924 , L0001925 , L0001926 ,

L0001927 , L0001928 , L0001929 , L0001930 , L0001931 , L0001932 , L0001933 , L0001934 ,

L0001935 , L0001936 , L0001937 , L0001938 , L0001939 , L0001940 , L0001941 , L0001942 ,

L0001943 , L0001944 , L0001945 , L0001946 , L0001947 , L0001948 , L0001949 , L0001950 ,

L0001951 , L0001952 , L0001953 , L0001954 , L0001955 , L0001956 , L0001957 , L0001958 ,

L0001959 , L0001960 , L0001961 , L0001962 , L0001963 , L0001964 , L0001965 , L0001966 ,

L0001967 , L0001968 , L0001969 , L0001970 , L0001971 , L0001972 , L0001973 , L0001974 ,

L0001975 , L0001976 , L0001977 , L0001978 , L0001979 , L0001980 , L0001981 , L0001982 ,

L0001983 , L0001984 , L0001985 , L0001986 , L0001987 , L0001988 , L0001989 , L0001990 ,

L0001991 , L0001992 , L0001993 , L0001994 , L0001995 , L0001996 , L0001997 , L0001998 ,

L0001999 , L0002000 , L0002001 , L0002002 , L0002003 , L0002004 , L0002005 , L0002006 ,

L0002007 , L0002008 , L0002009 , L0002010 , L0002011 , L0002012 , L0002013 , L0002014 ,

L0002015 , L0002016 , L0002017 , L0002018 , L0002019 , L0002020 , L0002021 , L0002022 ,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

L0002023 , L0002024 , L0002025 , L0002026 , L0002027 , L0002028 , L0002029 , L0002030 ,

L0002031 , L0002032 , L0002033 , L0002034 , L0002035 , L0002036 , L0002037 , L0002038 ,

L0002039 , L0002040 , L0002041 , L0002042 , L0002043 , L0002044 , L0002045 , L0002046 ,

L0002047 , L0002048 , L0002049 , L0002050 , L0002051 , L0002052 , L0002053 , L0002054 ,

L0002055 , L0002056 , L0002057 , L0002058 , L0002059 , L0002060 , L0002061 , L0002062 ,

L0002063 , L0002064 , L0002065 , L0002066 , L0002067 , L0002068 , L0002069 , L0002070 ,

L0002071 , L0002072 , L0002073 , L0002074 , L0002075 , L0002076 , L0002077 , L0002078 ,

L0002079 , L0002080 , L0002081 , L0002082 , L0002083 , L0002084 , L0002085 , L0002086 ,

L0002087 , L0002088 , L0002089 , L0002090 , L0002091 , L0002092 , L0002093 , L0002094 ,

L0002095 , L0002096 , L0002097 , L0002098 , L0002099 , L0002100 , L0002101 , L0002102 ,

L0002103 , L0002104 , L0002105 , L0002106 , L0002107 , L0002108 , L0002109 , L0002110 ,

L0002111 , L0002112 , L0002113 , L0002114 , L0002115 , L0002116 , L0002117 , L0002118 ,

L0002119 , L0002120 , L0002121 , L0002122 , L0002123 , L0002124 , L0002125 , L0002126 ,

L0002127 , L0002128 , L0002129 , L0002130 , L0002131 , L0002132 , L0002133 , L0002134 ,

L0002135 , L0002136 , L0002137 , L0002138 , L0002139 , L0002140 , L0002141 , L0002142 ,

L0002143 , L0002144 , L0002145 , L0002146 , L0002147 , L0002148 , L0002149 , L0002150 ,

L0002151 , L0002152 , L0002153 , L0002154 , L0002155 , L0002156 , L0002157 , L0002158 ,

L0002159 , L0002160 , L0002161 , L0002162 , L0002163 , L0002164 , L0002165 , L0002166 ,

L0002167 , L0002168 , L0002169 , L0002170 , L0002171 , L0002172 , L0002173 , L0002174 ,

L0002175 , L0002176 , L0002177 , L0002178 , L0002179 , L0002180 , L0002181 , L0002182 ,

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

L0002183 , L0002184 , L0002185 , L0002186 , L0002187 , L0002188 , L0002189 , L0002190 ,

L0002191 , L0002192 , L0002193 , L0002194 , L0002195 , L0002196 , L0002197 , L0002198 ,

L0002199 , L0002200 , L0002201 , L0002202 , L0002203 , L0002204 , L0002205 , L0002206 ,

L0002207 , L0002208 , L0002209 , L0002210 , L0002211 , L0002212 , L0002213 , L0002214 ,

L0002215 , L0002216 , L0002217 , L0002218 , IBA1 , IBA2 , IBA3 , IBA4 ,

IBB1 , IBB2 , IBB3 , IBC1 , IBC2 , IBC3 , IBD1 , IBD2 ,

IBD3 , IBD4 , IBE1 , IBE2 , IBE3 , IBF1 , IBF2 , IBF3 ,

FPA , FPB , FPC , FPD , FPE , FPF ,

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

URBAN ID	URBAN POP	SOURCE IDs

2000000. L0001703 , L0001704 , L0001705 , L0001706 , L0001707 , L0001708 , L0001709 , L0001710 ,

L0001711 , L0001712 , L0001713 , L0001714 , L0001715 , L0001716 , L0001717 , L0001718 ,

L0001719 , L0001720 , L0001721 , L0001722 , L0001723 , L0001724 , L0001725 , L0001726 ,

L0001727 , L0001728 , L0001729 , L0001730 , L0001731 , L0001732 , L0001733 ,

L0001734 ,

L0001735 , L0001736 , L0001737 , L0001738 , L0001739 , L0001740 , L0001741 , L0001742 ,

L0001743 , L0001744 , L0001745 , L0001746 , L0001747 , L0001748 , L0001749 , L0001750 ,

L0001751 , L0001752 , L0001753 , L0001754 , L0001755 , L0001756 , L0001757 , L0001758 ,

L0001759 , L0001760 , L0001761 , L0001762 , L0001763 , L0001764 , L0001765 , L0001766 ,

L0001767 , L0001768 , L0001769 , L0001770 , L0001771 , L0001772 , L0001773 , L0001774 ,

L0001775 , L0001776 , L0001777 , L0001778 , L0001779 , L0001780 , L0001781 , L0001782 ,

L0001783 , L0001784 , L0001785 , L0001786 , L0001787 , L0001788 , L0001789 , L0001790 ,

L0001791 , L0001792 , L0001793 , L0001794 , L0001795 , L0001796 , L0001797 , L0001798 ,

L0001799 , L0001800 , L0001801 , L0001802 , L0001803 , L0001804 , L0001805 , L0001806 ,

L0001807 , L0001808 , L0001809 , L0001810 , L0001811 , L0001812 , L0001813 , L0001814 ,

L0001815 , L0001816 , L0001817 , L0001818 , L0001819 , L0001820 , L0001821 , L0001822 ,

L0001823 , L0001824 , L0001825 , L0001826 , L0001827 , L0001828 , L0001829 , L0001830 ,

L0001831 , L0001832 , L0001833 , L0001834 , L0001835 , L0001836 , L0001837 , L0001838 ,

L0001839 , L0001840 , L0001841 , L0001842 , L0001843 , L0001844 , L0001845 , L0001846 ,

L0001847 , L0001848 , L0001849 , L0001850 , L0001851 , L0001852 , L0001853 , L0001854 ,

L0001855 , L0001856 , L0001857 , L0001858 , L0001859 , L0001860 , L0001861 , L0001862 ,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

URBAN ID	URBAN POP	SOURCE IDs

L0001863 , L0001864 , L0001865 , L0001866 , L0001867 , L0001868 , L0001869 , L0001870 ,

L0001871 , L0001872 , L0001873 , L0001874 , L0001875 , L0001876 , L0001877 , L0001878 ,

L0001879 , L0001880 , L0001881 , L0001882 , L0001883 , L0001884 , L0001885 , L0001886 ,

L0001887 , L0001888 , L0001889 , L0001890 , L0001891 , L0001892 , L0001893 , L0001894 ,

L0001895 , L0001896 , L0001897 , L0001898 , L0001899 , L0001900 , L0001901 , L0001902 ,

L0001903 , L0001904 , L0001905 , L0001906 , L0001907 , L0001908 , L0001909 , L0001910 ,

L0001911 , L0001912 , L0001913 , L0001914 , L0001915 , L0001916 , L0001917 , L0001918 ,

L0001919 , L0001920 , L0001921 , L0001922 , L0001923 , L0001924 , L0001925 , L0001926 ,

L0001927 , L0001928 , L0001929 , L0001930 , L0001931 , L0001932 , L0001933 , L0001934 ,

L0001935 , L0001936 , L0001937 , L0001938 , L0001939 , L0001940 , L0001941 , L0001942 ,

L0001943 , L0001944 , L0001945 , L0001946 , L0001947 , L0001948 , L0001949 , L0001950 ,

L0001951 , L0001952 , L0001953 , L0001954 , L0001955 , L0001956 , L0001957 , L0001958 ,

L0001959 , L0001960 , L0001961 , L0001962 , L0001963 , L0001964 , L0001965 , L0001966 ,

L0001967 , L0001968 , L0001969 , L0001970 , L0001971 , L0001972 , L0001973 , L0001974 ,

L0001975 , L0001976 , L0001977 , L0001978 , L0001979 , L0001980 , L0001981 , L0001982 ,

L0001983 , L0001984 , L0001985 , L0001986 , L0001987 , L0001988 , L0001989 , L0001990 ,

L0001991 , L0001992 , L0001993 , L0001994 , L0001995 , L0001996 , L0001997 , L0001998 ,

L0001999 , L0002000 , L0002001 , L0002002 , L0002003 , L0002004 , L0002005 , L0002006 ,

L0002007 , L0002008 , L0002009 , L0002010 , L0002011 , L0002012 , L0002013 , L0002014 ,

L0002015 , L0002016 , L0002017 , L0002018 , L0002019 , L0002020 , L0002021 , L0002022 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

URBAN ID	URBAN POP	SOURCE IDs

L0002023 , L0002024 , L0002025 , L0002026 , L0002027 , L0002028 , L0002029 , L0002030 ,

L0002031 , L0002032 , L0002033 , L0002034 , L0002035 , L0002036 , L0002037 , L0002038 ,

L0002039 , L0002040 , L0002041 , L0002042 , L0002043 , L0002044 , L0002045 , L0002046 ,

L0002047 , L0002048 , L0002049 , L0002050 , L0002051 , L0002052 , L0002053 , L0002054 ,

L0002055 , L0002056 , L0002057 , L0002058 , L0002059 , L0002060 , L0002061 , L0002062 ,

L0002063 , L0002064 , L0002065 , L0002066 , L0002067 , L0002068 , L0002069 , L0002070 ,

L0002071 , L0002072 , L0002073 , L0002074 , L0002075 , L0002076 , L0002077 , L0002078 ,

L0002079 , L0002080 , L0002081 , L0002082 , L0002083 , L0002084 , L0002085 , L0002086 ,

L0002087 , L0002088 , L0002089 , L0002090 , L0002091 , L0002092 , L0002093 , L0002094 ,

L0002095 , L0002096 , L0002097 , L0002098 , L0002099 , L0002100 , L0002101 , L0002102 ,

L0002103 , L0002104 , L0002105 , L0002106 , L0002107 , L0002108 , L0002109 , L0002110 ,

L0002111 , L0002112 , L0002113 , L0002114 , L0002115 , L0002116 , L0002117 , L0002118

,

L0002119 , L0002120 , L0002121 , L0002122 , L0002123 , L0002124 , L0002125 , L0002126 ,

L0002127 , L0002128 , L0002129 , L0002130 , L0002131 , L0002132 , L0002133 , L0002134 ,

L0002135 , L0002136 , L0002137 , L0002138 , L0002139 , L0002140 , L0002141 , L0002142 ,

L0002143 , L0002144 , L0002145 , L0002146 , L0002147 , L0002148 , L0002149 , L0002150 ,

L0002151 , L0002152 , L0002153 , L0002154 , L0002155 , L0002156 , L0002157 , L0002158 ,

L0002159 , L0002160 , L0002161 , L0002162 , L0002163 , L0002164 , L0002165 , L0002166 ,

L0002167 , L0002168 , L0002169 , L0002170 , L0002171 , L0002172 , L0002173 , L0002174 ,

L0002175 , L0002176 , L0002177 , L0002178 , L0002179 , L0002180 , L0002181 , L0002182 ,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

URBAN ID	URBAN POP	SOURCE IDs

L0002183 , L0002184 , L0002185 , L0002186 , L0002187 , L0002188 , L0002189 , L0002190 ,

L0002191 , L0002192 , L0002193 , L0002194 , L0002195 , L0002196 , L0002197 , L0002198 ,

L0002199 , L0002200 , L0002201 , L0002202 , L0002203 , L0002204 , L0002205 , L0002206 ,

L0002207 , L0002208 , L0002209 , L0002210 , L0002211 , L0002212 , L0002213 , L0002214 ,

L0002215 , L0002216 , L0002217 , L0002218 , IBA1 , IBA2 , IBA3 , IBA4 ,

IBB1 , IBB2 , IBB3 , IBC1 , IBC2 , IBC3 , IBD1 , IBD2 ,

IBD3 , IBD4 , IBE1 , IBE2 , IBE3 , IBF1 , IBF2 , IBF3 ,

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IBA1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.4,	76.0,	-72.4,	13.6,	2	9.1,	96.0,	82.1,	-79.8,	6.8,
3	9.1,	98.7,	85.7,	-84.8,	-0.1,	4	9.1,	98.5,	90.5,	-87.3,	-7.1,
5	9.1,	95.2,	94.7,	-87.1,	-13.8,	6	9.1,	89.0,	96.1,	-84.3,	-20.1,
7	9.1,	81.0,	94.5,	-78.9,	-25.4,	8	9.1,	75.2,	90.0,	-71.1,	-27.6,
9	9.1,	67.6,	82.9,	-61.1,	-28.9,	10	9.1,	76.0,	90.4,	-58.8,	-34.3,
11	9.1,	82.1,	96.0,	-54.8,	-38.8,	12	9.1,	85.7,	98.7,	-49.2,	-42.0,
13	9.1,	90.5,	98.5,	-42.1,	-42.1,	14	9.1,	94.7,	95.2,	-33.8,	-39.8,
15	9.1,	96.1,	89.0,	-24.4,	-36.2,	16	9.1,	94.5,	81.0,	-15.0,	-31.6,
17	9.1,	90.0,	75.2,	-10.0,	-26.1,	18	9.1,	82.9,	67.6,	-4.9,	-19.7,
19	9.1,	90.4,	76.0,	-3.7,	-13.6,	20	9.1,	96.0,	82.1,	-2.3,	-6.8,
21	9.1,	98.7,	85.7,	-0.9,	0.1,	22	9.1,	98.5,	90.5,	-3.2,	7.1,
23	9.1,	95.2,	94.7,	-7.6,	13.8,	24	9.1,	89.0,	96.1,	-11.8,	20.1,
25	9.1,	82.0,	61.8,	-81.8,	39.1,	26	9.1,	82.7,	49.8,	-81.3,	28.1,
27	9.1,	81.3,	36.2,	-78.3,	16.5,	28	9.1,	86.2,	45.8,	-87.0,	5.9,
29	9.1,	88.6,	54.2,	-93.0,	-5.0,	30	9.1,	88.3,	60.9,	-96.2,	-15.7,
31	9.1,	85.4,	65.8,	-96.5,	-26.0,	32	9.1,	79.9,	73.2,	-93.8,	-35.4,
33	9.1,	96.1,	89.0,	-64.6,	36.2,	34	9.1,	94.5,	81.0,	-65.9,	31.6,
35	9.1,	90.0,	75.2,	-65.2,	26.1,	36	9.1,	82.9,	67.6,	-62.7,	19.7,

SOURCE ID: IBA2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.4,	76.0,	-73.5,	20.4,	2	9.1,	96.0,	82.1,	-82.1,	13.3,
3	9.1,	98.7,	85.7,	-88.2,	5.9,	4	9.1,	98.5,	90.5,	-91.6,	-1.8,
5	9.1,	95.2,	94.7,	-92.3,	-9.3,	6	9.1,	89.0,	96.1,	-90.2,	-16.6,
7	9.1,	82.0,	61.8,	13.6,	-36.7,	8	9.1,	75.2,	90.0,	-77.8,	-26.3,
9	9.1,	67.6,	82.9,	-68.0,	-28.8,	10	9.1,	76.0,	90.4,	-65.5,	-35.4,
11	9.1,	82.1,	96.0,	-61.3,	-41.0,	12	9.1,	85.7,	98.7,	-55.2,	-45.3,
13	9.1,	90.5,	98.5,	-47.5,	-46.4,	14	9.1,	79.9,	73.2,	16.1,	30.2,
15	9.1,	71.9,	78.8,	6.0,	37.9,	16	9.1,	94.5,	81.0,	-17.5,	-38.0,
17	9.1,	90.0,	75.2,	-11.3,	-32.8,	18	9.1,	82.9,	67.6,	-5.0,	-26.6,
19	9.1,	90.4,	76.0,	-2.6,	-20.4,	20	9.1,	96.0,	82.1,	-0.1,	-13.3,
21	9.1,	98.7,	85.7,	2.5,	-5.9,	22	9.1,	98.5,	90.5,	1.2,	1.8,
23	9.1,	95.2,	94.7,	-2.4,	9.3,	24	9.1,	89.0,	96.1,	-5.9,	16.6,
25	9.1,	82.0,	61.8,	-75.4,	36.7,	26	9.1,	82.7,	49.8,	-74.5,	26.9,
27	9.1,	81.3,	36.2,	-71.5,	16.4,	28	9.1,	86.2,	45.8,	-80.2,	7.0,
29	9.1,	88.6,	54.2,	-86.5,	-2.7,	30	9.1,	88.3,	60.9,	-90.2,	-12.4,
31	9.1,	85.4,	65.8,	-91.1,	-21.6,	32	9.1,	79.9,	73.2,	-89.3,	-30.2,
33	9.1,	71.9,	78.8,	-84.8,	-37.9,	34	9.1,	94.5,	81.0,	-63.5,	38.0,
35	9.1,	90.0,	75.2,	-63.9,	32.8,	36	9.1,	82.9,	67.6,	-62.6,	26.6,

SOURCE ID: IBA3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ

1	9.1,	90.4,	76.0,	-74.8,	26.0,	2	9.1,	96.0,	82.1,	-84.3,	18.7,
3	9.1,	98.7,	85.7,	-91.4,	10.7,	4	9.1,	98.5,	90.5,	-95.6,	2.5,
5	9.1,	95.2,	94.7,	-97.0,	-5.8,	6	9.1,	78.8,	71.9,	-3.2,	-42.8,
7	9.1,	82.0,	61.8,	8.0,	-35.0,	8	9.1,	75.2,	90.0,	-83.6,	-25.6,
9	9.1,	67.6,	82.9,	-73.8,	-29.1,	10	9.1,	76.0,	90.4,	-71.2,	-36.8,
11	9.1,	82.1,	96.0,	-66.7,	-43.3,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	0.0,	0.0,	0.0,	0.0,	0.0,	14	9.1,	79.9,	73.2,	12.6,	25.6,
15	9.1,	71.9,	78.8,	3.4,	32.7,	16	9.1,	94.5,	81.0,	-19.2,	-43.6,
17	9.1,	90.0,	75.2,	-12.0,	-38.6,	18	9.1,	82.9,	67.6,	-4.7,	-32.4,
19	9.1,	90.4,	76.0,	-1.2,	-26.0,	20	9.1,	96.0,	82.1,	2.2,	-18.7,
21	9.1,	98.7,	85.7,	5.6,	-10.7,	22	9.1,	98.5,	90.5,	5.1,	-2.5,
23	9.1,	95.2,	94.7,	2.2,	5.8,	24	9.1,	78.8,	71.9,	-68.7,	42.8,
25	9.1,	82.0,	61.8,	-69.8,	35.0,	26	9.1,	82.7,	49.8,	-68.8,	26.1,
27	9.1,	81.3,	36.2,	-65.6,	16.7,	28	9.1,	86.2,	45.8,	-74.5,	8.3,
29	9.1,	88.6,	54.2,	-81.2,	-0.4,	30	9.1,	88.3,	60.9,	-85.3,	-9.2,
31	9.1,	85.4,	65.8,	-86.9,	-17.7,	32	9.1,	79.9,	73.2,	-85.8,	-25.6,
33	9.1,	71.9,	78.8,	-82.1,	-32.7,	34	9.1,	94.5,	81.0,	-61.8,	43.6,
35	9.1,	90.0,	75.2,	-63.2,	38.6,	36	9.1,	82.9,	67.6,	-62.9,	32.4,

SOURCE ID: IBA4

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.4,	76.0,	-75.5,	31.1,	2	9.1,	96.0,	82.1,	-86.0,	23.5,
3	9.1,	98.7,	85.7,	-93.8,	15.2,	4	9.1,	98.5,	90.5,	-98.8,	6.5,
5	9.1,	95.2,	94.7,	-100.8,	-2.4,	6	9.1,	78.8,	71.9,	-7.6,	-40.1,
7	9.1,	82.0,	61.8,	3.3,	-33.1,	8	9.1,	82.7,	49.8,	14.0,	-25.1,
9	9.1,	67.6,	82.9,	-78.9,	-28.9,	10	9.1,	76.0,	90.4,	-76.2,	-37.5,
11	9.1,	82.1,	96.0,	-71.5,	-44.9,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	9.1,	85.4,	65.8,	17.1,	14.5,	14	9.1,	79.9,	73.2,	9.2,	21.8,
15	9.1,	71.9,	78.8,	0.7,	28.4,	16	9.1,	61.8,	82.0,	-7.9,	34.2,
17	9.1,	90.0,	75.2,	-13.1,	-43.6,	18	9.1,	82.9,	67.6,	-4.9,	-37.5,
19	9.1,	90.4,	76.0,	-0.5,	-31.1,	20	9.1,	96.0,	82.1,	3.8,	-23.5,
21	9.1,	98.7,	85.7,	8.1,	-15.2,	22	9.1,	98.5,	90.5,	8.3,	-6.5,
23	9.1,	95.2,	94.7,	6.0,	2.4,	24	9.1,	78.8,	71.9,	-64.4,	40.1,
25	9.1,	82.0,	61.8,	-65.0,	33.1,	26	9.1,	82.7,	49.8,	-63.8,	25.1,
27	9.1,	81.3,	36.2,	-60.5,	16.6,	28	9.1,	86.2,	45.8,	-69.5,	9.1,
29	9.1,	88.6,	54.2,	-76.3,	1.2,	30	9.1,	88.3,	60.9,	-80.8,	-6.8,
31	9.1,	85.4,	65.8,	-82.9,	-14.5,	32	9.1,	79.9,	73.2,	-82.4,	-21.8,
33	9.1,	71.9,	78.8,	-79.5,	-28.4,	34	9.1,	61.8,	82.0,	-74.1,	-34.2,
35	9.1,	90.0,	75.2,	-62.1,	43.6,	36	9.1,	82.9,	67.6,	-62.8,	37.5,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IBB1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	45.8,	86.2,	-63.2,	-22.7,	2	9.1,	54.2,	88.6,	-60.5,	-27.6,
3	9.1,	60.9,	88.3,	-56.0,	-31.7,	4	9.1,	65.8,	85.4,	-49.8,	-34.8,
5	9.1,	73.2,	79.9,	-42.0,	-34.6,	6	9.1,	78.8,	71.9,	-33.0,	-33.1,
7	9.1,	82.0,	61.8,	-23.0,	-30.7,	8	9.1,	82.7,	49.8,	-12.3,	-27.3,

9	9.1,	81.3,	36.2,	-1.2,	-23.3,	10	9.1,	86.2,	45.8,	-0.2,	-20.1,
11	9.1,	88.6,	54.2,	0.5,	-16.2,	12	9.1,	88.3,	60.9,	1.2,	-11.8,
13	9.1,	85.4,	65.8,	1.9,	-7.0,	14	9.1,	79.9,	73.2,	-2.0,	-2.1,
15	9.1,	71.9,	78.8,	-6.2,	3.0,	16	9.1,	61.8,	82.0,	-10.3,	7.9,
17	9.1,	49.8,	82.7,	-14.0,	12.6,	18	9.1,	36.2,	81.3,	-17.4,	16.9,
19	9.1,	45.8,	86.2,	-23.0,	22.7,	20	9.1,	54.2,	88.6,	-28.1,	27.6,
21	9.1,	60.9,	88.3,	-32.4,	31.7,	22	9.1,	65.8,	85.4,	-35.7,	34.8,
23	9.1,	73.2,	79.9,	-37.9,	34.6,	24	9.1,	78.8,	71.9,	-38.9,	33.1,
25	9.1,	82.0,	61.8,	-38.8,	30.7,	26	9.1,	82.7,	49.8,	-37.5,	27.3,
27	9.1,	81.3,	36.2,	-35.1,	23.3,	28	9.1,	86.2,	45.8,	-45.6,	20.1,
29	9.1,	88.6,	54.2,	-54.7,	16.2,	30	9.1,	88.3,	60.9,	-62.1,	11.8,
31	9.1,	85.4,	65.8,	-67.7,	7.0,	32	9.1,	79.9,	73.2,	-71.2,	2.1,
33	9.1,	71.9,	78.8,	-72.5,	-3.0,	34	9.1,	61.8,	82.0,	-71.7,	-7.9,
35	9.1,	49.8,	82.7,	-68.6,	-12.6,	36	9.1,	36.2,	81.3,	-64.0,	-16.9,

SOURCE ID: IBB2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	45.8,	86.2,	-70.1,	-23.9,	2	9.1,	54.2,	88.6,	-67.1,	-30.0,
3	9.1,	98.7,	85.7,	-118.5,	30.4,	4	9.1,	98.5,	90.5,	-125.7,	17.2,
5	9.1,	73.2,	79.9,	-46.5,	-40.0,	6	9.1,	78.8,	71.9,	-36.5,	-39.2,
7	9.1,	82.0,	61.8,	-25.4,	-37.3,	8	9.1,	82.7,	49.8,	-13.5,	-34.2,
9	9.1,	81.3,	36.2,	-1.2,	-30.3,	10	9.1,	86.2,	45.8,	1.0,	-27.1,
11	9.1,	88.6,	54.2,	2.9,	-22.8,	12	9.1,	88.3,	60.9,	4.7,	-17.9,
13	9.1,	85.4,	65.8,	6.4,	-12.4,	14	9.1,	79.9,	73.2,	3.4,	-6.6,
15	9.1,	71.9,	78.8,	-0.1,	-0.6,	16	9.1,	61.8,	82.0,	-3.7,	5.5,
17	9.1,	49.8,	82.7,	-7.1,	11.4,	18	9.1,	36.2,	81.3,	-10.3,	16.9,
19	9.1,	45.8,	86.2,	-16.0,	23.9,	20	9.1,	54.2,	88.6,	-21.5,	30.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	9.1,	73.2,	79.9,	-33.3,	40.0,	24	9.1,	78.8,	71.9,	-35.4,	39.2,
25	9.1,	82.0,	61.8,	-36.4,	37.3,	26	9.1,	82.7,	49.8,	-36.3,	34.2,
27	9.1,	81.3,	36.2,	-35.1,	30.3,	28	9.1,	86.2,	45.8,	-46.8,	27.1,
29	9.1,	88.6,	54.2,	-57.1,	22.8,	30	9.1,	88.3,	60.9,	-65.6,	17.9,
31	9.1,	85.4,	65.8,	-72.2,	12.4,	32	9.1,	79.9,	73.2,	-76.6,	6.6,
33	9.1,	71.9,	78.8,	-78.6,	0.6,	34	9.1,	61.8,	82.0,	-78.3,	-5.5,
35	9.1,	49.8,	82.7,	-75.6,	-11.4,	36	9.1,	36.2,	81.3,	-71.0,	-16.9,

SOURCE ID: IBB3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	45.8,	86.2,	-76.4,	-25.3,	2	9.1,	96.0,	82.1,	-113.5,	40.2,
3	9.1,	98.7,	85.7,	-123.9,	26.9,	4	9.1,	98.5,	90.5,	-130.4,	12.8,
5	9.1,	95.2,	94.7,	-133.0,	-1.7,	6	9.1,	89.0,	96.1,	-131.6,	-16.2,
7	9.1,	82.0,	61.8,	-27.3,	-43.4,	8	9.1,	82.7,	49.8,	-14.3,	-40.6,
9	9.1,	81.3,	36.2,	-0.9,	-36.8,	10	9.1,	86.2,	45.8,	2.4,	-33.3,
11	9.1,	88.6,	54.2,	5.4,	-28.8,	12	9.1,	88.3,	60.9,	8.2,	-23.3,
13	9.1,	85.4,	65.8,	10.8,	-17.2,	14	9.1,	79.9,	73.2,	8.5,	-10.5,
15	9.1,	71.9,	78.8,	5.6,	-3.5,	16	9.1,	61.8,	82.0,	2.5,	3.6,
17	9.1,	49.8,	82.7,	-0.7,	10.6,	18	9.1,	36.2,	81.3,	-3.9,	17.2,
19	9.1,	45.8,	86.2,	-9.8,	25.3,	20	0.0,	0.0,	0.0,	0.0,	0.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	0.0,	0.0,	0.0,	0.0,	0.0,	24	0.0,	0.0,	0.0,	0.0,	0.0,
25	9.1,	82.0,	61.8,	-34.5,	43.4,	26	9.1,	82.7,	49.8,	-35.5,	40.6,
27	9.1,	81.3,	36.2,	-35.4,	36.8,	28	9.1,	86.2,	45.8,	-48.2,	33.3,
29	9.1,	88.6,	54.2,	-59.6,	28.8,	30	9.1,	88.3,	60.9,	-69.1,	23.3,
31	9.1,	85.4,	65.8,	-76.6,	17.2,	32	9.1,	79.9,	73.2,	-81.7,	10.5,

33	9.1,	71.9,	78.8,	-84.3,	3.5,	34	9.1,	61.8,	82.0,	-84.4,	-3.6,
35	9.1,	49.8,	82.7,	-82.0,	-10.6,	36	9.1,	36.2,	81.3,	-77.4,	-17.2,

SOURCE ID: IBC1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	48.7,	88.5,	-65.9,	-23.4,	2	9.1,	54.2,	88.6,	-96.0,	28.8,
3	9.1,	60.9,	88.3,	-100.8,	17.7,	4	9.1,	65.8,	85.4,	-102.5,	6.1,
5	9.1,	73.2,	79.9,	-101.0,	-3.5,	6	9.1,	78.8,	71.9,	-96.5,	-12.8,
7	9.1,	82.0,	61.8,	-89.0,	-21.7,	8	9.1,	82.7,	49.8,	-78.9,	-29.9,
9	9.1,	81.3,	36.2,	-66.3,	-37.4,	10	9.1,	86.2,	45.8,	-62.0,	-45.3,
11	9.1,	91.3,	57.5,	-0.2,	-17.6,	12	9.1,	91.3,	64.5,	0.7,	-13.0,
13	9.1,	88.5,	69.6,	1.5,	-8.1,	14	9.1,	83.0,	76.8,	-1.9,	-2.8,
15	9.1,	75.0,	82.4,	-6.0,	2.5,	16	9.1,	64.8,	85.4,	-9.9,	7.7,
17	9.1,	52.5,	85.9,	-13.5,	12.7,	18	9.1,	38.7,	83.7,	-16.7,	17.3,
19	9.1,	48.7,	88.5,	-22.6,	23.4,	20	9.1,	54.2,	88.6,	7.5,	-28.8,
21	9.1,	60.9,	88.3,	12.4,	-17.7,	22	9.1,	65.8,	85.4,	17.0,	-6.1,
23	9.1,	76.8,	83.0,	-38.7,	36.5,	24	9.1,	82.4,	75.0,	-40.0,	35.2,
25	9.1,	85.4,	64.8,	-40.1,	32.8,	26	9.1,	85.9,	52.5,	-38.9,	29.4,
27	9.1,	83.7,	38.7,	-36.6,	25.2,	28	9.1,	86.2,	45.8,	16.2,	45.3,
29	9.1,	91.3,	57.5,	-57.3,	17.6,	30	9.1,	91.3,	64.5,	-65.2,	13.0,
31	9.1,	88.5,	69.6,	-71.1,	8.1,	32	9.1,	83.0,	76.8,	-74.9,	2.8,
33	9.1,	75.0,	82.4,	-76.4,	-2.5,	34	9.1,	64.8,	85.4,	-75.5,	-7.7,
35	9.1,	52.5,	85.9,	-72.4,	-12.7,	36	9.1,	38.7,	83.7,	-67.0,	-17.3,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IBC2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	48.7,	88.5,	-72.8,	-24.6,	2	9.1,	54.2,	88.6,	-102.7,	26.4,
3	9.1,	60.9,	88.3,	-106.9,	14.2,	4	9.1,	65.8,	85.4,	-107.8,	1.5,
5	9.1,	73.2,	79.9,	-105.5,	-8.9,	6	9.1,	78.8,	71.9,	-100.0,	-18.9,
7	9.1,	82.0,	61.8,	-91.5,	-28.3,	8	9.1,	82.7,	49.8,	-80.1,	-36.8,
9	9.1,	81.3,	36.2,	-66.3,	-44.4,	10	9.1,	88.5,	48.7,	0.2,	-28.6,
11	9.1,	91.3,	57.5,	2.2,	-24.2,	12	9.1,	91.3,	64.5,	4.2,	-19.1,
13	9.1,	88.5,	69.6,	6.0,	-13.5,	14	9.1,	83.0,	76.8,	3.5,	-7.4,
15	9.1,	75.0,	82.4,	0.1,	-1.1,	16	9.1,	64.8,	85.4,	-3.3,	5.3,
17	9.1,	52.5,	85.9,	-6.6,	11.5,	18	9.1,	38.7,	83.7,	-9.7,	17.3,
19	9.1,	48.7,	88.5,	-15.7,	24.6,	20	9.1,	54.2,	88.6,	14.1,	-26.4,
21	9.1,	64.5,	91.3,	-26.5,	36.5,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	9.1,	76.8,	83.0,	-34.1,	41.9,	24	9.1,	82.4,	75.0,	-36.5,	41.3,
25	9.1,	85.4,	64.8,	-37.7,	39.4,	26	9.1,	85.9,	52.5,	-37.7,	36.3,
27	9.1,	83.7,	38.7,	-36.6,	32.2,	28	9.1,	88.5,	48.7,	-48.9,	28.6,
29	9.1,	91.3,	57.5,	-59.8,	24.2,	30	9.1,	91.3,	64.5,	-68.8,	19.1,
31	9.1,	88.5,	69.6,	-75.7,	13.5,	32	9.1,	83.0,	76.8,	-80.3,	7.4,
33	9.1,	75.0,	82.4,	-82.4,	1.1,	34	9.1,	64.8,	85.4,	-82.1,	-5.3,
35	9.1,	52.5,	85.9,	-79.3,	-11.5,	36	9.1,	38.7,	83.7,	-74.0,	-17.3,

SOURCE ID: IBC3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	48.7,	88.5,	-79.1,	-26.0,	2	9.1,	54.2,	88.6,	-108.6,	23.9,
3	9.1,	60.9,	88.3,	-112.3,	10.7,	4	9.1,	65.8,	85.4,	-112.6,	-2.8,
5	9.1,	73.2,	79.9,	-109.4,	-14.0,	6	9.1,	78.8,	71.9,	-103.0,	-24.6,
7	9.1,	82.0,	61.8,	-93.4,	-34.4,	8	9.1,	82.7,	49.8,	-80.9,	-43.2,
9	9.1,	83.7,	38.7,	-1.7,	-38.6,	10	9.1,	88.5,	48.7,	1.6,	-34.9,
11	9.1,	91.3,	57.5,	4.7,	-30.2,	12	9.1,	91.3,	64.5,	7.7,	-24.5,
13	9.1,	88.5,	69.6,	10.4,	-18.2,	14	9.1,	83.0,	76.8,	8.6,	-11.3,
15	9.1,	75.0,	82.4,	5.8,	-4.0,	16	9.1,	64.8,	85.4,	2.8,	3.4,
17	9.1,	52.5,	85.9,	-0.2,	10.6,	18	9.1,	38.7,	83.7,	-3.3,	17.6,
19	9.1,	48.7,	88.5,	-9.4,	26.0,	20	0.0,	0.0,	0.0,	0.0,	0.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	0.0,	0.0,	0.0,	0.0,	0.0,	24	0.0,	0.0,	0.0,	0.0,	0.0,
25	9.1,	85.4,	64.8,	-35.7,	45.5,	26	9.1,	85.9,	52.5,	-36.9,	42.7,
27	9.1,	83.7,	38.7,	-36.9,	38.6,	28	9.1,	88.5,	48.7,	-50.3,	34.9,
29	9.1,	91.3,	57.5,	-62.2,	30.2,	30	9.1,	91.3,	64.5,	-72.2,	24.5,
31	9.1,	88.5,	69.6,	-80.0,	18.2,	32	9.1,	83.0,	76.8,	-85.4,	11.3,
33	9.1,	75.0,	82.4,	-88.2,	4.0,	34	9.1,	64.8,	85.4,	-88.3,	-3.4,
35	9.1,	52.5,	85.9,	-85.7,	-10.6,	36	9.1,	38.7,	83.7,	-80.5,	-17.6,

SOURCE ID: IBD1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.9,	72.1,	-20.5,	43.6,	2	9.1,	90.3,	83.0,	-33.6,	48.4,
3	9.1,	57.4,	74.7,	6.9,	-25.9,	4	9.1,	58.7,	74.8,	11.5,	-16.3,
5	9.1,	61.8,	72.7,	15.7,	-8.0,	6	9.1,	80.2,	101.8,	-72.5,	43.2,
7	9.1,	74.8,	99.8,	-77.3,	37.0,	8	9.1,	68.5,	94.8,	-79.8,	30.4,
9	9.1,	60.1,	88.8,	-81.8,	22.9,	10	9.1,	67.7,	49.8,	17.6,	31.0,
11	9.1,	72.3,	54.4,	7.5,	38.2,	12	9.1,	91.4,	86.9,	-95.3,	-0.0,
13	9.1,	97.0,	84.5,	-94.1,	-7.9,	14	9.1,	100.8,	83.6,	-90.1,	-15.1,
15	9.1,	101.8,	80.2,	-83.3,	-21.6,	16	9.1,	99.8,	74.8,	-74.4,	-27.4,
17	9.1,	94.8,	68.5,	-64.6,	-32.4,	18	9.1,	88.8,	60.1,	-52.9,	-37.4,
19	9.1,	90.9,	72.1,	-51.6,	-43.6,	20	9.1,	90.3,	83.0,	-49.4,	-48.4,
21	9.1,	57.4,	74.7,	-81.5,	25.9,	22	9.1,	58.7,	74.8,	-86.3,	16.3,
23	9.1,	61.8,	72.7,	-88.4,	8.0,	24	9.1,	64.4,	68.4,	-87.9,	0.1,
25	9.1,	65.0,	62.0,	-84.7,	-7.7,	26	9.1,	63.6,	53.7,	-78.9,	-15.4,
27	9.1,	61.0,	43.8,	-70.7,	-22.9,	28	9.1,	67.7,	49.8,	-67.3,	-31.0,
29	9.1,	72.3,	54.4,	-61.9,	-38.2,	30	9.1,	91.4,	86.9,	8.4,	0.0,
31	9.1,	97.0,	84.5,	9.6,	7.9,	32	9.1,	100.8,	83.6,	6.4,	15.1,
33	9.1,	101.8,	80.2,	3.1,	21.6,	34	9.1,	99.8,	74.8,	-0.4,	27.4,
35	9.1,	94.8,	68.5,	-3.8,	32.4,	36	9.1,	88.8,	60.1,	-7.2,	37.4,

SOURCE ID: IBD2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.9,	72.1,	-27.4,	42.4,	2	9.1,	90.3,	83.0,	-40.2,	46.0,
3	9.1,	57.4,	74.7,	0.8,	-29.4,	4	9.1,	58.7,	74.8,	6.1,	-20.8,
5	9.1,	61.8,	72.7,	11.2,	-13.4,	6	9.1,	64.4,	68.4,	16.0,	-6.2,
7	9.1,	74.8,	99.8,	-79.7,	30.4,	8	9.1,	68.5,	94.8,	-81.0,	23.5,
9	9.1,	60.1,	88.8,	-81.8,	15.8,	10	9.1,	72.1,	90.9,	-87.8,	8.6,
11	9.1,	72.3,	54.4,	9.9,	31.6,	12	9.1,	74.7,	57.4,	0.7,	38.1,
13	9.1,	97.0,	84.5,	-89.6,	-13.3,	14	9.1,	100.8,	83.6,	-84.7,	-19.6,
15	9.1,	101.8,	80.2,	-77.2,	-25.1,	16	9.1,	99.8,	74.8,	-67.8,	-29.8,
17	9.1,	94.8,	68.5,	-57.7,	-33.6,	18	9.1,	88.8,	60.1,	-45.9,	-37.4,
19	9.1,	90.9,	72.1,	-44.7,	-42.4,	20	9.1,	90.3,	83.0,	-42.8,	-46.0,

21	9.1,	57.4,	74.7,	-75.5,	29.4,	22	9.1,	58.7,	74.8,	-80.9,	20.8,
23	9.1,	61.8,	72.7,	-83.9,	13.4,	24	9.1,	64.4,	68.4,	-84.4,	6.2,
25	9.1,	65.0,	62.0,	-82.3,	-1.1,	26	9.1,	63.6,	53.7,	-77.6,	-8.4,
27	9.1,	61.0,	43.8,	-70.7,	-15.8,	28	9.1,	67.7,	49.8,	-68.6,	-24.1,
29	9.1,	72.3,	54.4,	-64.3,	-31.6,	30	9.1,	74.7,	57.4,	-58.1,	-38.1,
31	9.1,	97.0,	84.5,	5.1,	13.3,	32	9.1,	100.8,	83.6,	1.1,	19.6,
33	9.1,	101.8,	80.2,	-3.0,	25.1,	34	9.1,	99.8,	74.8,	-7.0,	29.8,
35	9.1,	94.8,	68.5,	-10.8,	33.6,	36	9.1,	88.8,	60.1,	-14.2,	37.4,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IBD3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.9,	72.1,	-33.7,	40.9,	2	9.1,	90.3,	83.0,	-46.2,	43.5,
3	9.1,	57.4,	74.7,	-4.6,	-32.9,	4	9.1,	58.7,	74.8,	1.4,	-25.2,
5	9.1,	61.8,	72.7,	7.3,	-18.5,	6	9.1,	64.4,	68.4,	13.1,	-12.0,
7	9.1,	74.8,	99.8,	-81.6,	24.2,	8	9.1,	68.5,	94.8,	-81.8,	17.1,
9	9.1,	60.1,	88.8,	-81.5,	9.4,	10	9.1,	72.1,	90.9,	-86.4,	2.3,
11	9.1,	72.3,	54.4,	12.4,	25.6,	12	9.1,	74.7,	57.4,	4.2,	32.7,
13	9.1,	74.8,	58.7,	-4.2,	38.8,	14	9.1,	100.8,	83.6,	-79.5,	-23.5,
15	9.1,	101.8,	80.2,	-71.5,	-28.0,	16	9.1,	99.8,	74.8,	-61.6,	-31.7,
17	9.1,	94.8,	68.5,	-51.3,	-34.4,	18	9.1,	88.8,	60.1,	-39.4,	-37.1,
19	9.1,	90.9,	72.1,	-38.4,	-40.9,	20	9.1,	90.3,	83.0,	-36.8,	-43.5,
21	9.1,	57.4,	74.7,	-70.0,	32.9,	22	9.1,	58.7,	74.8,	-76.2,	25.2,
23	9.1,	61.8,	72.7,	-80.0,	18.5,	24	9.1,	64.4,	68.4,	-81.4,	12.0,
25	9.1,	65.0,	62.0,	-80.4,	5.0,	26	9.1,	63.6,	53.7,	-76.8,	-2.0,
27	9.1,	61.0,	43.8,	-71.0,	-9.4,	28	9.1,	67.7,	49.8,	-70.0,	-17.8,
29	9.1,	72.3,	54.4,	-66.8,	-25.6,	30	9.1,	74.7,	57.4,	-61.6,	-32.7,
31	9.1,	74.8,	58.7,	-54.5,	-38.8,	32	9.1,	100.8,	83.6,	-4.1,	23.5,
33	9.1,	101.8,	80.2,	-8.7,	28.0,	34	9.1,	99.8,	74.8,	-13.2,	31.7,
35	9.1,	94.8,	68.5,	-17.2,	34.4,	36	9.1,	88.8,	60.1,	-20.7,	37.1,

SOURCE ID: IBD4

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.9,	72.1,	-41.9,	39.4,	2	9.1,	90.3,	83.0,	-54.0,	40.6,
3	9.1,	86.9,	91.4,	-64.4,	40.6,	4	9.1,	58.7,	74.8,	-5.0,	-30.6,
5	9.1,	61.8,	72.7,	2.0,	-25.0,	6	9.1,	64.4,	68.4,	9.0,	-19.2,
7	9.1,	65.0,	62.0,	15.6,	-12.9,	8	9.1,	68.5,	94.8,	-83.1,	8.8,
9	9.1,	60.1,	88.8,	-81.4,	1.0,	10	9.1,	72.1,	90.9,	-84.8,	-5.9,
11	9.1,	72.3,	54.4,	15.3,	17.8,	12	9.1,	74.7,	57.4,	8.4,	25.5,
13	9.1,	74.8,	58.7,	1.3,	32.4,	14	9.1,	72.7,	61.8,	-5.9,	38.4,
15	9.1,	101.8,	80.2,	-64.2,	-32.1,	16	9.1,	99.8,	74.8,	-53.7,	-34.4,
17	9.1,	94.8,	68.5,	-43.1,	-35.8,	18	9.1,	88.8,	60.1,	-31.1,	-37.0,
19	9.1,	90.9,	72.1,	-30.2,	-39.4,	20	9.1,	90.3,	83.0,	-29.0,	-40.6,
21	9.1,	86.9,	91.4,	-27.0,	-40.6,	22	9.1,	58.7,	74.8,	-69.9,	30.6,
23	9.1,	61.8,	72.7,	-74.7,	25.0,	24	9.1,	64.4,	68.4,	-77.3,	19.2,
25	9.1,	65.0,	62.0,	-77.6,	12.9,	26	9.1,	63.6,	53.7,	-75.5,	6.2,
27	9.1,	61.0,	43.8,	-71.1,	-1.1,	28	9.1,	67.7,	49.8,	-71.5,	-9.6,

29	9.1,	72.3,	54.4,	-69.8,	-17.8,	30	9.1,	74.7,	57.4,	-65.8,	-25.5,
31	9.1,	74.8,	58.7,	-59.9,	-32.4,	32	9.1,	72.7,	61.8,	-55.9,	-38.4,
33	9.1,	101.8,	80.2,	-16.0,	32.1,	34	9.1,	99.8,	74.8,	-21.0,	34.4,
35	9.1,	94.8,	68.5,	-25.4,	35.8,	36	9.1,	88.8,	60.1,	-29.0,	37.0,

SOURCE ID: IBE1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	49.8,	67.7,	-10.1,	28.3,	2	9.1,	57.1,	69.0,	7.9,	-31.9,
3	9.1,	64.9,	67.2,	12.1,	-23.4,	4	9.1,	70.7,	63.4,	16.0,	-14.3,
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,	0.0,
7	9.1,	65.0,	62.0,	-42.2,	36.9,	8	9.1,	63.6,	53.7,	-43.8,	32.8,
9	9.1,	61.0,	43.8,	-44.0,	28.0,	10	9.1,	67.7,	49.8,	-53.2,	23.8,
11	9.1,	72.3,	54.4,	-61.0,	18.8,	12	9.1,	74.7,	57.4,	-66.9,	13.2,
13	9.1,	74.8,	58.7,	-70.8,	7.2,	14	9.1,	72.7,	61.8,	-72.5,	1.0,
15	9.1,	68.4,	64.4,	-72.0,	-5.2,	16	9.1,	62.0,	65.0,	-69.4,	-11.2,
17	9.1,	53.7,	63.6,	-64.6,	-17.0,	18	9.1,	43.8,	61.0,	-58.5,	-22.1,
19	9.1,	49.8,	67.7,	-57.6,	-28.3,	20	9.1,	57.1,	69.0,	-76.9,	31.9,
21	9.1,	64.9,	67.2,	-79.3,	23.4,	22	9.1,	70.7,	63.4,	-79.3,	14.3,
23	9.1,	74.4,	60.7,	-80.0,	4.7,	24	9.1,	75.8,	57.5,	-79.7,	-5.1,
25	9.1,	65.0,	62.0,	-19.8,	-36.9,	26	9.1,	63.6,	53.7,	-9.9,	-32.8,
27	9.1,	61.0,	43.8,	0.2,	-28.0,	28	9.1,	67.7,	49.8,	3.4,	-23.8,
29	9.1,	72.3,	54.4,	6.5,	-18.8,	30	9.1,	74.7,	57.4,	9.5,	-13.2,
31	9.1,	74.8,	58.7,	12.1,	-7.2,	32	9.1,	72.7,	61.8,	10.7,	-1.0,
33	9.1,	68.4,	64.4,	7.6,	5.2,	34	9.1,	62.0,	65.0,	4.4,	11.2,
35	9.1,	53.7,	63.6,	1.0,	17.0,	36	9.1,	43.8,	61.0,	-2.5,	22.1,

SOURCE ID: IBE2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	49.8,	67.7,	-17.0,	27.1,	2	9.1,	54.4,	72.3,	-24.0,	31.4,
3	9.1,	64.9,	67.2,	6.0,	-26.9,	4	9.1,	70.7,	63.4,	10.6,	-18.8,
5	9.1,	74.4,	60.7,	14.9,	-10.1,	6	9.1,	64.4,	68.4,	-42.9,	33.7,
7	9.1,	65.0,	62.0,	-44.6,	30.2,	8	9.1,	63.6,	53.7,	-45.0,	25.9,
9	9.1,	61.0,	43.8,	-44.0,	21.0,	10	9.1,	67.7,	49.8,	-52.0,	16.8,
11	9.1,	72.3,	54.4,	-58.6,	12.2,	12	9.1,	74.7,	57.4,	-63.4,	7.1,
13	9.1,	74.8,	58.7,	-66.2,	1.8,	14	9.1,	72.7,	61.8,	-67.1,	-3.5,
15	9.1,	68.4,	64.4,	-65.9,	-8.7,	16	9.1,	62.0,	65.0,	-62.8,	-13.6,
17	9.1,	53.7,	63.6,	-57.7,	-18.2,	18	9.1,	43.8,	61.0,	-51.5,	-22.1,
19	9.1,	49.8,	67.7,	-50.7,	-27.1,	20	9.1,	54.4,	72.3,	-48.3,	-31.4,
21	9.1,	64.9,	67.2,	-73.3,	26.9,	22	9.1,	70.7,	63.4,	-74.0,	18.8,
23	9.1,	74.4,	60.7,	-75.5,	10.1,	24	9.1,	64.4,	68.4,	-25.5,	-33.7,
25	9.1,	65.0,	62.0,	-17.3,	-30.2,	26	9.1,	63.6,	53.7,	-8.7,	-25.9,
27	9.1,	61.0,	43.8,	0.2,	-21.0,	28	9.1,	67.7,	49.8,	2.2,	-16.8,
29	9.1,	72.3,	54.4,	4.1,	-12.2,	30	9.1,	74.7,	57.4,	6.0,	-7.1,
31	9.1,	74.8,	58.7,	7.6,	-1.8,	32	9.1,	72.7,	61.8,	5.3,	3.5,
33	9.1,	68.4,	64.4,	1.5,	8.7,	34	9.1,	62.0,	65.0,	-2.2,	13.6,
35	9.1,	53.7,	63.6,	-6.0,	18.2,	36	9.1,	43.8,	61.0,	-9.5,	22.1,

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: IBE3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	49.8,	67.7,	-23.3,	25.7,	2	9.1,	54.4,	72.3,	-29.9,	28.9,
3	9.1,	57.4,	74.7,	-35.6,	31.2,	4	9.1,	58.7,	74.8,	-40.3,	32.5,
5	9.1,	61.8,	72.7,	-43.7,	31.1,	6	9.1,	64.4,	68.4,	-45.8,	28.0,
7	9.1,	65.0,	62.0,	-46.5,	24.1,	8	9.1,	63.6,	53.7,	-45.8,	19.5,
9	9.1,	61.0,	43.8,	-43.7,	14.6,	10	9.1,	67.7,	49.8,	-50.6,	10.6,
11	9.1,	72.3,	54.4,	-56.1,	6.2,	12	9.1,	74.7,	57.4,	-59.9,	1.7,
13	9.1,	74.8,	58.7,	-61.9,	-2.9,	14	9.1,	72.7,	61.8,	-62.0,	-7.4,
15	9.1,	68.4,	64.4,	-60.2,	-11.6,	16	9.1,	62.0,	65.0,	-56.6,	-15.6,
17	9.1,	53.7,	63.6,	-51.3,	-19.0,	18	9.1,	43.8,	61.0,	-45.1,	-21.8,
19	9.1,	49.8,	67.7,	-44.4,	-25.7,	20	9.1,	54.4,	72.3,	-42.4,	-28.9,
21	9.1,	57.4,	74.7,	-39.0,	-31.2,	22	9.1,	58.7,	74.8,	-34.5,	-32.5,
23	9.1,	61.8,	72.7,	-29.0,	-31.1,	24	9.1,	64.4,	68.4,	-22.6,	-28.0,
25	9.1,	65.0,	62.0,	-15.4,	-24.1,	26	9.1,	63.6,	53.7,	-7.8,	-19.5,
27	9.1,	61.0,	43.8,	-0.1,	-14.6,	28	9.1,	67.7,	49.8,	0.8,	-10.6,
29	9.1,	72.3,	54.4,	1.7,	-6.2,	30	9.1,	74.7,	57.4,	2.5,	-1.7,
31	9.1,	74.8,	58.7,	3.2,	2.9,	32	9.1,	72.7,	61.8,	0.2,	7.4,
33	9.1,	68.4,	64.4,	-4.2,	11.6,	34	9.1,	62.0,	65.0,	-8.4,	15.6,
35	9.1,	53.7,	63.6,	-12.3,	19.0,	36	9.1,	43.8,	61.0,	-15.9,	21.8,

SOURCE ID: IBF1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	47.6,	68.7,	-68.0,	-1.7,	2	9.1,	57.1,	69.0,	-69.0,	-7.2,
3	9.1,	64.5,	91.3,	17.1,	34.8,	4	9.1,	70.7,	63.4,	-64.8,	-17.4,
5	9.1,	74.4,	60.7,	-59.6,	-21.7,	6	9.1,	75.8,	57.5,	-52.7,	-25.4,
7	9.1,	74.8,	52.6,	-44.1,	-28.4,	8	9.1,	71.6,	46.1,	-34.2,	-30.5,
9	9.1,	66.5,	38.2,	-23.3,	-31.7,	10	9.1,	68.7,	47.6,	-22.1,	-33.7,
11	9.1,	69.0,	57.1,	-21.4,	-34.5,	12	9.1,	67.2,	64.9,	-20.0,	-34.3,
13	9.1,	63.4,	70.7,	-18.0,	-33.1,	14	9.1,	83.0,	76.8,	-91.5,	45.1,
15	9.1,	75.0,	82.4,	-102.6,	34.1,	16	9.1,	64.8,	85.4,	-110.5,	22.1,
17	9.1,	52.5,	85.9,	-115.1,	9.4,	18	9.1,	38.7,	83.7,	-116.2,	-3.5,
19	9.1,	48.7,	88.5,	-117.0,	-14.4,	20	9.1,	57.5,	91.3,	-114.4,	-25.0,
21	9.1,	64.5,	91.3,	-108.3,	-34.8,	22	9.1,	70.7,	63.4,	1.4,	17.4,
23	9.1,	74.4,	60.7,	-1.0,	21.7,	24	9.1,	75.8,	57.5,	-4.8,	25.4,
25	9.1,	74.8,	52.6,	-8.5,	28.4,	26	9.1,	71.6,	46.1,	-11.9,	30.5,
27	9.1,	66.5,	38.2,	-14.9,	31.7,	28	9.1,	68.7,	47.6,	-25.5,	33.7,
29	9.1,	69.0,	57.1,	-35.8,	34.5,	30	9.1,	67.2,	64.9,	-44.9,	34.3,
31	9.1,	63.4,	70.7,	-52.7,	33.1,	32	9.1,	83.0,	76.8,	14.7,	-45.1,
33	9.1,	57.5,	75.8,	-63.3,	23.9,	34	9.1,	52.6,	74.8,	-65.8,	17.8,
35	9.1,	46.1,	71.6,	-66.3,	11.2,	36	9.1,	38.2,	66.5,	-65.0,	4.2,

SOURCE ID: IBF2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	47.6,	68.7,	-68.6,	5.0,	2	9.1,	57.1,	69.0,	-70.8,	-0.7,
3	9.1,	64.9,	67.2,	-70.8,	-6.3,	4	9.1,	70.7,	63.4,	-68.6,	-11.8,
5	9.1,	74.4,	60.7,	-64.4,	-16.9,	6	9.1,	75.8,	57.5,	-58.2,	-21.6,
7	9.1,	74.8,	52.6,	-50.2,	-25.5,	8	9.1,	71.6,	46.1,	-40.8,	-28.7,
9	9.1,	66.5,	38.2,	-30.0,	-31.1,	10	9.1,	68.7,	47.6,	-28.9,	-34.2,
11	9.1,	69.0,	57.1,	-27.9,	-36.3,	12	9.1,	67.2,	64.9,	-26.1,	-37.2,
13	0.0,	0.0,	0.0,	0.0,	0.0,	14	9.1,	83.0,	76.8,	-96.3,	40.4,
15	9.1,	75.0,	82.4,	-106.5,	28.6,	16	9.1,	64.8,	85.4,	-113.4,	16.0,

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
17	9.1,	52.5,	85.9,	-116.9,	2.9,	18	9.1,	38.7,	83.7,	-116.8,	-10.3,
19	9.1,	48.7,	88.5,	-116.4,	-21.2,	20	9.1,	57.5,	91.3,	-112.6,	-31.5,
21	9.1,	64.9,	67.2,	3.6,	6.3,	22	9.1,	70.7,	63.4,	5.3,	11.8,
23	9.1,	74.4,	60.7,	3.7,	16.9,	24	9.1,	75.8,	57.5,	0.7,	21.6,
25	9.1,	74.8,	52.6,	-2.4,	25.5,	26	9.1,	71.6,	46.1,	-5.4,	28.7,
27	9.1,	66.5,	38.2,	-8.2,	31.1,	28	9.1,	68.7,	47.6,	-18.8,	34.2,
29	9.1,	69.0,	57.1,	-29.2,	36.3,	30	9.1,	67.2,	64.9,	-38.8,	37.2,
31	0.0,	0.0,	0.0,	0.0,	0.0,	32	9.1,	60.7,	74.4,	-54.1,	34.1,
33	9.1,	57.5,	75.8,	-59.4,	29.4,	34	9.1,	52.6,	74.8,	-62.9,	23.9,
35	9.1,	46.1,	71.6,	-64.5,	17.7,	36	9.1,	38.2,	66.5,	-64.4,	10.9,

SOURCE ID: IBF3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	47.6,	68.7,	-69.9,	10.7,	2	9.1,	57.1,	69.0,	-73.0,	4.7,
3	9.1,	64.9,	67.2,	-74.0,	-1.4,	4	9.1,	70.7,	63.4,	-72.6,	-7.6,
5	9.1,	74.4,	60.7,	-69.0,	-13.5,	6	9.1,	75.8,	57.5,	-63.4,	-18.9,
7	9.1,	74.8,	52.6,	-55.8,	-23.8,	8	9.1,	71.6,	46.1,	-46.5,	-28.0,
9	9.1,	66.5,	38.2,	-35.8,	-31.4,	10	9.1,	68.7,	47.6,	-34.5,	-35.6,
11	9.1,	69.0,	57.1,	-33.3,	-38.5,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	9.1,	88.5,	69.6,	-88.2,	46.9,	14	9.1,	83.0,	76.8,	-99.8,	35.7,
15	9.1,	75.0,	82.4,	-109.1,	23.4,	16	9.1,	64.8,	85.4,	-115.1,	10.5,
17	9.1,	52.5,	85.9,	-117.6,	-2.8,	18	9.1,	38.7,	83.7,	-116.5,	-16.1,
19	9.1,	48.7,	88.5,	-115.1,	-26.8,	20	9.1,	57.1,	69.0,	4.0,	-4.7,
21	9.1,	64.9,	67.2,	6.7,	1.4,	22	9.1,	70.7,	63.4,	9.2,	7.6,
23	9.1,	74.4,	60.7,	8.4,	13.5,	24	9.1,	75.8,	57.5,	5.9,	18.9,
25	9.1,	74.8,	52.6,	3.2,	23.8,	26	9.1,	71.6,	46.1,	0.4,	28.0,
27	9.1,	66.5,	38.2,	-2.4,	31.4,	28	9.1,	68.7,	47.6,	-13.1,	35.6,
29	9.1,	69.0,	57.1,	-23.9,	38.5,	30	0.0,	0.0,	0.0,	0.0,	0.0,
31	0.0,	0.0,	0.0,	0.0,	0.0,	32	0.0,	0.0,	0.0,	0.0,	0.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	9.1,	52.6,	74.8,	-61.2,	29.5,
35	9.1,	46.1,	71.6,	-63.8,	23.5,	36	9.1,	38.2,	66.5,	-64.7,	16.7,

♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: FPA

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.4,	76.0,	3.1,	-31.6,	2	9.1,	96.0,	82.1,	2.3,	-24.6,
3	9.1,	98.7,	85.7,	1.5,	-16.8,	4	9.1,	98.5,	90.5,	0.6,	-8.5,
5	9.1,	95.2,	94.7,	-0.3,	0.1,	6	9.1,	89.0,	96.1,	-1.2,	8.6,
7	9.1,	81.0,	94.5,	-2.0,	17.3,	8	9.1,	75.2,	90.0,	-2.8,	27.9,
9	9.1,	67.6,	82.9,	-3.5,	37.6,	10	9.1,	76.0,	90.4,	-13.6,	41.1,
11	9.1,	82.1,	96.0,	-23.4,	43.4,	12	9.1,	85.7,	98.7,	-32.6,	44.4,
13	9.1,	90.5,	98.5,	-40.8,	45.9,	14	9.1,	94.7,	95.2,	-47.7,	47.1,
15	9.1,	96.1,	89.0,	-53.1,	46.8,	16	9.1,	94.5,	81.0,	-57.8,	45.2,
17	9.1,	90.0,	75.2,	-65.5,	42.2,	18	9.1,	82.9,	67.6,	-71.4,	37.9,
19	9.1,	90.4,	76.0,	-79.1,	31.6,	20	9.1,	96.0,	82.1,	-84.5,	24.6,
21	9.1,	98.7,	85.7,	-87.2,	16.8,	22	9.1,	98.5,	90.5,	-91.1,	8.5,
23	9.1,	95.2,	94.7,	-94.4,	-0.1,	24	9.1,	89.0,	96.1,	-94.9,	-8.6,

25	9.1,	81.0,	94.5,	-92.5,	-17.3,	26	9.1,	75.2,	90.0,	-87.2,	-27.9,
27	9.1,	67.6,	82.9,	-79.3,	-37.6,	28	9.1,	76.0,	90.4,	-76.8,	-41.1,
29	9.1,	82.1,	96.0,	-72.5,	-43.4,	30	9.1,	85.7,	98.7,	-66.1,	-44.4,
31	9.1,	90.5,	98.5,	-57.7,	-45.9,	32	9.1,	94.7,	95.2,	-47.5,	-47.1,
33	9.1,	96.1,	89.0,	-35.9,	-46.8,	34	9.1,	94.5,	81.0,	-23.2,	-45.2,
35	9.1,	90.0,	75.2,	-9.7,	-42.2,	36	9.1,	82.9,	67.6,	3.8,	-37.9,

SOURCE ID: FPB

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	45.8,	86.2,	-3.1,	26.7,	2	9.1,	54.2,	88.6,	-9.9,	31.5,
3	9.1,	57.4,	74.7,	-95.5,	-1.0,	4	9.1,	58.7,	74.8,	-93.7,	-9.6,
5	9.1,	61.8,	72.7,	-89.0,	-19.7,	6	9.1,	64.4,	68.4,	-81.6,	-29.8,
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,	0.0,
9	9.1,	81.3,	36.2,	-39.4,	44.5,	10	9.1,	86.2,	45.8,	-49.6,	40.0,
11	9.1,	88.6,	54.2,	-58.6,	34.4,	12	9.1,	88.3,	60.9,	-65.8,	27.8,
13	9.1,	85.4,	65.8,	-71.0,	20.3,	14	9.1,	79.9,	73.2,	-78.5,	12.2,
15	9.1,	71.9,	78.8,	-84.0,	3.8,	16	9.1,	61.8,	82.0,	-87.1,	-4.8,
17	9.1,	49.8,	82.7,	-87.4,	-13.2,	18	9.1,	36.2,	81.3,	-85.1,	-21.3,
19	9.1,	45.8,	86.2,	-83.1,	-26.7,	20	9.1,	54.2,	88.6,	-78.7,	-31.5,
21	9.1,	64.5,	91.3,	-117.0,	15.4,	22	9.1,	69.6,	88.5,	-116.2,	4.3,
23	9.1,	76.8,	83.0,	-112.0,	-8.9,	24	9.1,	82.4,	75.0,	-104.3,	-22.3,
25	9.1,	85.4,	64.8,	-93.4,	-34.9,	26	9.1,	85.9,	52.5,	-79.7,	-46.5,
27	9.1,	81.3,	36.2,	3.1,	-44.5,	28	9.1,	86.2,	45.8,	3.8,	-40.0,
29	9.1,	88.6,	54.2,	4.4,	-34.4,	30	9.1,	88.3,	60.9,	4.8,	-27.8,
31	9.1,	85.4,	65.8,	5.1,	-20.3,	32	9.1,	79.9,	73.2,	5.3,	-12.2,
33	9.1,	71.9,	78.8,	5.3,	-3.8,	34	9.1,	61.8,	82.0,	5.1,	4.8,
35	9.1,	49.8,	82.7,	4.8,	13.2,	36	9.1,	36.2,	81.3,	3.8,	21.3,

SOURCE ID: FPC

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	48.7,	88.5,	6.0,	-16.4,	2	9.1,	57.5,	91.3,	6.3,	-9.2,
3	9.1,	64.5,	91.3,	6.5,	-1.8,	4	9.1,	69.6,	88.5,	6.5,	5.6,
5	9.1,	76.8,	83.0,	6.2,	15.1,	6	9.1,	82.4,	75.0,	5.8,	24.4,
7	9.1,	82.0,	61.8,	-59.1,	44.1,	8	9.1,	82.7,	49.8,	-60.9,	40.0,
9	9.1,	81.3,	36.2,	-60.7,	34.6,	10	9.1,	86.2,	45.8,	-68.9,	26.6,
11	9.1,	88.6,	54.2,	-75.3,	17.8,	12	9.1,	88.3,	60.9,	-79.3,	8.6,
13	9.1,	85.4,	65.8,	-80.9,	-1.0,	14	9.1,	79.9,	73.2,	-84.6,	-10.5,
15	9.1,	71.9,	78.8,	-86.1,	-19.7,	16	9.1,	61.8,	82.0,	-85.1,	-28.2,
17	9.1,	52.5,	85.9,	-83.5,	30.7,	18	9.1,	38.7,	83.7,	-88.7,	22.9,
19	9.1,	48.7,	88.5,	-94.5,	16.4,	20	9.1,	57.5,	91.3,	-97.6,	9.2,
21	9.1,	64.5,	91.3,	-97.8,	1.8,	22	9.1,	69.6,	88.5,	-95.0,	-5.6,
23	9.1,	76.8,	83.0,	-89.2,	-15.1,	24	9.1,	82.4,	75.0,	-80.8,	-24.4,
25	9.1,	82.0,	61.8,	-2.6,	-44.1,	26	9.1,	82.7,	49.8,	11.1,	-40.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	0.0,	0.0,	0.0,	0.0,	0.0,	30	0.0,	0.0,	0.0,	0.0,	0.0,
31	9.1,	85.4,	65.8,	15.1,	1.0,	32	9.1,	79.9,	73.2,	11.4,	10.5,
33	9.1,	71.9,	78.8,	7.4,	19.7,	34	9.1,	61.8,	82.0,	3.1,	28.2,
35	9.1,	52.5,	85.9,	-2.4,	-30.7,	36	9.1,	38.7,	83.7,	5.0,	-22.9,

SOURCE ID: FPD

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	90.9,	72.1,	-50.1,	-46.2,	2	9.1,	90.3,	83.0,	-47.2,	-45.1,
3	9.1,	86.9,	91.4,	-42.9,	-42.6,	4	9.1,	84.5,	97.0,	-37.2,	-40.7,

5	9.1,	83.6,	100.8,	-30.5,	-39.5,	6	9.1,	80.2,	101.8,	-22.8,	-37.2,
7	9.1,	74.8,	99.8,	-14.4,	-33.5,	8	9.1,	68.5,	94.8,	-5.5,	-28.2,
9	9.1,	60.1,	88.8,	1.5,	-21.9,	10	9.1,	72.1,	90.9,	0.7,	-14.1,
11	9.1,	83.0,	90.3,	-0.1,	-5.7,	12	9.1,	91.4,	86.9,	-0.8,	2.8,
13	9.1,	97.0,	84.5,	-1.6,	11.3,	14	9.1,	100.8,	83.6,	-2.3,	19.9,
15	9.1,	101.8,	80.2,	-2.9,	28.2,	16	9.1,	99.8,	74.8,	-3.8,	35.5,
17	9.1,	94.8,	68.5,	-6.1,	41.8,	18	9.1,	88.8,	60.1,	-8.2,	45.9,
19	9.1,	90.4,	76.0,	-107.7,	43.7,	20	9.1,	96.0,	82.1,	-114.7,	31.6,
21	9.1,	98.7,	85.7,	-118.2,	18.4,	22	9.1,	98.5,	90.5,	-121.9,	4.7,
23	9.1,	95.2,	94.7,	-124.1,	-9.2,	24	9.1,	89.0,	96.1,	-122.6,	-22.7,
25	9.1,	81.0,	94.5,	-117.3,	-36.0,	26	9.1,	68.5,	94.8,	-89.2,	28.2,
27	9.1,	60.1,	88.8,	-90.3,	21.9,	28	9.1,	72.1,	90.9,	-91.6,	14.1,
29	9.1,	83.0,	90.3,	-90.2,	5.7,	30	9.1,	91.4,	86.9,	-86.1,	-2.8,
31	9.1,	97.0,	84.5,	-82.9,	-11.3,	32	9.1,	100.8,	83.6,	-81.3,	-19.9,
33	9.1,	101.8,	80.2,	-77.3,	-28.2,	34	9.1,	99.8,	74.8,	-70.9,	-35.5,
35	9.1,	94.8,	68.5,	-62.4,	-41.8,	36	9.1,	88.8,	60.1,	-51.9,	-45.9,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: FPE

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	49.8,	67.7,	-58.9,	-27.4,	2	9.1,	54.4,	72.3,	-55.8,	-29.6,
3	9.1,	57.4,	74.7,	-50.9,	-30.9,	4	9.1,	58.7,	74.8,	-44.6,	-31.2,
5	9.1,	61.8,	72.7,	-36.9,	-32.5,	6	9.1,	64.4,	68.4,	-28.0,	-33.4,
7	9.1,	65.0,	62.0,	-18.4,	-33.3,	8	9.1,	63.6,	53.7,	-8.1,	-32.1,
9	9.1,	61.0,	43.8,	2.4,	-29.7,	10	9.1,	67.7,	49.8,	2.5,	-25.0,
11	9.1,	82.1,	96.0,	-115.1,	29.4,	12	9.1,	85.7,	98.7,	-120.4,	14.7,
13	9.1,	90.5,	98.5,	-122.1,	1.4,	14	9.1,	94.7,	95.2,	-120.0,	-10.8,
15	9.1,	96.1,	89.0,	-114.4,	-22.7,	16	9.1,	94.5,	81.0,	-106.0,	-33.9,
17	9.1,	90.0,	75.2,	-99.2,	-44.1,	18	9.1,	43.8,	61.0,	-0.8,	24.3,
19	9.1,	45.8,	86.2,	-114.8,	16.6,	20	9.1,	54.2,	88.6,	-117.5,	5.7,
21	9.1,	60.9,	88.3,	-116.6,	-5.4,	22	9.1,	65.8,	85.4,	-112.1,	-16.4,
23	9.1,	73.2,	79.9,	-104.3,	-29.1,	24	9.1,	78.8,	71.9,	-93.3,	-41.1,
25	9.1,	65.0,	62.0,	-43.6,	33.3,	26	9.1,	63.6,	53.7,	-45.6,	32.1,
27	9.1,	61.0,	43.8,	-46.2,	29.7,	28	9.1,	67.7,	49.8,	-52.3,	25.0,
29	9.1,	72.3,	54.4,	-56.8,	19.6,	30	9.1,	74.7,	57.4,	-59.6,	13.6,
31	9.1,	74.8,	58.7,	-60.6,	7.2,	32	9.1,	72.7,	61.8,	-63.4,	0.5,
33	9.1,	68.4,	64.4,	-65.6,	-6.1,	34	9.1,	62.0,	65.0,	-65.8,	-12.6,
35	9.1,	53.7,	63.6,	-64.0,	-18.7,	36	9.1,	43.8,	61.0,	-60.2,	-24.3,

SOURCE ID: FPF

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	47.6,	68.7,	-68.0,	-26.9,	2	9.1,	57.1,	69.0,	-64.6,	-32.0,
3	9.1,	57.4,	74.7,	-95.5,	25.4,	4	9.1,	58.7,	74.8,	-98.3,	16.5,
5	9.1,	61.8,	72.7,	-98.0,	5.2,	6	9.1,	82.4,	75.0,	16.0,	45.2,
7	9.1,	65.0,	62.0,	-88.7,	-18.8,	8	9.1,	63.6,	53.7,	-79.9,	-30.1,
9	9.1,	66.5,	38.2,	1.6,	-36.0,	10	9.1,	68.7,	47.6,	3.1,	-33.6,
11	9.1,	88.6,	54.2,	-84.7,	39.1,	12	9.1,	88.3,	60.9,	-92.2,	27.8,

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 13   9.1,  85.4,  65.8, -97.0,  15.8,     14   9.1,  79.9,  73.2, -103.4,   3.2,
 15   9.1,  71.9,  78.8, -107.0,  -9.4,    16   9.1,  61.8,  82.0, -107.4, -21.8,
 17   9.1,  46.1,  71.6,   3.2,  12.6,     18   9.1,  38.7,  83.7, -111.9,  21.4,
 19   9.1,  48.7,  88.5, -117.0,  10.8,    20   9.1,  57.5,  91.3, -118.8,  -0.2,
 21   9.1,  64.5,  91.3, -117.0, -11.1,    22   9.1,  69.6,  88.5, -111.7, -21.7,
 23   9.1,  76.8,  83.0, -102.9, -33.8,    24   9.1,  82.4,  75.0,  -91.1, -45.2,
 25   9.1,  74.8,  52.6, -30.4,  40.9,     26   9.1,  71.6,  46.1,  -35.6,  39.0,
 27   9.1,  66.5,  38.2, -39.8,  36.0,     28   9.1,  68.7,  47.6,  -50.8,  33.6,
 29   9.1,  69.0,  57.1, -60.6,  30.1,     30   9.1,  67.2,  64.9,  -68.6,  25.6,
 31   9.1,  63.4,  70.7, -74.5,  20.4,     32   9.1,  60.7,  74.4,  -78.2,  13.0,
 33   9.1,  57.5,  75.8, -79.5,   4.5,     34   9.1,  52.6,  74.8,  -78.4,  -4.1,
 35   9.1,  46.1,  71.6, -74.8, -12.6,     36   9.1,  38.2,  66.5,  -69.3, -20.7,
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♀ *** AERMOD - VERSION 21112  ***   *** Old Frontage Road Industrial Project          ***
07/17/21
 *** AERMET - VERSION  16216 ***   *** DPM Concentrations                             ***        11:38:23
                                                                                   PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

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  ( 473907.7, 3753349.6,    472.2,    472.2,      0.0);      ( 473908.9, 3753323.3,    472.3,    472.3,      0.0);

  ( 473931.3, 3753346.2,    472.2,    472.2,      0.0);      ( 473908.9, 3753307.7,    472.1,    472.1,      0.0);

  ( 473813.5, 3753310.4,    469.7,    469.7,      0.0);      ( 473782.6, 3753349.0,    469.9,    469.9,      0.0);

  ( 473842.8, 3753398.3,    471.6,    471.6,      0.0);      ( 473894.3, 3753398.9,    471.1,    471.1,      0.0);

  ( 473918.1, 3753398.3,    471.1,    471.1,      0.0);      ( 473945.7, 3753403.5,    471.0,    471.0,      0.0);

  ( 473966.5, 3753396.7,    471.4,    471.4,      0.0);      ( 473981.5, 3753407.8,    471.6,    471.6,      0.0);

  ( 473865.5, 3753398.9,    471.4,    471.4,      0.0);      ( 474028.0, 3753348.1,    471.9,    471.9,      0.0);

  ( 474030.1, 3753323.0,    471.5,    471.5,      0.0);      ( 474034.7, 3753289.9,    470.9,    470.9,      0.0);

  ( 474031.6, 3753262.1,    470.5,    470.5,      0.0);      ( 474054.6, 3753269.4,    470.6,    470.6,      0.0);

  ( 474059.5, 3753317.2,    471.3,    471.3,      0.0);      ( 474054.6, 3753349.6,    471.8,    471.8,      0.0);

  ( 473817.5, 3753358.5,    470.6,    470.6,      0.0);      ( 473837.6, 3753352.4,    470.8,    470.8,      0.0);

  ( 473827.9, 3753401.0,    471.2,    471.2,      0.0);      ( 474065.4, 3753112.7,    469.6,    469.6,      0.0);
  ( 474073.4, 3753078.5,    469.7,    469.7,      0.0);      ( 474074.9, 3753021.5,    469.9,    469.9,      0.0);

  ( 473641.3, 3753138.4,    468.6,    468.6,      0.0);      ( 473785.0, 3753383.2,    469.8,    469.8,      0.0);

  ( 473769.3, 3753376.8,    469.5,    469.5,      0.0);      ( 473748.4, 3753372.8,    469.3,    469.3,      0.0);

  ( 473718.1, 3753372.5,    469.1,    469.1,      0.0);      ( 473722.6, 3753396.3,    468.9,    468.9,      0.0);

  ( 473752.5, 3753334.4,    469.6,    469.6,      0.0);      ( 473591.4, 3753723.5,    464.7,    464.7,      0.0);
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( 473616.3, 3753754.8,    465.4,    465.4,     0.0);     ( 473640.8, 3753755.9,    465.4,    465.4,     0.0);

( 473580.5, 3753807.8,    466.6,    466.6,     0.0);     ( 473600.4, 3753813.1,    466.2,    466.2,     0.0);

( 473546.2, 3753846.9,    467.5,    467.5,     0.0);     ( 473547.6, 3753939.2,    466.7,    466.7,     0.0);

( 473436.8, 3754204.1,    470.9,    470.9,     0.0);     ( 473430.1, 3754228.6,    471.2,    471.2,     0.0);

( 473426.5, 3754249.3,    471.3,    471.3,     0.0);     ( 473427.1, 3754266.3,    471.3,    471.3,     0.0);

( 473427.1, 3754285.0,    471.4,    471.4,     0.0);     ( 473425.7, 3754303.7,    471.4,    471.4,     0.0);

( 473429.6, 3754323.8,    471.6,    471.6,     0.0);     ( 473426.2, 3754340.8,    471.7,    471.7,     0.0);

( 473427.3, 3754360.9,    471.9,    471.9,     0.0);     ( 473446.6, 3754377.1,    471.9,    471.9,     0.0);

( 473487.3, 3754380.4,    471.8,    471.8,     0.0);     ( 473479.8, 3754471.9,    471.3,    471.3,     0.0);

( 473506.3, 3754463.6,    471.9,    471.9,     0.0);     ( 473549.6, 3754524.4,    472.4,    472.4,     0.0);

( 473633.3, 3754602.2,    473.3,    473.3,     0.0);     ( 473655.0, 3754605.9,    473.6,    473.6,     0.0);

( 473628.7, 3754480.9,    471.9,    471.9,     0.0);     ( 473628.0, 3754506.9,    472.5,    472.5,     0.0);

( 473480.6, 3754114.4,    469.1,    469.1,     0.0);     ( 473577.5, 3753760.8,    465.5,    465.5,     0.0);
( 473659.2, 3753512.9,    468.1,    468.1,     0.0);     ( 473673.4, 3753485.0,    468.2,    468.2,     0.0);

( 473687.8, 3753454.2,    468.3,    468.3,     0.0);
♀ *** AERMOD - VERSION 21112  ***   *** Old Frontage Road Industrial Project                        ***
07/17/21
 *** AERMET - VERSION  16216 ***   *** DPM Concentrations                                         ***       11:38:23
                                                                                      PAGE  32
 *** 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         - - RECEPTOR LOCATION - -        DISTANCE
                          ID          XR (METERS)   YR (METERS)        (METERS)
                       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                       L0001790          473427.3     3754360.9           0.04
♀ *** AERMOD - VERSION 21112  ***   *** Old Frontage Road Industrial Project                        ***
07/17/21
 *** AERMET - VERSION  16216 ***   *** DPM Concentrations                                         ***       11:38:23
                                                                                      PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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

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

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

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

1.54, 3.09, 5.14, 8.23, 10.80,

♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

Surface file: ..\..\PerrisADJU\PERI_V9_ADJU\PERI_v9.SFC Met Version: 16216
Profile file: ..\..\PerrisADJU\PERI_V9_ADJU\PERI_v9.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3171 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	1.00	1.30	335.	9.1	282.5	5.5
10	01	01	1	02	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	142.	9.1	280.9	5.5
10	01	01	1	03	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	324.	9.1	280.4	5.5
10	01	01	1	04	-1.3	0.064	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	294.	9.1	278.8	5.5
10	01	01	1	05	-3.9	0.088	-9.000	-9.000	-999.	62.	15.0	0.19	0.61	1.00	0.90	205.	9.1	278.1	5.5
10	01	01	1	06	-1.3	0.065	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	3.	9.1	277.0	5.5
10	01	01	1	07	-8.0	0.125	-9.000	-9.000	-999.	106.	21.0	0.19	0.61	1.00	1.30	99.	9.1	277.0	5.5
10	01	01	1	08	-3.3	0.086	-9.000	-9.000	-999.	61.	16.8	0.19	0.61	0.54	0.90	319.	9.1	278.8	5.5
10	01	01	1	09	20.1	0.128	0.307	0.010	49.	110.	-9.0	0.19	0.61	0.33	0.90	239.	9.1	284.2	5.5
10	01	01	1	10	56.7	0.087	0.560	0.010	107.	62.	-1.0	0.19	0.61	0.26	0.40	188.	9.1	289.2	5.5
10	01	01	1	11	81.5	0.323	0.867	0.008	277.	441.	-35.9	0.19	0.61	0.23	2.70	310.	9.1	290.9	5.5
10	01	01	1	12	97.1	0.281	1.058	0.008	421.	357.	-19.7	0.19	0.61	0.22	2.20	357.	9.1	293.1	5.5
10	01	01	1	13	92.2	0.279	1.117	0.008	523.	354.	-20.4	0.19	0.61	0.22	2.20	356.	9.1	293.8	5.5
10	01	01	1	14	77.6	0.275	1.102	0.008	595.	347.	-23.2	0.19	0.61	0.23	2.20	50.	9.1	294.2	5.5
10	01	01	1	15	54.9	0.230	1.006	0.008	640.	266.	-19.2	0.19	0.61	0.27	1.80	53.	9.1	293.8	5.5
10	01	01	1	16	12.3	0.206	0.613	0.008	648.	225.	-61.5	0.19	0.61	0.36	1.80	11.	9.1	292.5	5.5
10	01	01	1	17	-3.6	0.087	-9.000	-9.000	-999.	71.	15.6	0.19	0.61	0.64	0.90	351.	9.1	290.4	5.5
10	01	01	1	18	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	1.00	0.90	186.	9.1	287.5	5.5
10	01	01	1	19	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	1.00	0.90	275.	9.1	285.9	5.5
10	01	01	1	20	-1.2	0.064	-9.000	-9.000	-999.	39.	18.1	0.19	0.61	1.00	0.40	181.	9.1	285.4	5.5
10	01	01	1	21	-7.8	0.125	-9.000	-9.000	-999.	106.	21.3	0.19	0.61	1.00	1.30	318.	9.1	284.9	5.5

```
10 01 01   1 22   -3.8  0.088 -9.000 -9.000 -999.   62.     15.1  0.19   0.61   1.00    0.90  196.    9.1  283.1    5.5
10 01 01   1 23   -3.8  0.088 -9.000 -9.000 -999.   62.     15.1  0.19   0.61   1.00    0.90  330.    9.1  281.4    5.5
10 01 01   1 24   -7.9  0.125 -9.000 -9.000 -999.  106.     21.2  0.19   0.61   1.00    1.30  332.    9.1  280.9    5.5


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

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

♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0001703 , L0001704 , L0001705 , L0001706 , L0001707 ,
L0001708 , L0001709 , L0001710 , L0001711 , L0001712 , L0001713 , L0001714 , L0001715 ,
L0001716 , L0001717 , L0001718 , L0001719 , L0001720 , L0001721 , L0001722 , L0001723 ,
L0001724 , L0001725 , L0001726 , L0001727 , L0001728 , L0001729 , L0001730 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
473907.72	3753349.61	0.00545	473908.94	3753323.30	0.00636
473931.28	3753346.25	0.00535	473908.94	3753307.69	0.00798
473813.48	3753310.45	0.00512	473782.57	3753349.00	0.00366
473842.85	3753398.26	0.00400	473894.26	3753398.88	0.00429
473918.12	3753398.26	0.00414	473945.66	3753403.47	0.00376
473966.47	3753396.73	0.00365	473981.46	3753407.75	0.00331
473865.50	3753398.88	0.00422	474027.97	3753348.08	0.00323
474030.11	3753322.99	0.00396	474034.70	3753289.95	0.00407
474031.64	3753262.10	0.00447	474054.59	3753269.44	0.00343
474059.49	3753317.18	0.00301	474054.59	3753349.61	0.00271
473817.46	3753358.49	0.00415	473837.65	3753352.37	0.00458
473827.86	3753401.02	0.00383	474065.38	3753112.69	0.00349
474073.40	3753078.48	0.00322	474074.88	3753021.52	0.00301
473641.33	3753138.41	0.00157	473784.97	3753383.22	0.00343
473769.31	3753376.82	0.00325	473748.44	3753372.78	0.00304
473718.08	3753372.55	0.00296	473722.59	3753396.26	0.00282
473752.48	3753334.36	0.00329	473591.43	3753723.55	0.00179
473616.26	3753754.80	0.00143	473640.82	3753755.92	0.00136
473580.55	3753807.82	0.00143	473600.36	3753813.12	0.00129
473546.22	3753846.88	0.00166	473547.62	3753939.25	0.00114
473436.84	3754204.06	0.00112	473430.14	3754228.61	0.00114
473426.51	3754249.26	0.00116	473427.07	3754266.28	0.00116

473427.07	3754284.98	0.00118	473425.68	3754303.68	0.00123
473429.58	3754323.77	0.00125	473426.23	3754340.79	0.00141
473427.35	3754360.88	0.00135	473446.61	3754377.06	0.00156
473487.35	3754380.41	0.00119	473479.81	3754471.94	0.00112
473506.32	3754463.57	0.00140	473549.57	3754524.40	0.00132
473633.28	3754602.25	0.00086	473655.05	3754605.88	0.00068
473628.73	3754480.93	0.00097	473627.98	3754506.94	0.00108
473480.65	3754114.42	0.00103	473577.50	3753760.83	0.00176
473659.25	3753512.95	0.00263	473673.37	3753485.04	0.00263
473687.81	3753454.18	0.00267			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0001703 , L0001704 , L0001705 , L0001706 , L0001707 ,
L0001708 , L0001709 , L0001710 , L0001711 , L0001712 , L0001713 , L0001714 , L0001715 ,
L0001716 , L0001717 , L0001718 , L0001719 , L0001720 , L0001721 , L0001722 , L0001723 ,
L0001724 , L0001725 , L0001726 , L0001727 , L0001728 , L0001729 , L0001730 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
473907.72	3753349.61	0.03699	(10082720)	473908.94	3753323.30	0.04164	(16072520)
473931.28	3753346.25	0.03633	(15092420)	473908.94	3753307.69	0.05818	(15060820)
473813.48	3753310.45	0.03492	(15080720)	473782.57	3753349.00	0.03133	(10060520)
473842.85	3753398.26	0.03153	(16051320)	473894.26	3753398.88	0.03187	(10092822)
473918.12	3753398.26	0.03060	(15092420)	473945.66	3753403.47	0.02531	(15072822)
473966.47	3753396.73	0.02415	(15090922)	473981.46	3753407.75	0.02520	(16092719)
473865.50	3753398.88	0.03259	(10071721)	474027.97	3753348.08	0.03220	(11091003)
474030.11	3753322.99	0.04389	(15101019)	474034.70	3753289.95	0.05227	(15090919)
474031.64	3753262.10	0.05309	(15080621)	474054.59	3753269.44	0.05817	(15080621)
474059.49	3753317.18	0.04443	(15101019)	474054.59	3753349.61	0.03362	(15101019)
473817.46	3753358.49	0.03368	(10100219)	473837.65	3753352.37	0.03569	(16062220)

473827.86 3753401.02 0.03137 (10092720) 474065.38 3753112.69 0.03854 (11071624)
474073.40 3753078.48 0.02311 (11071624) 474074.88 3753021.52 0.01953 (15072101)
473641.33 3753138.41 0.02036 (14120316) 473784.97 3753383.22 0.02952 (16080320)
473769.31 3753376.82 0.02885 (14083120) 473748.44 3753372.78 0.02813 (10060520)
473718.08 3753372.55 0.02607 (15080720) 473722.59 3753396.26 0.02619 (10060520)
473752.48 3753334.36 0.02635 (15080720) 473591.43 3753723.55 0.01181 (16062923)
473616.26 3753754.80 0.01093 (16091820) 473640.82 3753755.92 0.01106 (16073121)
473580.55 3753807.82 0.00941 (16091820) 473600.36 3753813.12 0.00921 (11090702)
473546.22 3753846.88 0.00874 (16091820) 473547.62 3753939.25 0.00659 (14090804)
473436.84 3754204.06 0.00489 (16072422) 473430.14 3754228.61 0.00486 (16072422)
473426.51 3754249.26 0.00484 (16072422) 473427.07 3754266.28 0.00478 (16072422)
473427.07 3754284.98 0.00476 (16072422) 473425.68 3754303.68 0.00480 (10071501)
473429.58 3754323.77 0.00479 (10071501) 473426.23 3754340.79 0.00500 (10071501)
473427.35 3754360.88 0.00490 (10071501) 473446.61 3754377.06 0.00514 (14070921)
473487.35 3754380.41 0.00462 (15080121) 473479.81 3754471.94 0.00434 (14073122)
473506.32 3754463.57 0.00487 (14073122) 473549.57 3754524.40 0.00464 (15081603)
473633.28 3754602.25 0.00394 (10071722) 473655.05 3754605.88 0.00367 (10071722)
473628.73 3754480.93 0.00417 (14080121) 473627.98 3754506.94 0.00432 (14080121)
473480.65 3754114.42 0.00507 (16072422) 473577.50 3753760.83 0.01076 (16062923)
473659.25 3753512.95 0.02103 (14090723) 473673.37 3753485.04 0.02206 (14050420)
473687.81 3753454.18 0.02284 (14062120)

♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

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

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

ALL 1ST HIGHEST VALUE IS 0.00798 AT (473908.94, 3753307.69, 472.10, 472.10, 0.00) DC
2ND HIGHEST VALUE IS 0.00636 AT (473908.94, 3753323.30, 472.31, 472.31, 0.00) DC
3RD HIGHEST VALUE IS 0.00545 AT (473907.72, 3753349.61, 472.18, 472.18, 0.00) DC
4TH HIGHEST VALUE IS 0.00535 AT (473931.28, 3753346.25, 472.22, 472.22, 0.00) DC
5TH HIGHEST VALUE IS 0.00512 AT (473813.48, 3753310.45, 469.70, 469.70, 0.00) DC
6TH HIGHEST VALUE IS 0.00458 AT (473837.65, 3753352.37, 470.80, 470.80, 0.00) DC
7TH HIGHEST VALUE IS 0.00447 AT (474031.64, 3753262.10, 470.50, 470.50, 0.00) DC
8TH HIGHEST VALUE IS 0.00429 AT (473894.26, 3753398.88, 471.09, 471.09, 0.00) DC
9TH HIGHEST VALUE IS 0.00422 AT (473865.50, 3753398.88, 471.44, 471.44, 0.00) DC
10TH HIGHEST VALUE IS 0.00415 AT (473817.46, 3753358.49, 470.58, 470.58, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23
PAGE 38
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

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

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

ALL HIGH 1ST HIGH VALUE IS 0.05818 ON 15060820: AT (473908.94, 3753307.69, 472.10, 472.10, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
♀ *** AERMOD - VERSION 21112 *** *** Old Frontage Road Industrial Project *** 07/17/21
*** AERMET - VERSION 16216 *** *** DPM Concentrations *** 11:38:23
PAGE 39
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

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

A Total of 0 Fatal Error Message(s)
A Total of 24 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 ********

SO W320	1301	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1302	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1303	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1304	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1305	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1306	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1307	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1308	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1309	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1310	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1311	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1312	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1313	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1314	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1315	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1316	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1317	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1318	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1319	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	1320	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
ME W186	2264	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	2264	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W450	17521	CHKDAT: Record Out of Sequence in Meteorological File at:	14010101
MX W450	17521	CHKDAT: Record Out of Sequence in Meteorological File at:	2 year gap

****
*** AERMOD Finishes Successfully ***
****

Old Frontage Road Industrial Project

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	**Residential**	**30-year Exposure**	**Total Cancer risk**
			5.27

Annual DPM Concentration at Max Impacted Sensitive Receptor 0.00798 ug/m3

Year	**Year**	**Maximum DPM (ug/m3)**	**CPF (mg/kg-day)^-1**	**95% DBR (l/kg-day)**	**ED (years)**	**EF (days)**	**AT (years)**	**TAH (%)**	**ASF**	**Operational Risk (risk/million)**
3rd Trimester	2022	0.00798	1.1	361	0.25	350	25550	0.85	10	0.09
1	2022	0.00798	1.1	1090	1	350	25550	0.85	10	1.11
2	2023	0.00798	1.1	1090	1	350	25550	0.72	10	0.94
3	2024	0.00798	1.1	745	1	350	25550	0.72	3	0.19
4	2025	0.00798	1.1	745	1	350	25550	0.72	3	0.19
5	2026	0.00798	1.1	745	1	350	25550	0.72	3	0.19
6	2027	0.00798	1.1	745	1	350	25550	0.72	3	0.19
7	2028	0.00798	1.1	745	1	350	25550	0.72	3	0.19
8	2029	0.00798	1.1	745	1	350	25550	0.72	3	0.19
9	2030	0.00798	1.1	745	1	350	25550	0.72	3	0.19
10	2031	0.00798	1.1	745	1	350	25550	0.72	3	0.19
11	2032	0.00798	1.1	745	1	350	25550	0.72	3	0.19
12	2033	0.00798	1.1	745	1	350	25550	0.72	3	0.19
13	2034	0.00798	1.1	745	1	350	25550	0.72	3	0.19
14	2035	0.00798	1.1	745	1	350	25550	0.72	3	0.19
15	2036	0.00798	1.1	745	1	350	25550	0.72	3	0.19
16	2037	0.00798	1.1	745	1	350	25550	0.72	3	0.19
17	2038	0.00798	1.1	335	1	350	25550	0.73	1	0.03
18	2039	0.00798	1.1	335	1	350	25550	0.73	1	0.03
19	2040	0.00798	1.1	335	1	350	25550	0.73	1	0.03
20	2041	0.00798	1.1	335	1	350	25550	0.73	1	0.03
21	2042	0.00798	1.1	335	1	350	25550	0.73	1	0.03
22	2043	0.00798	1.1	335	1	350	25550	0.73	1	0.03
23	2044	0.00798	1.1	335	1	350	25550	0.73	1	0.03
24	2045	0.00798	1.1	335	1	350	25550	0.73	1	0.03
25	2046	0.00798	1.1	335	1	350	25550	0.73	1	0.03
26	2047	0.00798	1.1	335	1	350	25550	0.73	1	0.03
27	2048	0.00798	1.1	335	1	350	25550	0.73	1	0.03
28	2049	0.00798	1.1	335	1	350	25550	0.73	1	0.03
29	2050	0.00798	1.1	335	1	350	25550	0.73	1	0.03
30	2051	0.00798	1.1	335	1	350	25550	0.73	1	0.03

Old Frontage Road Industrial Project

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	**Residential**	**Child (Pre-birth - 9 years)**	**Total Cancer risk**
			3.72

Annual DPM Concentration at Max Impacted Sensitive Receptor 0.00798 ug/m3

Year	**Year**	**Maximum DPM (ug/m3)**	**CPF (mg/kg-day)^-1**	**95% DBR (l/kg-day)**	**ED (years)**	**EF (days)**	**AT (years)**	**TAH (%)**	**ASF**	**Operational Risk (risk/million)**
3rd Trimester	2022	0.00798	1.1	361	0.25	350	25550	0.85	10	0.09
1	2022	0.00798	1.1	1090	1	350	25550	0.85	10	1.11
2	2023	0.00798	1.1	1090	1	350	25550	0.72	10	0.94
3	2024	0.00798	1.1	861	1	350	25550	0.72	3	0.22
4	2025	0.00798	1.1	861	1	350	25550	0.72	3	0.22
5	2026	0.00798	1.1	861	1	350	25550	0.72	3	0.22
6	2027	0.00798	1.1	861	1	350	25550	0.72	3	0.22
7	2028	0.00798	1.1	861	1	350	25550	0.72	3	0.22
8	2029	0.00798	1.1	861	1	350	25550	0.72	3	0.22
9	2030	0.00798	1.1	861	1	350	25550	0.72	3	0.22

Old Frontage Road Industrial Project

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	**Residential**	**30-year Exposure**	**Adult**	**Total Cancer risk**
				0.88

Annual DPM Concentration at Max Impacted Sensitive Receptor 0.00798 ug/m3

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	95% DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	TAH (%)	ASF	Operational Risk (risk/million)
1	2022	0.00798	1.1	335	1	350	25550	0.73	1	0.03
2	2023	0.00798	1.1	335	1	350	25550	0.73	1	0.03
3	2024	0.00798	1.1	335	1	350	25550	0.73	1	0.03
4	2025	0.00798	1.1	335	1	350	25550	0.73	1	0.03
5	2026	0.00798	1.1	335	1	350	25550	0.73	1	0.03
6	2027	0.00798	1.1	335	1	350	25550	0.73	1	0.03
7	2028	0.00798	1.1	335	1	350	25550	0.73	1	0.03
8	2029	0.00798	1.1	335	1	350	25550	0.73	1	0.03
9	2030	0.00798	1.1	335	1	350	25550	0.73	1	0.03
10	2031	0.00798	1.1	335	1	350	25550	0.73	1	0.03
11	2032	0.00798	1.1	335	1	350	25550	0.73	1	0.03
12	2033	0.00798	1.1	335	1	350	25550	0.73	1	0.03
13	2034	0.00798	1.1	335	1	350	25550	0.73	1	0.03
14	2035	0.00798	1.1	335	1	350	25550	0.73	1	0.03
15	2036	0.00798	1.1	335	1	350	25550	0.73	1	0.03
16	2037	0.00798	1.1	335	1	350	25550	0.73	1	0.03
17	2038	0.00798	1.1	335	1	350	25550	0.73	1	0.03
18	2039	0.00798	1.1	335	1	350	25550	0.73	1	0.03
19	2040	0.00798	1.1	335	1	350	25550	0.73	1	0.03
20	2041	0.00798	1.1	335	1	350	25550	0.73	1	0.03
21	2042	0.00798	1.1	335	1	350	25550	0.73	1	0.03
22	2043	0.00798	1.1	335	1	350	25550	0.73	1	0.03
23	2044	0.00798	1.1	335	1	350	25550	0.73	1	0.03
24	2045	0.00798	1.1	335	1	350	25550	0.73	1	0.03
25	2046	0.00798	1.1	335	1	350	25550	0.73	1	0.03
26	2047	0.00798	1.1	335	1	350	25550	0.73	1	0.03
27	2048	0.00798	1.1	335	1	350	25550	0.73	1	0.03
28	2049	0.00798	1.1	335	1	350	25550	0.73	1	0.03
29	2050	0.00798	1.1	335	1	350	25550	0.73	1	0.03
30	2051	0.00798	1.1	335	1	350	25550	0.73	1	0.03

Old Frontage Road Industrial Project

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	Residential	70-year Exposure	Total Cancer risk
			6.23

Annual DPM Concentration at Max Impacted Sensitive Receptor 0.00798 ug/m3

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	95% DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	TAH (%)	ASF	Operational Risk (risk/million)
3rd Trimester	2022	0.00798	1.1	361	0.25	350	25550	0.85	10	0.09
1	2022	0.00798	1.1	1090	1	350	25550	0.85	10	1.11
2	2023	0.00798	1.1	1090	1	350	25550	0.72	10	0.94
3	2024	0.00798	1.1	745	1	350	25550	0.72	3	0.19
4	2025	0.00798	1.1	745	1	350	25550	0.72	3	0.19
5	2026	0.00798	1.1	745	1	350	25550	0.72	3	0.19
6	2027	0.00798	1.1	745	1	350	25550	0.72	3	0.19
7	2028	0.00798	1.1	745	1	350	25550	0.72	3	0.19
8	2029	0.00798	1.1	745	1	350	25550	0.72	3	0.19
9	2030	0.00798	1.1	745	1	350	25550	0.72	3	0.19
10	2031	0.00798	1.1	745	1	350	25550	0.72	3	0.19
11	2032	0.00798	1.1	745	1	350	25550	0.72	3	0.19
12	2033	0.00798	1.1	745	1	350	25550	0.72	3	0.19
13	2034	0.00798	1.1	745	1	350	25550	0.72	3	0.19
14	2035	0.00798	1.1	745	1	350	25550	0.72	3	0.19
15	2036	0.00798	1.1	745	1	350	25550	0.72	3	0.19
16	2037	0.00798	1.1	745	1	350	25550	0.72	3	0.19
17	2038	0.00798	1.1	290	1	350	25550	0.73	1	0.03
18	2039	0.00798	1.1	290	1	350	25550	0.73	1	0.03
19	2040	0.00798	1.1	290	1	350	25550	0.73	1	0.03
20	2041	0.00798	1.1	290	1	350	25550	0.73	1	0.03
21	2042	0.00798	1.1	290	1	350	25550	0.73	1	0.03
22	2043	0.00798	1.1	290	1	350	25550	0.73	1	0.03
23	2044	0.00798	1.1	290	1	350	25550	0.73	1	0.03
24	2045	0.00798	1.1	290	1	350	25550	0.73	1	0.03
25	2046	0.00798	1.1	290	1	350	25550	0.73	1	0.03
26	2047	0.00798	1.1	290	1	350	25550	0.73	1	0.03
27	2048	0.00798	1.1	290	1	350	25550	0.73	1	0.03
28	2049	0.00798	1.1	290	1	350	25550	0.73	1	0.03
29	2050	0.00798	1.1	290	1	350	25550	0.73	1	0.03
30	2051	0.00798	1.1	290	1	350	25550	0.73	1	0.03
31	2052	0.00798	1.1	290	1	350	25550	0.73	1	0.03
32	2053	0.00798	1.1	290	1	350	25550	0.73	1	0.03
33	2054	0.00798	1.1	290	1	350	25550	0.73	1	0.03
34	2055	0.00798	1.1	290	1	350	25550	0.73	1	0.03
35	2056	0.00798	1.1	290	1	350	25550	0.73	1	0.03
36	2057	0.00798	1.1	290	1	350	25550	0.73	1	0.03
37	2058	0.00798	1.1	290	1	350	25550	0.73	1	0.03
38	2059	0.00798	1.1	290	1	350	25550	0.73	1	0.03
39	2060	0.00798	1.1	290	1	350	25550	0.73	1	0.03
40	2061	0.00798	1.1	290	1	350	25550	0.73	1	0.03
41	2062	0.00798	1.1	290	1	350	25550	0.73	1	0.03
42	2063	0.00798	1.1	290	1	350	25550	0.73	1	0.03
43	2064	0.00798	1.1	290	1	350	25550	0.73	1	0.03
44	2065	0.00798	1.1	290	1	350	25550	0.73	1	0.03
45	2066	0.00798	1.1	290	1	350	25550	0.73	1	0.03
46	2067	0.00798	1.1	290	1	350	25550	0.73	1	0.03
47	2068	0.00798	1.1	290	1	350	25550	0.73	1	0.03
48	2069	0.00798	1.1	290	1	350	25550	0.73	1	0.03
49	2070	0.00798	1.1	290	1	350	25550	0.73	1	0.03
50	2071	0.00798	1.1	290	1	350	25550	0.73	1	0.03
51	2072	0.00798	1.1	290	1	350	25550	0.73	1	0.03
52	2073	0.00798	1.1	290	1	350	25550	0.73	1	0.03
53	2074	0.00798	1.1	290	1	350	25550	0.73	1	0.03
54	2075	0.00798	1.1	290	1	350	25550	0.73	1	0.03
55	2076	0.00798	1.1	290	1	350	25550	0.73	1	0.03
56	2077	0.00798	1.1	290	1	350	25550	0.73	1	0.03
57	2078	0.00798	1.1	290	1	350	25550	0.73	1	0.03
58	2079	0.00798	1.1	290	1	350	25550	0.73	1	0.03
59	2080	0.00798	1.1	290	1	350	25550	0.73	1	0.03
60	2081	0.00798	1.1	290	1	350	25550	0.73	1	0.03
61	2082	0.00798	1.1	290	1	350	25550	0.73	1	0.03
62	2083	0.00798	1.1	290	1	350	25550	0.73	1	0.03
63	2084	0.00798	1.1	290	1	350	25550	0.73	1	0.03
64	2085	0.00798	1.1	290	1	350	25550	0.73	1	0.03
65	2086	0.00798	1.1	290	1	350	25550	0.73	1	0.03
66	2087	0.00798	1.1	290	1	350	25550	0.73	1	0.03
67	2088	0.00798	1.1	290	1	350	25550	0.73	1	0.03
68	2089	0.00798	1.1	290	1	350	25550	0.73	1	0.03
69	2090	0.00798	1.1	290	1	350	25550	0.73	1	0.03
70	2091	0.00798	1.1	290	1	350	25550	0.73	1	0.03

Old Frontage Road Industrial Project

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	**Worker**	**25-year Exposure**	**Total Cancer risk**
			0.37

Annual DPM Concentration at Max Impacted Worker Receptor 0.00592 ug/m3

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	TAH (%)	ASF	Operational Risk (risk/million)
1	2022	0.00592	1.1	230	1	250	25550	1	1	0.01
2	2023	0.00592	1.1	230	1	250	25550	1	1	0.01
3	2024	0.00592	1.1	230	1	250	25550	1	1	0.01
4	2025	0.00592	1.1	230	1	250	25550	1	1	0.01
5	2026	0.00592	1.1	230	1	250	25550	1	1	0.01
6	2027	0.00592	1.1	230	1	250	25550	1	1	0.01
7	2028	0.00592	1.1	230	1	250	25550	1	1	0.01
8	2029	0.00592	1.1	230	1	250	25550	1	1	0.01
9	2030	0.00592	1.1	230	1	250	25550	1	1	0.01
10	2031	0.00592	1.1	230	1	250	25550	1	1	0.01
11	2032	0.00592	1.1	230	1	250	25550	1	1	0.01
12	2033	0.00592	1.1	230	1	250	25550	1	1	0.01
13	2034	0.00592	1.1	230	1	250	25550	1	1	0.01
14	2035	0.00592	1.1	230	1	250	25550	1	1	0.01
15	2036	0.00592	1.1	230	1	250	25550	1	1	0.01
16	2037	0.00592	1.1	230	1	250	25550	1	1	0.01
17	2038	0.00592	1.1	230	1	250	25550	1	1	0.01
18	2039	0.00592	1.1	230	1	250	25550	1	1	0.01
19	2040	0.00592	1.1	230	1	250	25550	1	1	0.01
20	2041	0.00592	1.1	230	1	250	25550	1	1	0.01
21	2042	0.00592	1.1	230	1	250	25550	1	1	0.01
22	2043	0.00592	1.1	230	1	250	25550	1	1	0.01
23	2044	0.00592	1.1	230	1	250	25550	1	1	0.01
24	2045	0.00592	1.1	230	1	250	25550	1	1	0.01
25	2046	0.00592	1.1	230	1	250	25550	1	1	0.01