Air Quality and Health Risk Assessment Report
901 East South Street Project
City of Anaheim, California

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ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
µm	micrometer one millionth of a meter)
AADT	annual average daily traffic
AERMOD	AMS/EPA Regulatory Model
ARB	California Air Resources Board
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
CEQA	California Environmental Quality Act
CO	carbon monoxide
CPF	cancer potency factor
DBR	daily breathing rate
DPM	diesel particulate matter
ED	exposure duration
EF	exposure frequency
EMFAC	ARB Mobile Source Emission Factor Model
EPA	Environmental Protection Agency
FIND	Facility Information Detail
HI	hazard index
HQ	hazard quotient
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
MERV	Minimum Efficiency Reporting Value
NO_x	oxides of nitrogen
NO_2	nitrogen dioxide
OEHHA	California Office of Environmental Health Hazards Assessment
PDF	project design feature
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
REL	reference exposure level
SCAQMD	South Coast Air Quality Management District
TOG	total organic gases

SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this assessment report is to estimate the potential air quality and health risk impacts to future residents located at the proposed 901 East South Street Project (project) resulting from exposures to air pollutant emissions from nearby emission sources.

Of particular interest are the potential impacts from criteria pollutant emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminant (TAC) emissions from the rail line that runs adjacent to the project's western boundary and from stationary sources of air emissions located within one-quarter mile of the project.

1.2 - Project Location and Description

The project is located within the City of Anaheim, California. The subject property is located at 901 E South Street and 900 E. Santa Ana Street. The project site consists of two parcels totaling 20.56 acres (APN 037-130-29, 037-271-24) improved with approximately 340,000 square feet of industrial buildings. The property is generally bounded by East Santa Ana Street, East South Street, industrial businesses (separating the Property and South Rose Street) and a rail line.

Contextually, residential development is located to the north and west of the subject site, while older industrial development is located to the east and south. The neighborhood has been transitioning from these industrial uses to a working class, multi-family residential market.

The project will feature three different product types to insure a home builder and the community has plenty of product segmentation including apartment units, townhomes and single family detached residential units. The apartment building will have approximately 296 units that will consist of 1-3 bedrooms. The building will have an attached five story parking structure to accommodate the City's parking standards. The building will also feature a pool, rec center and typical apartment amenities. Access to the apartment building will be taken off of East South Street and an internal loop road.

For-sale townhomes will total 162 units. The townhomes will be located in thirty-one 3-story buildings spread across the site, with three to seven homes per building. The townhomes will feature 2-3 bedrooms, 2.5-3.5 bathrooms, and will range in size from 1,250 to 1,925 square feet. Units will have direct access from the interior of the unit to a private 2-car garage. The units will have private open space consisting of roof top decks and patios. The

townhomes have been located along the eastern edge per the zoning code. We have located the majority of the guest parking spaces along this edge as well to help provide additional separation from the railroad line. Additionally a sound wall and landscaping will be provided to help minimize potential noise and visual impacts from the rail line.

Single-family detached residential units will total 72. The single-family homes will be located on smaller lot sizes ranging from 2,400 to 2,600 square feet. The majority of the homes will be two stories with an occasional 3 story "pop-up" to provide architectural differentiation and variety throughout the site. The homes will feature 2-3 bedrooms, 2.5-3.5 bathrooms, and will range in size from 1,450 to 1,967 square feet. Homes will have direct access from the interior of the unit to a private 2-car garage and some will have additional driveway parking spots. Some of the homes do have tandem parking spaces per City code. The units will have private open space consisting of ground floor yards ranging in size. The homes have been located on the western edge of the site per the zoning code. Additionally a sound wall and landscaping will be provided to help minimize potential noise and visual impacts from the neighboring sites and uses.

The project's location is shown in Exhibit 1 and Exhibit 2 provides a site plan design. The project was assumed to be operational in 2019.

1.3 - Summary of Results

This assessment of the potential air quality and health risk impacts to the future residents of the project supports the following conclusions:

- The future residents of the project would not experience criteria pollutant levels that would exceed the South Coast Air Quality Management District (SCAQMD) air quality significance thresholds adopted for this assessment.
- Prior to the application of project design features, the future residents of the project would experience cancer risk levels that would exceed the SCAQMD health risk significant thresholds adopted for this assessment.
- Project design features are provided in response to Mitigation Measure 5.2-7 of the Mitigation Monitoring Program Number 122 A for the City of Anaheim Housing Opportunities Sites Rezoning Project (City of Anaheim 2013) as part of Environmental Impact Report No. 2012-00346. Project design features would consist of the installation and maintenance of an air filtration system rated at MERV13 or higher for those buildings on the western side of the project that are adjacent to the rail line.
- After the installation and maintenance of an air filtration system rated at MERV 13 or higher, all future residents of the project would not be exposed to substantial air pollutant concentrations or health risks that would exceed any SCAQMD significance threshold.

Exhibit 1
Location of the Project Site

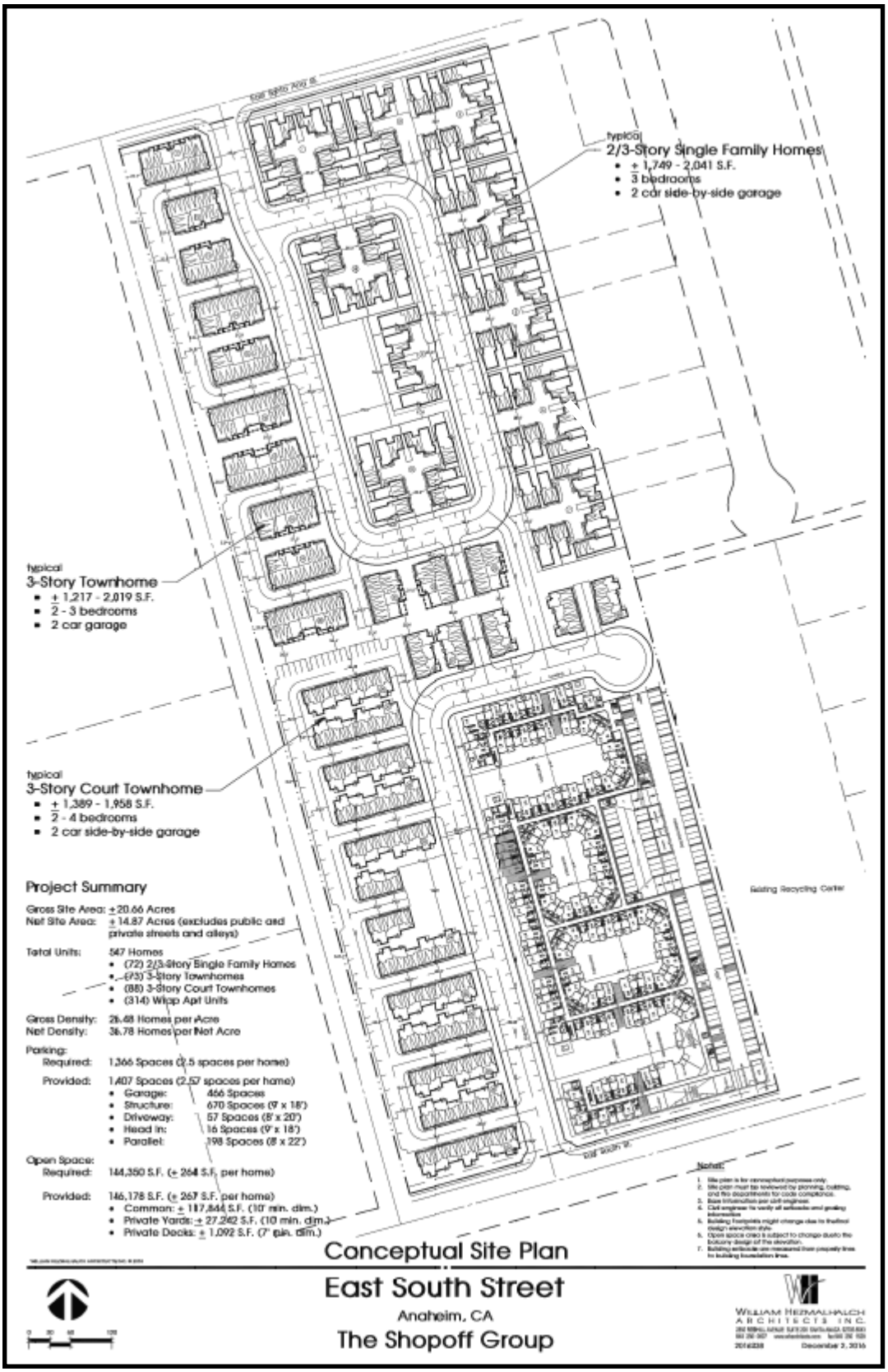


Exhibit 2
Site Plan

SECTION 2: ENVIRONMENTAL AND REGULATORY SETTING

2.1 - Regulatory Setting

The project is located in the SCAQMD and is subject to their rules and regulation.

2.1.1 - United State Environmental Protection Agency

The EPA handles global, international, national, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all state implementation plans (SIPs), provides research and guidance in air pollution programs, and sets national ambient air quality standards (NAAQS), also known as national standards. There are NAAQS for six common air pollutants, called criteria air pollutants[1], which were identified resulting from provisions of the Clean Air Act of 1970 (CAA).

The six criteria pollutants are:

- Ozone;
- Particulate matter (PM_{10} and $PM_{2.5}$);
- Nitrogen dioxide (NO_2);
- Carbon monoxide (CO);
- Lead; and
- Sulfur dioxide.

The NAAQS were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants.

2.1.2 - California Air Resources Board

The SIP for the State of California is administered by California Air Resources Board (ARB), which has overall responsibility for statewide air quality maintenance and air pollution prevention. A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain NAAQS within the state. The SIP incorporates the individual attainment plans for regional air districts. Regional air quality attainment plans prepared by individual regional air districts are sent to the ARB to be approved and incorporated into the California SIP. SIPs include the technical foundation for understanding the air quality (e.g. emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. The ARB also administers California ambient air quality standards (CAAQS) for the ten air pollutants designated in the California Clean Air Act (CCAA).

The ten state air pollutants are the six national criteria pollutants plus:

[1] EPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels.

- Visibility reducing particulates;
- Sulfates;
- Hydrogen sulfide (H_2S)
- Vinyl chloride.

The national and state ambient air quality standards and the effects, properties, and emission sources are summarized in Table 1. Both the national and State standards are periodically updated as new medical information becomes available regarding the health impacts of air pollution.

The ARB has published the "Air Quality and Land Use Handbook: A Community Health Perspective (ARB 2005). This Handbook provides siting recommendations regarding projects that include sensitive land uses (schools, residences, playgrounds, convalescent centers, nursing homes, long-term health care facilities, etc.) near or adjacent to high traffic roadways such as freeways and the associated emissions that may lead to adverse health effects beyond those associated with regional air pollution in urban areas. The Handbook is based on a number of health studies and states, in part, that there is an association "between residential proximity to high traffic roadways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children." One such study (Brunekreef 1997) "found an association between traffic and respiratory symptoms in children showing measurements of traffic-related pollutants showing concentrations within 300 meters (approximately 1,000 feet) downwind of freeways being higher than regional values." The key observation according to these studies cited in the Handbook is that "close proximity increases both exposure and the potential for adverse health effects." Other effects associated with traffic emissions according to the Handbook include "premature death in elderly individuals with heart disease." Consistent with the recommendations in ARB's Handbook, the Handbook recommends that Lead Agencies avoid siting new sensitive land uses within 500 feet away from a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles per day. However, the Handbook does indicate that "these recommendations are advisory and should not be interpreted as defined "buffer zones. We recognize the opportunity for more detailed site-specific analyses always exists, and that there is no "one size fits all" solution to land use planning." The recommendations are also based on emission conditions and their impacts that have occurred in the 1990s and 2000s. Emissions from the emission sources described in the Handbook have declined significantly since the 1990s and 2000s to the extent that the Handbook recommendations are advisory at best. However, this air quality and health risk report prepared for the proposed project provides a site-specific analysis of potential impacts using actual emission conditions.

Table 1: Air Pollutants and Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), NO_X, and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm	0.070 ppm			
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9.0 ppm	9 ppm			
Nitrogen dioxide [b] (NO_2)	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in PM related health effects.	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO_x emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Table 1 (cont): Air Pollutants and Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfur dioxide[c] (SO_2)	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (1 micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m^3	—			
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 µg/m^3			
	Annual	12 µg/m^3	12 µg/m^3			
Visibility reducing particles	8 Hour	See note below [d]				

Table 1 (cont): Air Pollutants and Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hour	25 µg/m^3	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardio-pulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO_4^{2-}. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead [e]	30-day	1.5 µg/m^3	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m^3			
	Rolling 3-month average	—	0.15 µg/m^3			
Vinyl chloride[e]	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure	Hydrogen sulfide (H_2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the

Table 1 (cont): Air Pollutants and Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
				can cause pulmonary edema.		combustion of sulfur containing fuels (oil and coal).
Volatile organic compounds (VOC)		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.

Table 1 (cont): Air Pollutants and Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources

Notes:
ppm = parts per million (concentration) $\mu g/m^3$ = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility reducing particles: In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

[e] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source of Standards: ARB 2016a
Source of effects, properties, and sources: SCAQMD 2007; California Environmental Protection Agency 2002; ARB 2016a; EPA 2003, 2009a, 2010a and 2010b, and 2011a, National Toxicology Program 2011a and 2011b.

2.1.3 - SCAQMD

There are basically two types of land use projects that have the potential to cause long-term public health risk impacts:

Type A - Land use projects with toxic emissions that impact surrounding receptors, and

Type B - Land use project that will place new receptors in the vicinity of existing toxics sources.

Type A project examples (project impacts receptors):

- Combustion related power plants,
- Gasoline dispensing facilities,
- Asphalt batch plants,
- Warehouse distribution centers,
- Quarry operations, and
- Other stationary sources that emit toxic substances.

Type B project examples (project impacted by existing nearby toxic sources):

- Residential, commercial, and institutional developments proposed to be located in the vicinity of existing toxic emission sources such as:
  - > Stationary sources,
  - > High traffic roads and freeways, and
  - > Rail yards and ports.

The East South Street Project is a **Type B** project involving the siting of new sensitive receptors that may be impacted by external sources of air emissions. The SCAQMD has published a number of significance thresholds that apply to projects that typically fall under Type A project. However, the SCAQMD also recommends that lead agencies apply these same thresholds to Type B projects in determining whether a proposed project would be subject to a significant air quality impact from external sources of emissions (that is, sources not associated with a given project). If the lead agency finds that a proposed project has the potential to be exposed to air pollutant levels that exceed these air pollution thresholds, then the project would be considered to experience a significant impact and mitigation would be necessary to minimize the impacts. The SCAQMD thresholds are provided in Table 2.

Table 2: SCAQMD Significance Thresholds

Localized Thresholds for Criteria Pollutants		
Pollutant	**Averaging Time**	**Significance Threshold**
Nitrogen Dioxide (NO_2)	1-hour – State Annual – State	0.18 ppm or 338 $\mu g/m^3$ 0.03 ppm or 56 $\mu g/m^3$
Carbon Monoxide (CO)	1-hour 8 hour	20 ppm or23,000 $\mu g/m^3$ 9 ppm or 10,000 $\mu g/m^3$
PM_{10}	24-hours Annual	2.5 $\mu g/m^3$ 1.0 $\mu g/m^3$
$PM_{2.5}$	24-hours	2.5 $\mu g/m^3$
Health Risk Thresholds for Toxic Air Contaminants		
Cancer Risk	70-year average (sensitive receptors)	10 in 1 million
Non-Cancer Risk	Hazard Index	1.0
Source: SCAQMD 2015b		

2.1.4 - Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts are not expected to occur.

Therefore, rather than a cancer risk standard or threshold being expressed as an absolute level or concentration, cancer risk is expressed as a probability interpreted as the probability of an individual contracting cancer out of a population of 1 million people from exposures to one or more TACs. This contrasts with the criteria pollutants such as nitrogen dioxide and carbon monoxide for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

The ARB identified the diesel particulate matter (DPM) emissions from diesel-fueled engines as a toxic air contaminant in August 1998 under California's toxic air contaminant program (ARB 1998). In California, diesel engine exhaust has been identified as a carcinogen. Most researchers believe that diesel exhaust particles contribute the majority of the airborne cancer risk in California.

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 40 percent of the statewide total, with an additional

57 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units (TRUs). Stationary sources, contributing about 3 percent of emissions, include shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations. Emissions from these sources are from diesel-fueled internal combustion engines. Stationary sources that report DPM emissions also include heavy construction (except highway) manufacturers of asphalt, paving materials and blocks, and electrical generation.

DPM is a subset of PM_{10}—diesel particles are typically 10 microns and smaller in diameter. In a document published in 2002, the EPA noted that in 1998, DPM made up about 6 percent of the total PM_{10} inventory nationwide. The complex particles and gases that make up diesel exhaust have the physical properties of organic compounds that account for 80 percent of the total particulate matter mass consisting of hydrocarbons and their derivatives and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust. The chemical composition and particle sizes of DPM vary among different engine types (heavy-duty, light-duty), engine operating conditions (idling, accelerating, decelerating), expected load, engine emission controls, fuel formulations (high/low sulfur fuel), and engine year.

Some short-term (acute) health effects of diesel exhaust exposure include eye, nose, throat, and lung irritation, and exposure can cause coughs, headaches, light-headedness, and nausea. Diesel exhaust is a major source of ambient PM pollution in urban environments. In a 2002 report from the Office of Environmental Health Hazard Assessment (OEHHA) titled “Health Effects of Diesel Exhaust Report,” it was noted that numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems (OEHHA 2001 and 2003). The National Toxicology Program asserted that more serious, long-term health effects of diesel exhaust have demonstrated an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure in its 2005 Report on Carcinogens, Twelfth Edition (NTP 2012).

2.1.5 - Regulatory Programs

The identification of DPM as a carcinogenic substance set into motion the development and adoption of the ARB’s Diesel Risk Reduction Plan (ARB 2000). This plan recommends many control measures to reduce the risks associated with DPM and to achieve a goal of 75 percent reduction by 2010 and 85 percent reduction by 2020 from the risks estimated in the year 2000. These control measures include reductions on both on-road and off-road vehicles, off-road construction equipment, stationary and portable diesel engines, marine engines, railroad locomotive engines, and transportation refrigeration units. Based on these

control measures, DPM emissions have declined statewide since 2000 by approximately 65 percent in 2015 and are expected to decline even further into the future (ARB 2014).

LOCOMOTIVES

In 1998, EPA promulgated final exhaust emission standards for oxides of nitrogen (NOx), hydrocarbons (HC), carbon monoxide (CO), particulate matter (PM) and smoke for newly manufactured and remanufactured locomotives and locomotive engines. The requirements for compliance with these emission standards are described in Federal Code of Regulations, 40 CFR Part 92. These provisions apply to manufacturers, remanufacturers, and owners and operators of locomotives and locomotive engines manufactured on or after January 1, 1973. The three most significant requirements for railroads relate to: 1) remanufacture of locomotives, 2) maintenance of locomotives, and 3) testing of locomotives.

The EPA emission standards for railway locomotives were adopted in two regulatory actions:

- *Tier 0-2 standards:* The first emission regulation for railroad locomotives was adopted on 17 December 1997 [63 FR 18997-19084, 16 Apr 1998]. The rulemaking, which became effective from 2000, applies to locomotives originally manufactured from 1973, any time they are manufactured or remanufactured. Tier 0-2 standards are met though engine design methods, without the use of exhaust gas aftertreatment.
- *Tier 3-4 standards:* A regulation signed on 14 March 2008 introduced more stringent emission requirements [73 FR 88 25098-25352, 6 May 2008]. Tier 3 standards, to be met by engine design methods, become effective from 2011/12. Tier 4 standards, which are expected to require exhaust gas aftertreatment technologies, become effective from 2015. The 2008 regulation also includes more stringent emission standards for remanufactured Tier 0-2 locomotives.

The EPA locomotive emission standards are summarized in Table 3

Table 3: EPA Long-Haul Locomotive Emission Standards

Locomotive Tier	Model Year	Date	HC (g/bhp-hr)	CO (g/bhp-hr)	NOx (g/bhp-hr)	PM (g/bhp-hr)
Tier 0(1)	1973-1992(3)	2010(4)	1.00	5.0	8.0	0.22
Tier 1(1)	1993-2004	2010(4)	0.55	2.2	7.4	0.22
Tier 2(1)	2005-2011	2010(4)	0.30	1.5	5.5	0.10(5)
Tier 3(2)	2012-2014	2012	0.30	1.5	5.5	0.10
Tier 4	2015 and later	2015	0.14(6)	1.5	1.3	0.03

Table 3 (cont): EPA Long Haul Locomotive Emission Standards

Notes:
(1) Tier 0-2 line-haul locomotives must also meet switch standards of the same tied
(2) Tier 3 line-haul locomotives must also meet Tier 2 switch standards
(3) 1993-2001locomotives that were not equipped with an intake air coolant system are subject to Tier 0 rather than Tier 1 standards
(4) As early as 2008 if approved engine upgrade kits become available
(5) 0.20 g/bhp-hr until January 1, 2013 (with some exceptions)
(6) Manufacturers may elect to meet a combined NOx + HC standard of 1.4 g/bhp-hr

HC = hydrocarbons CO = carbon monoxide NOx = oxides of nitrogen PM = particulate matter
g/bhp-hr = unit of emission rate in grams per brake horsepower per hour

Source: Dieselnet 2017

Preceding Environmental Actions

The project is subject to the Mitigation Monitoring Program Number 122 A for the City of Anaheim Housing Opportunities Sites Rezoning Project (City of Anaheim 2013) as part of Environmental Impact Report No. 2012-00346. This Program identifies a series of mitigation requirements applicable to projects that utilize Public Resources Code Section 21159.24 that allows urban infill residential development that meets certain criteria to be exempt from the California Environmental Quality Act (CEQA). The City would facilitate the Statutory Infill Housing Exemption by providing updated community level environmental review, as defined by Public Resources Code Section 21159.20, for properties designated for residential development by the General Plan, In addition, the City may utilize the SB 226 CEQA streamlining provisions that go into effect January 1, 2013.

In particular, Mitigation Measure 5.2-7 is relevant to the project. This mitigation measure requires, in part, that a health risk assessment (HRA) be submitted to the City Planning Department prior to the issuance of building permits for any future discretionary residential or residential mixed-use project. The mitigation measure states further that If the HRA shows that the incremental cancer risk exceeds one in 100,000 (or 10 in one million), or the appropriate non-cancer hazard index exceeds 1.0, or if the PM_{10} or $PM_{2.5}$ ambient air quality standard exceeds 2.5 µg/m^3, the HRA shall identify the level of high-efficiency MERV filtration system required to reduce indoor air concentrations of pollutants to achieve the cancer and/or non-cancer and/or ambient air quality threshold. The assessment set forth below addresses the health risks and PM_{10} and $PM_{2.5}$ impacts to the project's future residents in light of Mitigation Measure 5.2-7.

2.2 - Environmental Setting

Regional air quality is impacted by topography, dominant airflows, atmospheric inversions, location, and season. To the west of the Air Basin is the Pacific Ocean and the Los Padres National Forest. To the north and east of the basin are the San Gabriel, San Bernardino, and San Jacinto mountains, while the southern limit of the basin is the San Diego County

line. The basin consists of Orange County, all of Los Angeles County except for the Antelope Valley, and the non-desert portions of western San Bernardino County and Riverside County (see illustration above). The SCAQMD also has jurisdiction over the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin; however, those basins are not within the Air Basin.

Temperature inversions limit the vertical depth of the atmosphere through which pollution can be mixed. Among the most common temperature inversions in the basin are radiation inversions, which form on clear winter nights when cold air off mountains sink to the valley floor while the air aloft over the valley remains warm. These inversions, in conjunction with calm winds, trap pollutants near the source. Other types of temperature inversions that affect the basin include marine, subsidence, and high-pressure inversions.

Summers often have periods of hazy visibility and occasionally unhealthful air, while air quality impacts in the winter tend to be localized. Higher temperatures and sunshine can contribute to air pollutant formation, particularly ozone. Impacts of ozone are discussed in the impact sections of this analysis. The annual average temperature varies little throughout much of the basin, ranging from the low to middle 60s to the upper 80s (degrees Fahrenheit). The majority of the annual rainfall in the area occurs between December and March.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert, known as the Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events. The primary wind direction near the project site is from the northwest to the southeast. Exhibit 3 from the SCAQMD Anaheim air monitoring station summarizes the wind patterns in the project area.

2.2.1 - Existing Air Quality

Existing levels of ambient air quality, historical trends, and future projections of air quality in the project area are best documented from measurements made near the project site. The SCAQMD maintains an extensive air-monitoring network that measures levels of several air pollutants throughout the SoCAB. The SCAQMD has subdivided the SoCAB into 36

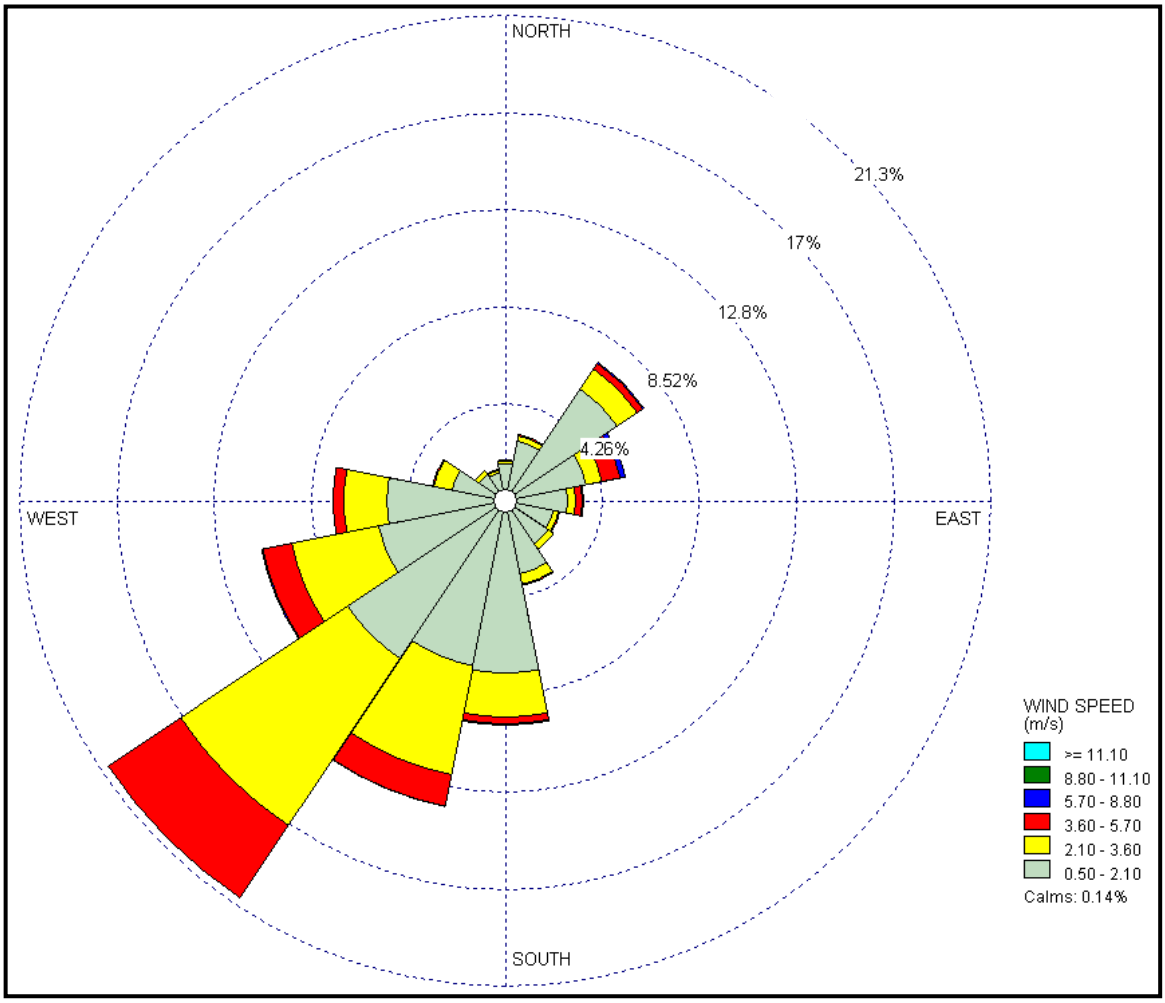


Exhibit 3

Wind Rose for the SCAQMD Anaheim Air Monitoring Station

Source-Receptor Areas (SRA) many containing one or more monitoring stations. A Source Receptor Area is a geographical area identified by the SCAQMD that is a source area in which contaminants are emitted or a receptor area in which the contaminants accumulate and are measured. Any of the areas can be a source area, a receptor area, or both a source and receptor area.

The project is located within SRA 17, Central Orange County. Various air pollutants are measured within SRA 17 at the SCAQMD's Anaheim (Pampas Lane) air monitoring station located approximately 8.7 miles northwest of the project site. The pollutant levels from SRA 17 were used to comprise a "background" for the project site. Table 3 summarizes the air monitoring data for SRA 17 covering the period 2013-2015, the most currently published 3-year monitoring period.

The information in Table 4 indicates that the area where the project would be located currently violates the State or federal standards for ozone, PM_{10} and $PM_{2.5}$.

2.2.2 - Toxic Air Contaminants

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. According to the California Almanac of Emissions and Air Quality (ARB 2009b), the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being diesel particulate matter (DPM) from diesel-fueled engines.

DPM poses the greatest health risk among the TACs listed above. The State of California, after a 10-year research program, determined in 1998 (ARB 1998) that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea.

Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is

Table 4: Air Quality Monitoring Summary – Anaheim Monitoring Station

Air Pollutant, Averaging Time (Units)(*)	2013	2014	2015
Ozone			
Max 1 Hour (ppm) Days > CAAQS (0.09 ppm)	0.084 0	0.111 2	0.100 1
Max 8 Hour (ppm) Days > CAAQS (0.07 ppm) Days > NAAQS (0.07 ppm)	0.070 0 0	0.081 6 6	0.08 1 1
Carbon Monoxide			
Max 1 Hour (ppm) Days > CAAQS (20 ppm) Days > NAAQS (35 ppm)	3.7 0 0	3.0 0 0	3.0 0 0
Max 8 Hour (ppm) Days > CAAQS (9.0 ppm) Days > NAAQS (9.0 ppm)	2.6 0 0	2.1 0 0	2.2 0 0
Nitrogen Dioxide			
Annual Mean (ppm) Exceeds CAAQS (0.030 ppm) ? Exceeds NAAQS (0.053 ppm) ?	0.018 No Exceedance No Exceedance	0.015 No Exceedance No Exceedance	0.014 No Exceedance No Exceedance
Max 1 Hour (ppm) Days > CAAQS (0.18 ppm)	0.082 0	0.076 0	0.059 0
Inhalable Particulate Matter (PM_{10})			
Annual Mean (µg/m^3) Exceeds CAAQS (20 µg/m^3)?	25.2 Exceeds Std	26.7 Exceeds Std	25.3 Exceeds Std
Max 24 Hour (µg/m^3) Days > CAAQS (50 µg/m^3) Days > NAAQS (150 µg/m^3)	77.0 1 0	85.0 2 0	59.0 1 0
Fine Particulate Matter ($PM_{2.5}$)			
Annual Mean (µg/m^3) Exceeds CAAQS (12 µg/m^3)? Exceeds NAAQS (15 µg/m^3)?	10.1 No Exceedance No Exceedance	10.5 No Exceedance No Exceedance	9.4 No Exceedance No Exceedance
Max 24 Hour (µg/m^3) Days > NAAQS (35 µg/m^3)	37.8 1	45.0 4	45.8 3

Abbreviations:
> = exceed ppm = parts per million µg/m^3 = micrograms per cubic meter
max = maximum std = ambient air quality standard ID = Insufficient Data
CAAQS = California Ambient Air Quality Standard NAAQS = National Ambient Air Quality Standard
Source: SCAQMD Historical Data by Year, accessed on March 1, 2017.

present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from

several studies to estimate concentrations of DPM. Within Los Angeles County, in addition to DPM, there are emissions of benzene, formaldehyde, acetaldehyde, naphthalene, ethylbenzene, acrolein, toluene, hexane, propylene, and xylene from a variety of sources located within the County that contribute to health risks.

The SCAQMD conducted a series of comprehensive studies called the Multiple Air Toxics Exposure Study in the South Coast Air SoCAB (MATES-II) (SCAQMD 2000), (MATES-III), (SCAQMD 2008), and MATES IV (SCAQMD 2015). These studies developed detailed TAC emission inventories, air sampling, and dispersion modeling for the SoCAB. The MATES Studies provided information on the importance of various TACs in terms of their relative health risks as well as their spatial magnitude and distribution across the SoCAB. The MATES-IV information can be used to characterize the "background" health risks from both regional and local TAC emission sources. The MATES-IV program results indicate that based on extensive computer modeling the cancer risks in the area where the project site is located are estimated to be 302 in one million[2] of which DPM contributes approximately 68 percent of the total cancer risk. This risk refers to the expected number of additional cancers in a population of one million individuals if they were exposed to these levels over a 70-year lifetime. The MATES IV study found that the population weighted cancer risk in the entire SoCAB was estimated to be 367 in one million. The remaining portion of the total cancer risk is comprised mainly of exposures to benzene, formaldehyde, acrolein, and 1,3-butadiene. Note that the cancer risks estimated in the MATES IV studied the impacts of toxics emissions in 2012 that were about 57 percent lower than the risks estimated in the MATES III study that studied the impacts of toxics emissions in 2005. The reduced levels in MATES IV are attributable the implementation of a wide variety of emission controls especially those on motor vehicles and, in particular, on large diesel trucks. Levels of cancer risk are expected to decline even further in the future as existing regulatory control requirements are phased in over the next 10 to 15 years.

Sensitive Receptors

Those individuals who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. The SCAQMD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive

[2] Note the original cancer risks estimated in the MATES IV final report were recently modified to reflect the guidance recommended by the California OEHHA for estimating cancer risks that focuses on increased sensitivity of young children to exposures to TACs. In order to provide a meaningful comparison of the MATES IV cancer risks to those risks estimated using the currently recommended cancer risk guidance from the SCAQMD for mobile sources (SCAQMD 2003), the MATES IV risks have been divided by a factor of 2.5 which is the approximate ratio of risks estimated in the MATES IV study and the risks from the current SCAQMD guidance for mobile sources. All subsequent references to the MATES risks refer to the original risk estimates based on current SCAQMD guidance.

receptors include hospitals, residences, convalescent facilities, and schools. The future residents represent the sensitive receptors that are the subject of this analysis.

SECTION 3: CRITERIA POLLUTANT AND HEALTH RISK ASSUMPTIONS AND IMPACTS

3.1 - Modeling Guidance

The methodology applied in this assessment follows the following SCAQMD guidance:

- Risk Management Assessment Procedures for Rules 1401, 1401.1, and 212 (SCAQMD 2017) – incorporates the California Office of Environmental Health Hazards Air Toxics Hot Spots Program Manual for the Preparation of Health Risk Assessments (OEHHA 2015)

A criteria pollutant and health risk assessment requires the completion and interaction of four general steps:

- Quantify estimates of emissions.
- Identify receptor locations that may be affected by the emissions. .
- Perform air dispersion modeling analyses to estimate ambient pollutant concentrations at each receptor location using the calculated emissions and representative meteorological data to define the transport and dispersion of those emissions in the atmosphere.
- Characterize and compare the calculated air quality and health risks with the applicable SCAQMD significance thresholds.

3.2 - Pollutants of Concern

There are thousands of different air pollutants, defined as any gas or particle found in concentrations in excess of what is of natural origin. While some are relatively benign, others may be found in concentrations high enough to cause health or environmental impacts. Almost any gas or particle in high enough concentrations will cause some type of health response. Generally, air pollutants of most concern can be broken into two major categories: the criteria pollutants and regulated toxic air contaminants (TACs). Thus, this report developed impact assessments for both criteria pollutants and TACs.

Criteria pollutants are those pollutants for which the EPA and ARB have set ambient air quality standards such as those shown in Table 1 above. The focus of the analysis of criteria pollutants included the following criteria pollutants:

● Carbon Monoxide (CO) ● Oxides of Nitrogen (NO_x) ● Particulates (PM_{10} and $PM_{2.5}$)

While there are other criteria pollutants such as sulfur dioxide and lead, the ambient levels of these other criteria pollutants are sufficiently low enough to be much lower than ambient air quality standards. Therefore, these other criteria pollutants were not evaluated in this assessment.

Regulated TACs consist of over 180 federally defined compounds that may be emitted at high enough rates to cause localized health or environmental impacts. TACs include toxic air pollutants that may have direct impacts, as well as persistent bioaccumulative toxics that build up in the body before impacts are noticeable.

There are a number of TACs that could potentially affect the future residents of the project. Such effects could include long-term exposures resulting in increased incidences of cancer and various long-term and short-term (less than 24 hour acute exposures) non-cancer effects such as developmental, eye, lung function, and renal effects among others. Table 5 identifies the TACs that were included in this assessment and their potential health impacts.

Table 5: TACs of Concern and Their Health Effects

Pollutant	Cancer	Chronic Non-Cancer Hazard	Acute Non-Cancer Hazard
Ammonia		X	X
Benzene	X	X	X
Formaldehyde	X	X	X
Naphthalene	X	X	
PAH Total	X		
1,3,Butadiene	X	X	X
Acetaldehyde	X	X	X
Acrolein			X
Chlorine		X	X
Ethylbenzene	X	X	
Hexane		X	
M-Xylene			X
Methanol		X	X
Styrene		X	X
Toluene		X	X
Xylenes		X	X
o-Xylene			X
Diesel Particulate Matter (DPM)[(1)]	X	X	
MethylEthylKetone			X
Arsenic		X	X

Table 5 (cont): TACs of Concern and Their Health Effects

Pollutant	Cancer	Chronic Non-Cancer Hazard	Acute Non-Cancer Hazard
Copper			X
Chlorine		X	X
Methyl Tertiary Butyl Ether	X	X	
Mercury		X	X
Sulfate			X
Manganese		X	X
Methyl Tertiary Butyl Ether (MTBE)	X	X	

Note:
(1) DPM was used to estimate cancer risk and chronic non-cancer hazards from rail locomotives and an adjacent recycle facility
X = included in this assessment

3.3 - Impact Assessment of Criteria Pollutants

Criteria pollutants are the only air pollutants with national and State ambient air quality standards that define allowable concentrations of these substances in ambient air. For purposes of this assessment, the criteria pollutants included were carbon monoxide (CO), nitrogen dioxide (NO_2, a component of oxides of nitrogen), and particulate matter (PM_{10} and $PM_{2.5}$).

3.3.1 - Emission Inventory Development – Rail Locomotives

The first requirement to carry out the assessment involves the process of identifying and quantifying the sources of air emissions from nearby emission sources, also termed an emission inventory. Each piece of equipment that emits is identified in terms of its location and physical characteristics (release height, release temperature, etc.) as well as the chemical nature of the emissions. The predominant source of emissions that would affect the proposed project is the rail line that travels along the western boundary of the project and includes emissions of CO, NO_x, and particulate matter. The emissions from the rail line are described and quantified below.

Locomotive Rail Line Activity

A major rail line runs along the western boundary of the project from the Anaheim Regional Transportation Intermodal Center to the Fullerton train station. This rail line is mainly used by Metrolink and Amtrak for passenger trains. Burlington Northern Santa Fe Railroad also occasionally uses the line for freight transportation. Rail locomotive emissions were derived from the frequency of rail traffic along the rail line, train speed, locomotive model, size, operational parameters, and emission factors. Locomotive traffic was derived from a review

of the train schedules for Metrolink and Amtrak and the locomotive fleet mix of engine emission control tier levels anticipated to be in service over the next 30 years.

Metrolink Locomotive Inventory

Metrolink is Southern California's regional commuter rail service in its 20th year of operation. The Southern California Regional Rail Authority (SCRRA), a joint powers authority made up of an 11-member board representing the transportation commissions of Los Angeles, Orange, Riverside, San Bernardino and Ventura counties, governs the service. Metrolink operates over seven routes through a six-county, 512 route-mile network. Metrolink is the third largest commuter rail agency in the United States based on directional route miles and the eighth largest based on annual ridership.

The Orange County Line portion of the Metrolink rail network runs adjacent to the project along its western boundary. According to the latest Metrolink schedule, 29 trains run along the segment adjacent to the project each weekday and 8 trains on Saturdays and Sundays. The current Metrolink locomotive fleet consists of a mix of 30 Tier 0 and 22 Tier 2 locomotives. Metrolink is currently undergoing a major locomotive replacement project by replacing its current locomotive fleet with new state-of-the-art Tier IV locomotives. Tier IV locomotives represent the cleanest diesel engines available. Information provided by Metrolink (Metrolink 2016) indicates that 40 replacement Tier IV locomotives will be in place by the end of 2018. However, to provide a conservative estimate of locomotive emissions from Metrolink, it was assumed that 20 of the existing Tier 0 locomotives would be replaced with the new Tier IV locomotives in 2018 with the remaining existing locomotives replaced by Tier IV locomotives by 2023 (SCAQMD 2016). The current locomotive fleet consists of 3,200 horsepower units while the new Tier IV units will be 4,700 horsepower units.

Amtrak Locomotive Inventory

The Amtrak Pacific Surfliner provides daily passenger service between San Diego, Los Angeles, Santa Barbara, and San Luis Obispo (and intermediate communities between these cities). According to the latest Pacific Surfliner schedule, the segment of rail line adjacent to the project has 24 trains per weekday and 24 trains on Saturday and Sunday. The current Amtrak locomotives servicing the Pacific Surfliner route consists of 15 Tier 0 locomotives rated at 3,000 hp each. In December 2014, approvals were given for the purchase of 20 Tier IV locomotives to replace the existing locomotives that service the Pacific Surfliner line. The new locomotives are currently expected to be delivered and put into service on the Pacific Surfliner beginning in 2018 (KCOY 2016), (CDOT 2016). For this analysis, it was assumed that the replacement of the entire fleet with Tier IV locomotives would occur by 2020. These new locomotives will be rated at 4,400 hp.

Burlington Northern Santa Fe Locomotive Inventory

Anecdotal evidence suggests that freight locomotive traffic along the rail line segment adjacent to the project is infrequent as the major freight line traffic is to the north of the project running through the Fullerton train station. Nonetheless, to include potential emissions from freight traffic, it was assumed that one freight train powered by two 3,800 hp locomotives travels past the project site each day.

Table 6 shows the locomotive fleet assumed in this analysis based on the available information from Metrolink, Amtrak, and published news releases.

Table 6: Locomotive Fleets – Number by Tier

Year	Metrolink[1]			Amtrak[2]			BNSF[3]	Total Locomotives
	Tier 2	Tier 4	Total	Tier 0	Tier 4	Total		
2019	26	26	52	10	10	20	1	73
2020	20	32	52	0	20	20	1	73
2021	14	38	52	0	20	20	1	73
2022	8	44	52	0	20	20	1	73
2023	0	52	52	0	20	20	1	73
2024	0	52	52	0	20	20	1	73
2025	0	52	52	0	20	20	1	73
After 2025	0	52	52	0	20	20	1	73

Notes:
[1] It was assumed based on information from Metrolink and the SCAQMD that 20 Tier 2 locomotives would be replaced by Tier IV locomotives by 2018 with the remainder of the existing fleet replaced by Tier IV locomotives by 2023 (Metrolink 2016 and SCAQMD 2016)
[2] It was assumed based on information from AMTRAK the 20 Tier 0 locomotives would be replaced by Tier IV locomotives by 2020 (CDOT 2016)
(3) The future locomotive tier level for BNSF follows the emission estimates contained in the EPA locomotive emission factor document (EPA 2009)

Table 7 provides a summary of the hourly train traffic along the adjacent rail line segment for Metrolink and Amtrak trains.

California High Speed Rail

At the time of this analysis, the Metrolink railroad segment adjacent to the project site between Fullerton and Anaheim Stations was considered in the proposed California High Speed Rail alignment. The California High-Speed Rail Authority (CHSRA) will evaluate the rail service on the Los Angeles-to-Anaheim segment of the high-speed rail project to satisfy CEQA requirements at the time of environmental review. Therefore, any future analysis of the potential air quality impacts due to high speed rail activity would be completed by the

CHSRA as a requirement of the CEQA process and is, therefore, not analyzed nor included in this air quality study

Table 7: Passenger Locomotive Rail Traffic Along the Adjacent Rail Line Segment

Hour Beginning	Metrolink Trains[1]		Amtrak Trains[2]		Total Trains	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Midnight	0	0	0	0	0	0
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4	1	0	0	0	1	0
5	1	0	0	0	1	0
6	2	0	2	2	4	2
7	3	0	0	0	3	0
8	2	0	2	3	4	3
9	2	2	2	2	4	4
10	1	0	2	1	3	1
11	0	1	2	2	2	3
12	1	1	1	1	2	2
13	1	0	2	2	3	2
14	1	2	0	0	1	2
15	1	0	2	2	3	2
16	4	0	1	1	5	1
17	3	1	1	2	4	3
18	2	1	2	1	4	2
19	2	0	0	0	2	-
20	0	0	2	2	2	2
21	1	0	1	1	2	1
22	1	0	1	1	2	1
23	0	0	1	1	1	1
Total	29	8	24	24	53	32

Notes:
[1] Metrolink Train Schedule: Orange County Line April 2017
[2] Amtrak Surfliner Train Schedule: April 2017.

Air Emissions of Concern from Locomotive Rail Line Activity

Locomotives emit a myriad of air pollutants during their operation. This analysis focuses on several criteria pollutants and toxics air contaminant emissions emitted from locomotive operations. The criteria pollutants included carbon monoxide (CO), oxides of nitrogen (NO_x), and particulate matter (PM_{10} and $PM_{2.5}$) for which ambient air quality standards have been set by the EPA and ARB.

The rail locomotive emissions were estimated using the frequency of locomotive trips past the project, locomotive engine size and emission control tier, train speed, and emission factors that are summarized in Appendix A. A travel speed of 50 miles per hour was assumed along the adjacent rail line segment based on railroad crossing incidences reported by the Federal Railroad Administration (FRA 2017). Emissions of PM_{10}, $PM_{2.5}$, and NO_x were estimated as a daily average for the project opening year of 2019. CO, NO_x, PM_{10}, and HC emissions were also estimated during the peak hour of locomotive travel during the project opening year 2019 to correspond to the time intervals specified in the ambient air quality standards and for use in estimating acute non-cancer hazards. Table 8 summarizes the rail locomotive annual emissions for NO_x, PM_{10} and $PM_{2.5}$ generated from locomotive travel along the rail line adjacent to the project.

Table 9 summarizes the peak one-hour emissions for CO, NO_x, DPM as PM_{10}, and HC emissions. Available locomotive scheduling information indicated that a maximum of 6 trains would pass the project during a given hour.

Table 8: Rail Locomotive PM_{10}, $PM_{2.5}$, and NO_x Annual Emissions

Activity	PM_{10} (1) (tons/year)	$PM_{2.5}$ (2) (tons/year	NO_x (1) (tons/year)
Metrolink	0.0050	0.0049	0.55
Amtrak	0.0048	0.0047	0.71
BNSF	0.0004	0.0004	0.06
Total	0.0102	0.0100	1.32

Notes:
(1) Annual emissions for the project opening year 2019 along the rail line segment adjacent to the project
(2) $PM_{2.5}$ assumed to be 97% of the PM_{10} emissions
Source: Appendix A

Table 9: Rail Locomotive NOx, CO, HC, and DPM (as PM_{10}) Peak Hour Emissions

Activity	NO_x[(1)] (pounds/hour)	CO[(1)] (pounds/hour)	HC[(1)] (pounds/hour)	DPM (as PM10)[(1)] (pounds/hour)
Metrolink	0.441	0.186	0.027	0.008
Amtrak	0.140	0.098	0.015	0.003
BNSF	0.346	0.104	0.070	0.008
Total	0.927	0.388	0.112	0.019

Note:
(1) Metrolink and Amtrak schedules indicate that a maximum of 6 trains travel past the project rail segment during the same hour including 1 BNSF train
Source: Appendix A

3.3.2 - Emission Inventory Development – Stationary Sources

The SCAQMD also recommends identifying potential sources of stationary source emissions located within one-quarter mile of a new sensitive receptor. The SCAQMD provides an internet-based tool called the Facility Information Detail (FIND) that can be searched to identify SCAQMD-regulated sources and their annual emissions located within the SCAQMD. The search of the FIND database identified twelve facilities within the one-quarter mile radius of the project. However, only one facility, Facility # 2825, MCP Foods located at 424-425 South Atchison Street, Anaheim displayed their annual emissions. All other facilities reported emissions to the SCAQMD that were less than the reporting threshold established by the SCAQMD under their Annual Emission Reporting system and this not shown in the FIND database. Table 10 shows the maximum daily criteria pollutant emissions reported to the SCAQMD during the time period 2012 to 2016 (annual emissions (tons/year) / 365 days/year * 2000 pounds/ton).

Table 10: Daily Criteria Air Emissions from SCAQMD Facility #2825

Air Pollutant	Daily Emissions (pounds/day)[(1)]
Carbon Monoxide	18.6
Oxides of Nitrogen	11.9
Particulates as PM_{10} as $PM_{2.5}$	31.9 21.5 12.9
ROG	181.4

Note:
(1) Assumes 24/7 operations
Source: SCAQMD FINDS database; maximum emissions during the period 2012 and 2016
See Appendix A

In addition to a review of the permitted stationary sources found in the SCAQMD FIND database, a textile recycling facility is located along the eastern boundary of the project. An estimate was made of the criteria pollutant emissions from this facility. For this purpose, the facility was assumed to be a light industrial land use. Based on an estimated size of 3.45 acres, the facility was estimated to generate 179 vehicle trips per day based on the Institute of Transportation Engineers trip generation rate of 51.8 trips per acre for a general light industrial land use. During the peak hour, the facility was estimated to generate 26 vehicle trips per hour. The vehicle trips were further subdivided into several vehicle classes (i.e., cars vs trucks) in accordance with the City of Fontana Truck Trip Generation Study (City of Fontana 2003) vehicle distribution for a light industrial land use. The facility was assumed to operate 12 hours per day from 5am to 5pm. Vehicle emissions were quantified for both onsite vehicle travel and idling as well as vehicle travel along East South Street to and from the facility. Table 11 summarizes the daily emissions from the recycle facility.

Table 11: Estimate of Daily Criteria Pollutant Emissions from the Recycle Facility

Air Pollutant	Daily Emissions (pounds/day)
Carbon Monoxide	0.232
Oxides of Nitrogen	0.604
PM_{10}	0.012
$PM_{2.5}$	0.007
See Appendix A	

3.3.3 - Air Dispersion Modeling Assumptions

The assessment of air quality and health risk impacts determines the potential of the project's future sensitive receptors to be exposed to substantial pollutant concentrations. To accomplish this assessment, an air dispersion model (EPA model; AERMOD Version 16216r) was used to simulate the movement of air pollutants through the air and compare the concentration of these pollutants with the applicable air quality and health risk thresholds established by the SCAQMD shown earlier in Table 2.

Terrain elevations were obtained for the project site using AERMAP, the AERMOD terrain data pre-processor. The urban dispersion option was used to describe the air dispersion in the local vicinity of the project. The meteorological data for the years 2006 through 2010 and 2012 were obtained from the SCAQMD Anaheim Air Monitoring Station. Table 12 summarizes the general AERMOD model assumptions applied in the air dispersion model assessment.

Each emission source to be evaluated requires geometrical and emission release specifications for use in the air dispersion model. The emission source configurations applied in this assessment were assumed to be a line volume source to describe the impacts from locomotive travel along the rail line segment adjacent to the project and a point source to describe the impacts from the stationary emission source. Both line volume sources and a point source were used to describe the emissions from the recycle facility. Table 13 summarizes the emission source details.

Table 12: General Air Dispersion Model Assumptions

Feature	Assumption
Terrain processing	Complex terrain; elevations were obtained for the project site using the EPA AERMAP terrain data pre-processor
Emission source configuration	See Table 13 below.
Land Use	Urban
Coordinate System	Universal Transverse Mercator
Building downwash	Included in calculations; nearest building was assumed to be 60 feet in height for Stationary Source 2825
Meteorological Data	SCAQMD Anaheim meteorological Data for 2006-2010 and 2012
Receptor height	0 meters (ground-level), 3 meters (2nd Floor), 6 meters (3rd floor)
Source: Appendix A	

Table 13: Summary of Emission Source Configurations

Emission Source Configuration	Assumption	Relevant Assumptions
Rail Line	Line Source	• See Table 7 for an inventory of locomotive operations • Stack release height: 13 feet • Plume height: 25.5 feet • Plume width: 27 feet • Train Speed: 50 mph • Length of the line source: 0.73 miles adjacent to the project site • Emission factors: EPA Emission Factors for Locomotives
Stationary Permitted Source	Point Source	• Emission release height: 80 feet • Building downwash included • Facility ID# 2825, MCP Foods • Stack release characteristics: ambient air • Emissions: SCAQMD FIND database • Source operations: 24/7

Table 13 (cont): Summary of Emission Source Configurations

Emission Source Configuration	Assumption	Relevant Assumptions
Recycle Facility	Onsite Vehicle Travel: Line Source	• Emission release height: 12 feet for trucks and 3 feet for autos • Vehicle Speed: 5 mph • Source operations: 12/7 • Emissions: EMFAC2014 for gas and diesel vehicles
	Onsite Truck Idling: Point Source	• Emission release height: 12 feet for trucks • Truck Idle time: 15 min/truck/day • Source operations: 12/7 • Emissions: EMFAC2014 for diesel trucks
	Offsite Vehicle Travel: Line Sources	• Emission release height: 12 feet for trucks and 3 feet for autos (haul truck assumptions) • Vehicle Speed: 25 mph for trucks and 35 mph for autos • Source operations: 12/7 • Emissions: EMFAC2014 for gas and diesel vehicles
Source: Appendix A		

Exhibit 4 provides the locations of the emission sources included I in this analysis. Exhibit 5 provides the locations of the receptor network included in this analysis.

3.4 - Criteria Pollutant Impacts

The results of the criteria pollutant impact analysis are summarized in Table 14 along with a comparison of the applicable SCAQMD significance thresholds. As noted from Table 14, the criteria pollutant significance thresholds would not be exceeded at any location within the project site. The highest PM^{10} and $PM^{2.5}$ impacts are less than 2.5 $\mu g/m^3$ as referenced in Mitigation Measure 5.2-7. Thus, the project's sensitive receptors would not be exposed to substantial criteria pollutant concentrations.

Table 14: Results of the Criteria Pollutant Impact Analysis

Air Pollutant	Averaging Time Units[(1)]	Impact to Project	Background Air Quality[(2)]	Total[(3)]	Standard/ Threshold	Significant Impact?
Carbon monoxide (CO)	1-hour, ppm	0.01	3.7	3.71	20	No
	8-hour, ppm	0.01	2.6	2.61	9.0	No
Nitrogen dioxide (NO_2)	1-hour, ppm	0.010	0.082	0.083	0.18	No
	Annual, ppm	0.001	0.018	0.019	0.03	No
Particulate matter (PM_{10})	24-hour, $\mu g/m^3$	2.3	NA	2.3	2.5	No
	Annual, $\mu g/m^3$	0.9	NA	0.8	1.0	No
Particulate matter ($PM_{2.5}$)	24-hour, $\mu g/m^3$	1.4	NA	145	2.5	No

Table 14 (cont): : Results of the Criteria Pollutant Impact Analysis

Notes:
(1) Concentration units for each air pollutant are shown in the second column; the AERMOD model estimates pollutant concentrations in units of micrograms per cubic meter; to estimate pollutant concentrations for NO_2 and CO which are in units of parts per million by volume, the NO_2 pollutant concentrations in micrograms per cubic meter are divided by 1,880 and the CO pollutant concentrations are divided by 1,100; these multiplication factors are based on a standard temperature of 25 degrees centigrade and a standard atmospheric pressure of 760 millibars.
(2) Background air quality for CO and NO_2 from SCAQMD and ARB measurement data for the time period of 2013 to 2015
(3) Total = local project impact + background air quality
NA = Not Applicable; as noted above, since the SCAQMD exceeds the federal or State PM_{10} and $PM_{2.5}$ standards, determining background levels of PM_{10} and $PM_{2.5}$ are unnecessary (SCAQMD 2009); the PM_{10} and $PM_{2.5}$ significance thresholds are based on the requirements of SCAQMD Rule 1303—Requirements.
ppm = parts per million (a unit of concentration); $\mu g/m^3$ = micrograms per cubic meter (a unit of concentration)
Sources:
Local project impacts are from the source-specific dispersion modeling (see Appendix A)
Source: Appendix A.

Also, air impacts did not vary appreciably with the height of the building floor.

3.5 - Health Risk Assessment Methodology

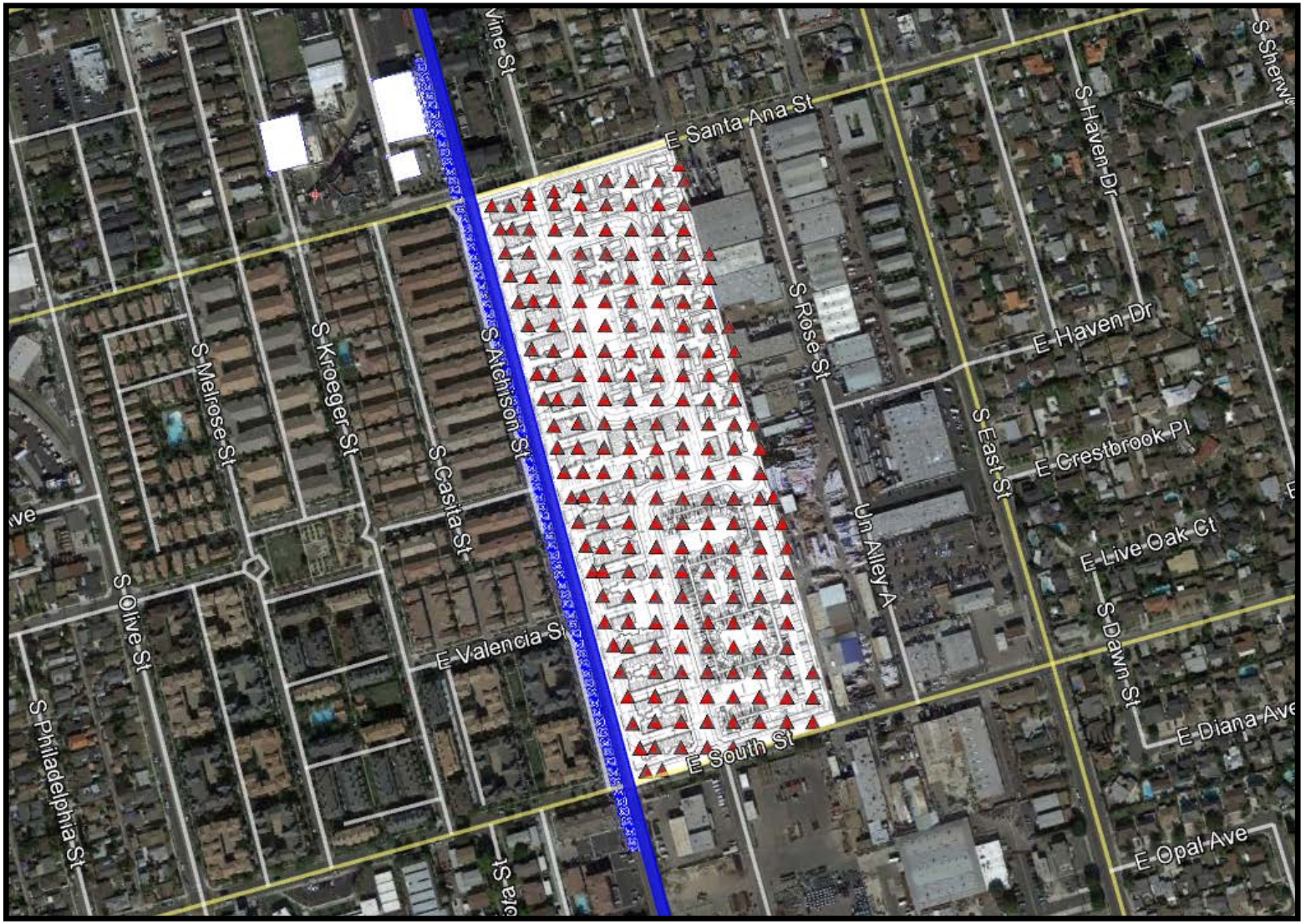
A health risk analysis (HRA) of toxic air contaminants is a guide that helps to determine if current or future exposure to a chemical or substance could affect the health of a population. The State of California Office of Environmental Health Hazard Assessment (OEHHA) develops methods for conducting 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" (OEHHA 1987).

The TACs that has the greatest potential to cause a health risk to the future residents of the project is DPM from the operation of diesel-powered locomotives and heavy duty trucks. Other TACs associated with the emissions from stationary emission sources were also included in this assessment.

3.5.1 - Estimation of TAC Emissions

The most important TAC potentially affecting the project's future residents with respect to health risk is diesel particulate matter (DPM) from the operation of diesel-fueled locomotives that would pass by the project on a daily basis. The ARB estimates that between 70 and 80 percent of the estimated airborne cancer risk within the State is due to DPM from all sources. Other TACs are also associated with the operation of locomotives and stationary

Exhibit 4
Locations of TAC Emission Sources



Project Receptor Locations

Exhibit 5
Receptor Locations

sources include pollutants such as benzene, 1, 3-butadiene, formaldehyde, acetaldehyde, ethyl benzene, naphthalene, and others noted in Table 5 above. TAC emissions were estimated for the rail locomotives and stationary source Facility ID#2825.

Locomotive TAC Emissions

Locomotive DPM emissions were estimated over the 30-year time period that is used in estimating cancer risks to sensitive individuals using the rail line activity levels, locomotive fleet mix. and emission rates discussed earlier in Section 3.3.1. DPM emissions were estimated for the years 2019, 2020, 2025, 2030, 2035, 2040, 2045, and 2050. Table 15 summarizes the DPM emission rates from the locomotive operations over the 30-year exposure duration (2019 to 2048). Emissions during 2019 were used to estimate chronic non-cancer and acute non-cancer hazards. Table 16 summarizes the peak hour TAC emissions from the locomotive operations during 2019 used in estimating acute non-cancer hazards from locomotive operations. The emissions shown in Table 16 were made using the respective air pollutant speciation profiles from the ARB for total organic gas (TOG) and DPM emissions. Speciation profiles allow the estimation of the emissions of various individual TACs that comprise diesel TOG and DPM emissions that are needed to estimate acute non-cancer hazards.

Table 15: Annual Rail Locomotive DPM Emissions

Year	Metrolink (tons/year)	Amtrak (tons/year)	BNSF (tons/year)	Total (tons/year)
2019	0.0085	0.0165	0.0013	0.0264
2020	0.0078	0.0046	0.0012	0.0136
2025	0.0047	0.0046	0.0009	0.0101
2030	0.0046	0.0046	0.0005	0.0098
2035	0.0049	0.0046	0.0004	0.0098
2040	0.0047	0.0046	0.0002	0.0095
2035	0.0047	0.0046	0.0002	0.0095
2040	0.0047	0.0046	0.0002	0.0095
2045	0.0047	0.0046	0.0002	0.0095
2050	0.0047	0.0046	0.0002	0.0095
Source: see Appendix B				

Table 16: Peak Hour TAC Emissions from Rail Line Operations

TAC	Peak Hour Emission[(1)] (pounds/hour)
TAC Emissions from Diesel TOG[(2)]	
Acetaldehyde	0.00820
Benzene	0.00223
Formaldehyde	0.01642
Methyl Alcohol	0.00003
Methyl Ethyl Ketone	0.00165
Styrene	0.00007
Toluene	0.00164
M-Xylenes	0.00068
O-Xylene	0.00038
P-Xylene	0.00011
1-3 Butadiene	0.00021
TAC Emissions from Diesel PM_{10}[(3)]	
Arsenic	7.887E-08
Copper	5.915E-07
Chlorine	5.402E-06
Nickel	3.154E-07
Mercury	5.126E-07
Sulfate	3.431E-04
Manganese	4.535E-07
Notes: [(1)] Peak hour emissions are used to estimate the acute non-cancer hazard from locomotive TAC emissions [(2)]ARB TOG Speciation Profile: 818 [(3)] ARB PM10 Speciation Profile: 425 Source: see Appendix B	

Stationary Source TAC Emissions

Estimates of the stationary source TAC emissions (Facility ID# 2825 – MCP Foods) were derived from the TAC emission data provided by the SCAQMD FIND database and are shown in Table 17. The facility emissions were assumed to remain constant over time.

Table 17: TAC Emissions from Stationary Source Facility ID# 2825

TAC and Health Impact[1]	Annual Emissions[2] (tons/year)	Hourly Emissions[3] (pounds/hour)
Ammonia (c,a)	322.518	3.682E-02
Benzene (cr,c,a)	0.647	7.386E-05
Formaldehyde (cr,c,a)	1.373	1.567E-04
Naphthalene (cr,c)	0.030	3.425E-06
PAH, total (cr)	0.010	1.142E-06
1,3-butadiene (cr,c,a)	0.014	1.598E-06
Acetaldehyde (cr,c,a)	45.667	5.213E-03
Acrolein (c,a)	0.198	2.260E-05
Chlorine (c,a)	0.004	4.566E-07
Ethylbenzene (cr,c)	0.572	6.530E-05
Hexane (c)	0.384	4.384E-05
M-Xylene (c,a)	0.049	5.594E-06
Methyl Tertiary Butyl Ether (cr,c)	0.020	2.283E-06
Methanol (c,a)	0.007	7.991E-07
Styrene (c,a)	0.001	1.142E-07
Toluene (c,a)	2.211	2.524E-04
Xylenes (c,a)	1.587	1.812E-04
o-Xylene (c,a)	0.017	1.941E-06

Note:
[1] Heath Impacts: cr = cancer risk c = chronic non-cancer hazard
a = acute non-cancer hazard
[2] Annual emissions indicated are the maximum reported during the years 2012 to 2016; TACs with zero emissions are not listed
[3] Assumes a 24/7 hour operation
Source: SCAQMD FIND database for Facility ID# 2825
See Appendix B

Recycle Facility Emissions

The DPM emissions from the recycle facility were estimated for the future years 2019, 2020, 2025, 2030, 2035, 2040, 2045, and 2050 as derived from the EMFAC2014 mobile source emission model. The number of daily delivery trucks was determined from the trip generation data from the Institute of Transportation Engineers (ITE 2012) for a general light industry land use. And form the City of Fontana for light industrial uses (City of Fontana 2003). Trucks were assumed to travel within the facility at 5 miles per hour and idle for 15

minutes per day as per recommendations from the SCAQMD. The estimated annual DPM emissions from the Recycle Facility are presented in Table 18.

Table 18: Annual DPM Emissions From the Recycle Facility

Year	Recycle Facility (tons/year)
2019	0.00050
2020	0.00041
2025	0.00028
2030	0.00023
2035	0.00023
2040	0.00017
2045	0.00016
2050	0.00016
Source: see Appendix B	

Note also that there is an existing gasoline service station located approximately 550 feet east of the project at the intersection of East South Street and South East Street. Gasoline stations are a source of benzene emissions which is also a carcinogenic substance. The ARB published the Land Use Handbook (ARB 2005) that provides recommendations for siting sensitive receptors such as residences in close proximity to sources of TAC emissions. The Handbook recommends

> "Avoid siting sensitive land uses within 300 feet of any large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities."

Since the project is located beyond 300 feet, the TACs from the gas service station are not expected to impact the project.

3.5.2 - Estimation of Cancer Risks

Excess lifetime cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange

boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF)[3]. The following equations were used to calculate the potential excess lifetime cancer risk for the inhalation pathway is based on the guidance published by the SCAQMD (SCAQMD 2015).

$$Risk_{inh} = C_a \times \text{Inhalation Exposure Factor} \quad \text{(EQ-1)}$$

Where:

$Risk_{inh}$ = Cancer Risk; the incremental probability of an individual developing cancer as a result of inhalation exposure to a particular potential carcinogen (expressed as the probability of an individual developing cancer out of a population of 1 million people exposed to the carcinogen over a lifetime of 30-years)

C_a = the calculated annual average air concentration of the TAC calculated by the air dispersion model

Inhalation is the most important exposure pathway to impact human health from TACs and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = CPF \times EF \times ED \times AAT / AT \quad \text{(EQ-2)}$$

Where:

CPF = Inhalation cancer potency factor for the TAC; for DPM the CPF has a value of 1.1 $(mg/kg\text{-}day)^{-1}$
EF = Exposure frequency (days/year)
ED = Exposure duration (years)
AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH).
AT = Averaging time period over which exposure is averaged (25,550 days)

The SCAQMD/OEHHA guidance incorporates early-in-life cancer risk adjustment factors that account for the increased sensitivity and susceptibility of infants and young children to exposures to airborne carcinogens. These adjustment factors include age-sensitivity weighting factors, age-specific daily breathing rates, and age-specific time-at-home factors. The SCAQMD/OEHHA recommended values for the various cancer risk parameters shown in Equation 2 for sensitive/residential receptors are provided in Table 19. The exposure assumptions relate to the lifetime exposure commencing from pre-birth to adults. A 30-year lifetime exposure duration is specified in the estimation of cancer risks.

[3] Cancer potency factors (CPF) are used to estimate the risk of cancer associated with exposure to a carcinogenic or potentially carcinogenic substance. A slope factor is an upper bound, approximating a 95% confidence limit, on the increased cancer risk from a lifetime exposure to an agent by ingestion or inhalation.

Table 19: Exposure Assumptions for Lifetime Cancer Risk

Age Bins	Exposure Frequency		Exposure Duration (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—Child to Adult						
3rd Trimester	24	350	0.25	10	100	361
0 to 2 years	24	350	2	10	100	1,090
3 to 16 years	24	350	14	3	100	571
17 to 30 years	24	350	14	1	73	261

Cancer risks are also attributable to TAC emissions from the stationary source Facility ID#2825. The cancer risk potency factors specific to each TAC were used to estimate cancer risks from the stationary source. The potential TACs from this stationary source were identified in Table 17.

It should be noted that exposures for separate subpopulations of sensitive receptors can be defined such as for school age children, adults, and non-school age children. However, the highest total risks for an individual are associated with the lifetime exposure of 30 years of age. Therefore, the HRA focused on this lifetime exposure duration for sensitive receptors.

Non-Cancer Health Risk Characterization

Chronic Non-Cancer Impacts

Exposures to TACs can also cause chronic (long-term) related non-cancer illnesses such as reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system effects, birth defects, or other adverse environmental effects. Risk characterization for non-cancer health risks from TACs is expressed as a Hazard Index (HI). The HI is a ratio of the predicted concentration of a TAC to a concentration considered acceptable to public health professionals, termed the reference exposure level or REL. A significant risk is defined by the SCAQMD as an HI of 1 or greater. When evaluating chronic non-cancer effects due to TAC exposures, a hazard quotient (HQ) is established for each individual TAC as follows and for each target organ[4] affected by the individual TAC:

$$HQ_i = C_{air}/REL_i \qquad \text{(EQ-3)}$$

Where:

[4] A target organ is a biological organ(s) most adversely affected by exposure to a chemical substance and includes the respiratory system, cardiovascular system, eyes, nervous system, hematological system, immune system, reproductive system, developmental system, skin, and endocrine system

HQ_i = chronic hazard quotient for each TAC
C_{air} = Annual average concentration of each TAC ($\mu g/m^3$)
REL = Chronic Reference Exposure Level ($\mu g/m^3$)

To evaluate the potential for adverse non-cancer health effects from simultaneous exposure to multiple TACs, the HQs for all TACs that affect the same target organ are summed yielding an HI as follows:

$$HI_{CNCHI} = \Sigma HQi \qquad \text{(EQ-4)}$$

Where:

HI_{CHI} = chronic hazard index for all TACs
ΣHQ_i = sum of all chronic hazard quotients for each individual TAC affecting the same target organ

Chronic health effects were calculated based on annual average TAC concentrations from the operation of locomotives, recycle facility and from the operation of the permitted stationary source. The estimation of the chronic non-cancer hazard index was taken as the sum of the indices for locomotive, recycle facility, and stationary source TAC emissions. This is a conservative assumption given that the chemical components of the various TACs affect different target organs.

Acute Non-Cancer Impacts

Exposures to toxics air contaminants can also have short-term or acute non-cancer effects, typically dealing with exposures over an hour or so. The California OEHHA has not defined a reference exposure level appropriate for estimating acute non-cancer hazards from DPM. Therefore, to estimate the potential acute non-cancer impacts from the surrounding stationary emission source, it was necessary to examine the various individual chemical components (or chemical species) that comprise the emissions from the regulated stationary source previously shown in Table 17. From this information, an estimate can be made of the maximum one-hour average concentration levels of the regulated stationary source's various chemical species from which an acute non-cancer hazard index can be determined. Acute non-cancer health effects were calculated based on 1-hour maximum TAC concentrations from the permitted stationary source's TAC emissions..

The acute non-cancer hazard index is calculated as follows.

$$HQ_i = C_{air}/REL_i \qquad \text{(EQ-5)}$$

Where:

HQ_i = acute hazard quotient for each TAC

C_{air} = 1 hour maximum average concentration of each TAC ($\mu g/m^3$)
REL = Acute Reference Exposure Level for each TAC ($\mu g/m^3$)

To evaluate the potential for adverse non-cancer health effects from simultaneous exposure to multiple TACs, the HQs for all TACs that affect the same target organ are summed yielding an HI as follows:

$$HI_{AHI} = \Sigma HQ_i \quad \text{(EQ-6)}$$

Where:

HI_{CHI} = acute hazard index for all TACs
ΣHQi = sum of all acute hazard quotients for each individual TAC affecting the same target organ

Applying the information in Table 16 and Table 17 with Equations 5 and 6 yields the estimation of acute non-cancer hazard indices for the affecting TACs. The estimation of the acute non-cancer hazard index was taken as the sum of the indices for locomotive, recycle facility, and stationary source TAC emissions. This is a conservative assumption given that the chemical components of the various TACs affect different target organs.

The reference exposure levels for the TACs analyzed in this report are shown in Table 20.

Table 20: Reference Exposure Levels for TACs Potentially Affecting the Project

Pollutant	Chronic Non-Cancer REL ($\mu g/m^3$)	Acute Non-Cancer REL ($\mu g/m^3$)
Ammonia	200	3200
Benzene	3	27
Formaldehyde	9	55
Naphthalene	9	----(1)
1,3,Butadiene	2	660
Acetaldehyde	140	470
Acrolein	0.35	2.5
Chlorine	0.2	210
Ethylbenzene	2,000	----
Hexane	7,000	----
M-Xylene	700	22,000
MTBE	8,000	----
Methanol	4,000	28,000
Styrene	900	21,000

Table 20 (cont): Reference Exposure Levels for TACs Potentially Affecting the Project

Pollutant	Chronic Non-Cancer REL ($\mu g/m^3$)	Acute Non-Cancer REL ($\mu g/m^3$)
Toluene	300	37,000
Xylenes	700	22,000
o-Xylene	700	22,000
Diesel Particulate Matter (DPM)[(2)]	5	----

Notes::
[(1)] ------- means that the California OEHHA has not defined a REL for this TAC
[(2)] DPM was used to estimate the chronic non-cancer hazard index for the rail emissions
Source: OEHHA 2017

3.6 - Results of the Health Risk Assessment

Table 21 summarizes the results of the health risk assessment. The table presents the highest cancer risk and non-cancer hazards at the maximum impacted sensitive receptor located within the project. As noted from this table, the impacts to the project's residents result in an exceedance of the SCAQMD's health risk significance threshold for cancer of 10 in a million. The impacts to the project, however, do not exceed the chronic and acute non-cancer hazard indices of 1.0. Note that the DPM emissions from the rail locomotives contributes 99 percent of the total cancer risk (from rail + recycle facility + stationary source) while the TAC emissions from the stationary source Facility ID# 2825 contributes 99 percent of the chronic and acute non-cancer hazard indices. Exhibit 6 overlays the cancer risk impacts on the project site plan. As noted from this exhibit, the building locations within the project where the estimated cancer risks exceed the 10 in one million significance threshold are located adjacent to the rail line.

Table 21: Summary of Health Risk Assessment

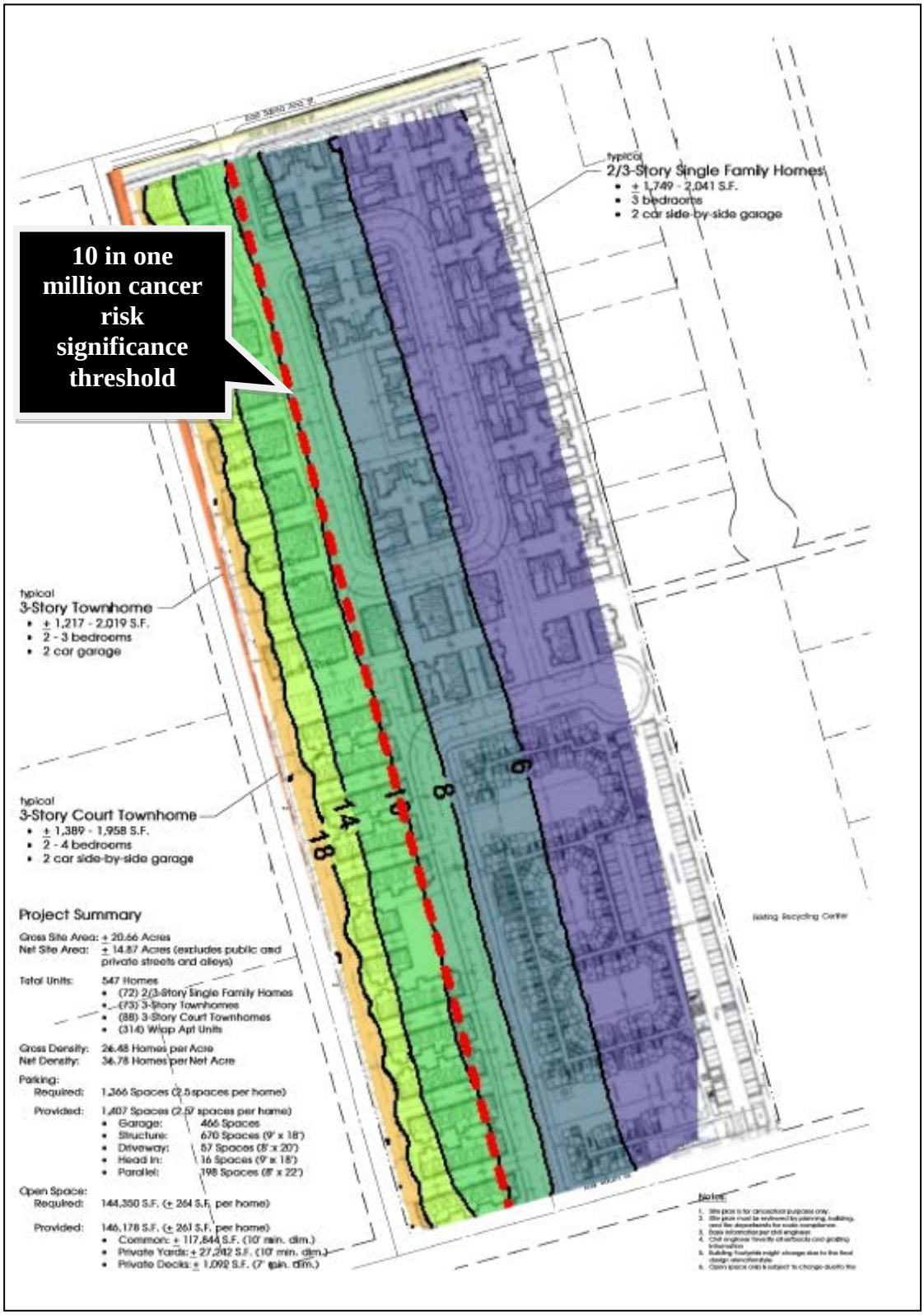
Location[1]	Cancer Risk (per million)[1]		Exceeds Significance Threshold?
	Maximum Lifetime Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor	22.5	10	Yes
Location	**Chronic Non-Cancer Hazard Index**		**Exceeds Significance Threshold?**
	Hazard Index	**Significance Threshold**	
Maximum Impacted Sensitive Receptor	0.0008	1.0	No
Location	**Acute Non-Cancer Hazard Index**		**Exceeds Significance Threshold**
	Hazard Index	**Significance Threshold**	
Maximum Impacted Sensitive Receptor	0.006	1.0	No
Source: Appendix B			

As noted in the previous section of this report, the TAC emissions principally from the adjacent rail line would result in impacts within the project that would exceed the SCAQMD's significance threshold for cancer risk prior to any mitigation.

Various project design features are potentially available to reduce the potential impacts to the proposed project. These methods include enhanced air filtration systems, sound walls, and vegetation. Both the SCAQMD (SCAQMD 2009b) and ARB (ARB 2012) have discussed the merits and effectiveness of various measures designed to reduce near-roadway pollutant levels.

Many HVAC filters available in the U.S. are rated for their particle removal efficiency using a laboratory test procedure described in the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standard 52.2-2012, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size. The test procedure classifies the single-pass particle removal efficiency of HVAC filters based on their minimum particle removal efficiency in three particle size bins (0.3 µm to 1 µm, 1 µm to 3 µm, and 3 µm to 10 µm) under various loading conditions. Minimum removal efficiency values in these three size bins are used to assign HVAC filters a single efficiency metric called the MERV. In general, the higher the MERV, the greater the removal efficiency for one or more particle size bins.

The particle removal efficiency of filters is strongly dependent on particle size. Both larger particles (i.e., greater than ~1 µm) and smaller particles (i.e., less than ~0.1 µm) are removed by typical fibrous media filters with greater efficiency than particle sizes in between ~0.1 µm and ~1 µm. ASHRAE Standard 52.2-2012 evaluates the removal efficiency of a filter on a particle number- basis, albeit only for particle sizes 0.3 µm to 10 µm.



Contour lines are lifetime cancer risk per million individuals

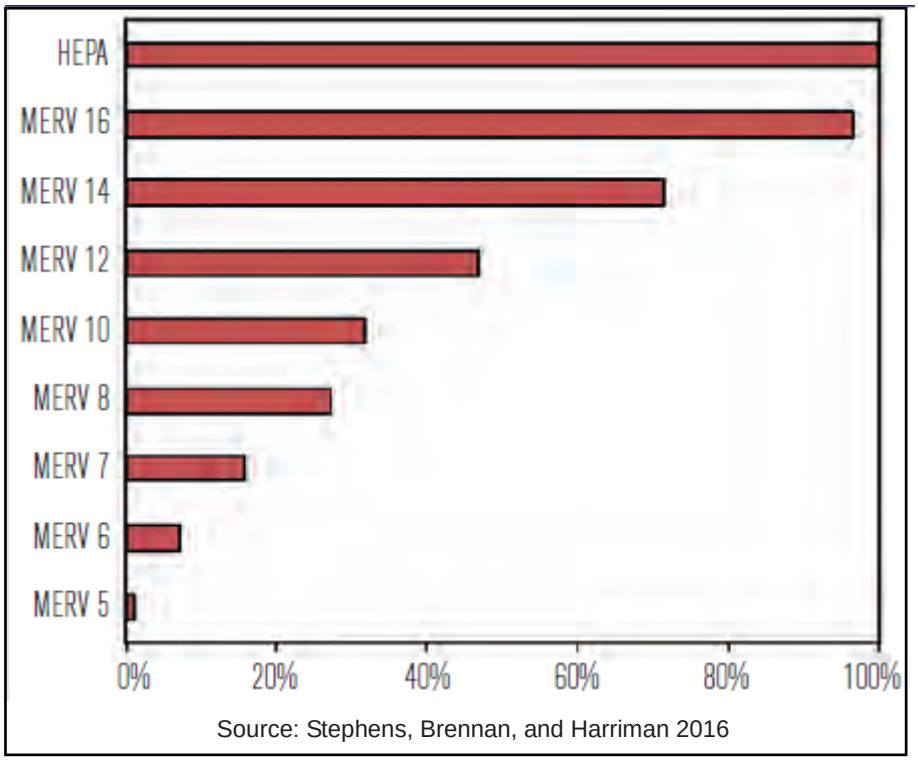
Exhibit 6
Contours of Cancer Risk

However, the vast majority of particles (by number) in most outdoor environments are smaller than 0.3 µm, and much of the $PM_{2.5}$ mass is often in the 0.5 µm to 1 µm size range. Thus, the $PM_{2.5}$ mass removal efficiency of a filter will vary depending on the filter's size-resolved removal efficiency for these particle sizes and the particle size distribution that passes through it. Average values for approximated outdoor-origin $PM_{2.5}$ removal efficiencies for several MERV-rated filters are shown in Exhibit 7 taken from (Stephens, Brennan, and Harriman 2016). Single-pass outdoor-origin $PM_{2.5}$ removal efficiencies range from less than 10% for MERV 6 to over 95% for MERV 16 and HEPA filters.

Consistent with Mitigation Measure 5.2-7 (Mitigation Monitoring Program Number 122 A for the City of Anaheim Housing Opportunities Sites Rezoning Project) air filtration rated at MERV 13 is recommended to be incorporated into the project for those buildings along the western side of the project adjacent to the rail line. .The MERV 13 rated filters were assumed to remove approximately 60 percent of the outside particulate matter levels. Thus, the maximum cancer risk level after application of the air filtration system is:

22.5 in one million x (100% - 60% reduction) = 9.0 in one million

Therefore, after the inclusion of the project air filtration system, the maximum cancer risk levels to all residents of the proposed project' will be less than the SCAQMD's cancer risk significance threshold of 10 in one million. Note further, that as part of the project design, a 14-foot tall sound wall will also be constructed along the western property boundary adjacent to the rail tracks. The presence of a sound wall would also add to the further reduction in pollutant levels within the proposed project.



Source: Stephens, Brennan, and Harriman 2016

Exhibit 7: Estimates of Particle Removal Efficiency for $PM_{2.5}$ of Outdoor Origin for Filters Tested According to ASHRAE Standard 52.2-2012

Based on the foregoing information, the following project design feature is recommended:

> The applicant/developer shall deploy upgraded air filtration systems in all units of each residential building that are adjacent to the rail line along the western boundary of the project (see Exhibit 8) to minimize the potential impacts from diesel particulate matter. Air filtration devices shall be rated MERV13 or higher. Ventilation systems in these units shall meet the following minimal design standards:
>
> - At least one air exchange(s) per hour of fresh outside filtered air;
> - At least four air exchange(s) per hour recirculation; and
> - At least 0.25 air exchange(s) per hour in unfiltered infiltration.

As part of implementing this design feature, an ongoing maintenance plan for the buildings' heating, ventilation, and air conditioning (HVAC) air filtration system shall be required.

Ensure that the CC&R's and other property documents

- Require cleaning, maintenance, and monitoring of the affected buildings for air flow leaks;

- Include assurance that new owners and tenants are provided information on the ventilation system; and

- Include provisions that fees associated with owning or leasing a unit(s) in the building include funds for cleaning, maintenance, monitoring, and replacements of the filters, as needed.

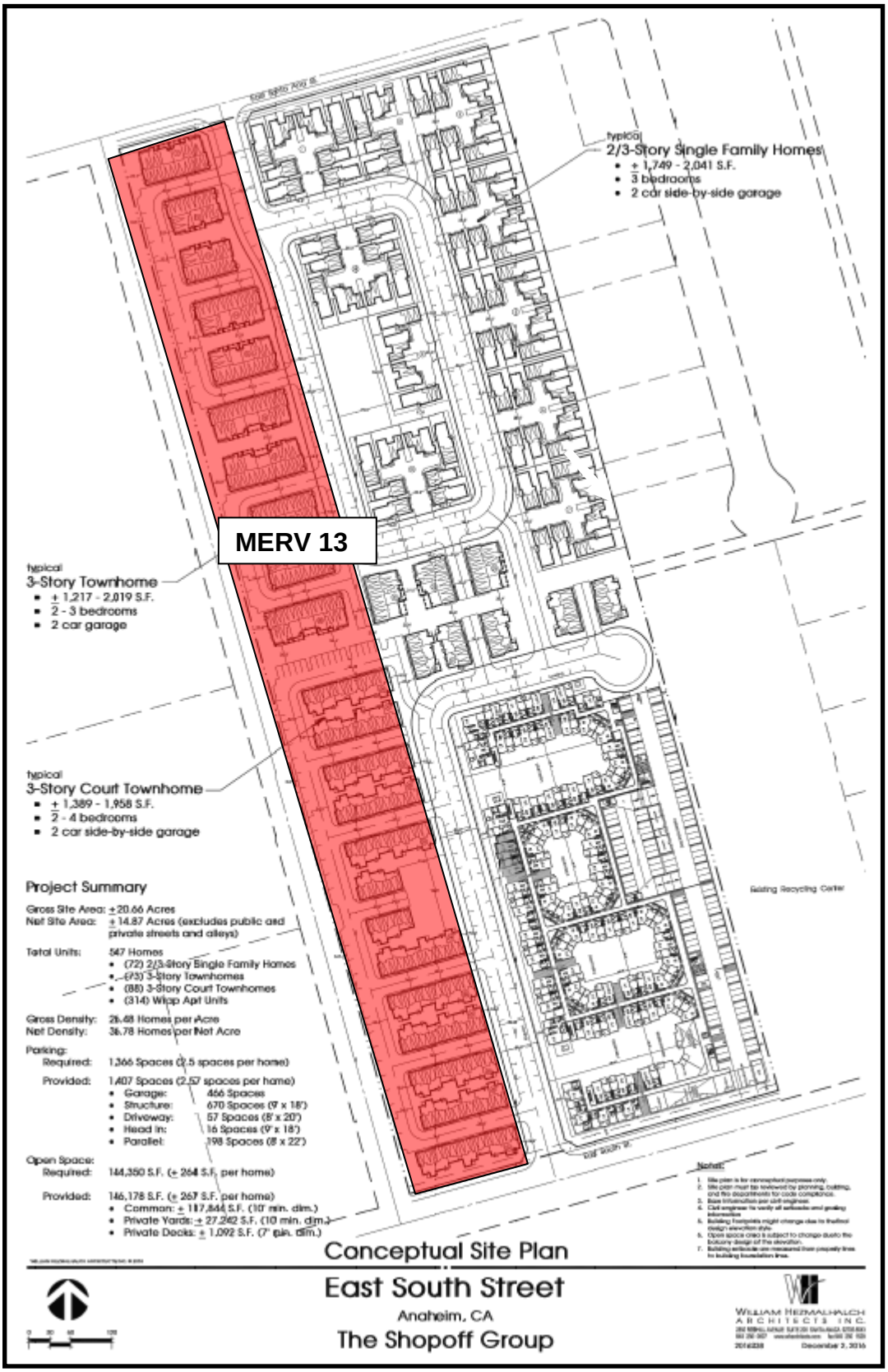


Exhibit 8
Deployment of MERV Air Filtration Mitigation

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Appendix A:
Criteria Pollutant Impact Assessment Output

Appendix A

Criteria Pollutant Impact Assessment

Metrolink and Amtrak Schedule - Weekday

Hour	Metrolink North	Metrolink South	Total ML Metrolink	Amtrak North	Amtrak South	Total-A Amtrak	Grand Total
0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	1	0	1	0	0	0	1
5	1	0	1	0	0	0	1
6	2	0	2	1	1	2	4
7	2	1	3	0	0	0	3
8	1	1	2	1	1	2	4
9	2	0	2	1	1	2	4
10	0	1	1	1	1	2	3
11	0	0	0	1	1	2	2
12	1	0	1	1	0	1	2
13	0	1	1	1	1	2	3
14	0	1	1	0	0	0	1
15	0	1	1	1	1	2	3
16	2	2	4	0	1	1	5
17	1	2	3	1	0	1	4
18	1	1	2	1	1	2	4
19	0	2	2	0	0	0	2
20	0	0	0	1	1	2	2
21	1	0	1	0	1	1	2
22	0	1	1	0	1	1	2
23	0	0	0	1	0	1	1
Total	15	14	29	12	12	24	53

Metrolink and Amtrak Schedule - Weekend

Hour	Metrolink North	Metrolink South	Total ML Metrolink	Amtrak North	Amtrak South	Total-A Amtrak	Grand Total
0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0
6	0	0	0	1	1	2	2
7	0	0	0	0	0	0	0
8	0	0	0	1	2	3	3
9	1	1	2	1	1	2	4
10	0	0	0	1	0	1	1
11	0	1	1	1	1	2	3
12	1	0	1	1	0	1	2
13	0	0	0	1	1	2	2
14	1	1	2	0	0	0	2
15	0	0	0	1	1	2	2
16	0	0	0	0	1	1	1
17	0	1	1	1	1	2	3
18	1	0	1	1	0	1	2
19	0	0	0	0	0	0	0
20	0	0	0	1	1	2	2
21	0	0	0	0	1	1	1
22	0	0	0	0	1	1	1
23	0	0	0	1	0	1	1
	4	4	8	12	12	24	32

Train Schedules as of April 2017

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date *(MM/DD/YYYY)*	B. Reporting Agency	C. Reason for Update *(Select only one)*	D. DOT Crossing Inventory Number
11 / 05 / 2014	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	026646R

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Southern California Regional Rail Authority [SCAX]	CALIFORNIA	ORANGE

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near ANAHEIM	SANTA ANA ST *(Street/Road Name)* | * *(Block Number)*	LOCAL

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☒ Yes ☐ No If Yes, Specify RR BNSF, ATK

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None	☐ None ORANGE	☐ None	| 0168.06 | *(prefix) | (nnnn.nnn) | (suffix)*

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR *(if applicable)*	16. Crossing Owner *(if applicable)*
OR-168.0	FULLERTON	☐ N/A SCAX	☐ N/A SCAX

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access *(if Private Crossing)*	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☐ Freight ☐ Transit ☐ Intercity Passenger ☐ Shared Use Transit ☒ Commuter ☐ Tourist/Other	☐ Less Than One Per Day ☒ Number Per Day 48

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone *(FRA provided)*
☐ Yes ☐ No If Yes, Provide Crossing Number	☐ No ☒ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☐ N/A	*(WGS84 std: nn.nnnnnnn)* 33.8328530	*(WGS84 std: -nnn.nnnnnnn)* -117.9049920	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use *
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use * NOE 7/6/2011
32.A. Narrative *(Railroad Use)* * OTHER SIGNS: 6-W10-9(24*18), 2-W10-9(36*36	32.B. Narrative *(State Use)* * OTHER SIGNS: 6-W10-9(24*18), 2-W10-9(36*36),4

33. Emergency Notification Telephone No. *(posted)*	34. Railroad Contact *(Telephone No.)*	35. State Contact *(Telephone No.)*
		415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)*	1.B. Total Night Thru Trains *(6 PM to 6 AM)*	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
37	15	0		

2. Year of Train Count Data *(YYYY)*	3. Speed of Train at Crossing
	3.A. Maximum Timetable Speed *(mph)* 79 3.B. Typical Speed Range Over Crossing *(mph)* From 50 to 79

4. Type and Count of Tracks
Main 2 Siding ____ Yard ____ Transit ____ Industry ____

5. Train Detection *(Main Track only)*
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
11/05/2014		026646R

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1) (count)*	2.C. YIELD Signs *(R1-2) (count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
2	0		☒ W10-1 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☐ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☐ None	☐ Yes ☐ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count 2 Specify Type _____ Count 2 Specify Type _____ Count _____	☐ Yes ☐ No	

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian _____	☐ 2 Quad ☐ 3 Quad ☐ 4 Quad ☐ Full *(Barrier)* Resistance ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☐ LED ☐ Back Lights Included ☐ Side Lights Included	4

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☐ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☐ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☐ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☐ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____

☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☒ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 200	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☒ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	35 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2008 AADT 006100	18 %	☐ Yes ☒ No Average Number per Day 0	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date *(MM/DD/YYYY)*: 11 / 05 / 2014

B. Reporting Agency: ☒ Railroad ☐ Transit ☐ State ☐ Other

C. Reason for Update *(Select only one)*: ☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction

D. DOT Crossing Inventory Number: 026647X

Part I: Location and Classification Information

1. Primary Operating Railroad: Southern California Regional Rail Authority [SCAX]

2. State: CALIFORNIA

3. County: ORANGE

4. City / Municipality: ☒ In ☐ Near ANAHEIM

5. Street/Road Name & Block Number: SOUTH ST | _____ (Street/Road Name) | * (Block Number)

6. Highway Type & No.: LOCAL

7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☒ No
If Yes, Specify RR: _____, _____, _____, _____

8. Do Other Railroads Operate Over Your Track at Crossing? ☒ Yes ☐ No
If Yes, Specify RR: BNSF, ATK, _____, _____

9. Railroad Division or Region: ☐ None _____

10. Railroad Subdivision or District: ☐ None ORANGE

11. Branch or Line Name: ☐ None _____

12. RR Milepost: _____ | 0168.38 | _____ (prefix) | (nnnn.nnn) | (suffix)

13. Line Segment *: OR-168.3

14. Nearest RR Timetable Station *: ANAHEIM STADIUM

15. Parent RR *(if applicable)*: ☐ N/A SCAX

16. Crossing Owner *(if applicable)*: ☐ N/A SCAX

17. Crossing Type: ☒ Public ☐ Private

18. Crossing Purpose: ☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.

19. Crossing Position: ☒ At Grade ☐ RR Under ☐ RR Over

20. Public Access *(if Private Crossing)*: ☐ Yes ☐ No

21. Type of Train: ☐ Freight ☐ Transit ☐ Intercity Passenger ☐ Shared Use Transit ☒ Commuter ☐ Tourist/Other

22. Average Passenger Train Count Per Day: ☐ Less Than One Per Day ☒ Number Per Day 48

23. Type of Land Use: ☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?: ☐ Yes ☐ No If Yes, Provide Crossing Number _____

25. Quiet Zone *(FRA provided)*: ☐ No ☒ 24 Hr ☐ Partial ☐ Chicago Excused Date Established _____

26. HSR Corridor ID: _____ ☐ N/A

27. Latitude in decimal degrees *(WGS84 std: nn.nnnnnnn)*: 33.8284520

28. Longitude in decimal degrees *(WGS84 std: -nnn.nnnnnnn)*: -117.9035510

29. Lat/Long Source: ☒ Actual ☐ Estimated

30.A. Railroad Use *:

31.A. State Use *:

30.B. Railroad Use *:

31.B. State Use *:

30.C. Railroad Use *:

31.C. State Use *:

30.D. Railroad Use *:

31.D. State Use *: NOE 7/6/2011

32.A. Narrative *(Railroad Use)* *: OTHER SIGNS: 6-W10-9(24*18), 2-W10-9(36*36

32.B. Narrative *(State Use)* *: OTHER SIGNS: 6-W10-9(24*18), 2-W10-9(36*36),4

33. Emergency Notification Telephone No. *(posted)*:

34. Railroad Contact *(Telephone No.)*:

35. State Contact *(Telephone No.)*: 415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)*: 37

1.B. Total Night Thru Trains *(6 PM to 6 AM)*: 15

1.C. Total Switching Trains: 0

1.D. Total Transit Trains:

1.E. Check if Less Than One Movement Per Day ☐ How many trains per week? _____

2. Year of Train Count Data *(YYYY)*:

3. Speed of Train at Crossing
3.A. Maximum Timetable Speed *(mph)*: 79
3.B. Typical Speed Range Over Crossing *(mph)* From 50 to 79

4. Type and Count of Tracks
Main 2 Siding _____ Yard _____ Transit _____ Industry _____

5. Train Detection *(Main Track only)*
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled? ☒ Yes ☐ No

7.A. Event Recorder ☐ Yes ☐ No

7.B. Remote Health Monitoring ☐ Yes ☐ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
11/05/2014		026647X

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1) (count)*	2.C. YIELD Signs *(R1-2) (count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
2	0		☒ W10-1 ____ ☐ W10-3 ____ ☐ W10-11 ____ ☐ W10-2 ____ ☐ W10-4 ____ ☐ W10-12 ____

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☐ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☒ One Approach ☐ None	☐ Yes ☐ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type ____ Count 2 Specify Type ____ Count 2 Specify Type ____ Count ____	☐ Yes ☐ No	

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 1	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian ____	☐ 2 Quad ☐ 3 Quad ☐ 4 Quad ☐ Full *(Barrier)* Resistance ☐ Median Gates	Over Traffic Lane 1 ☐ Incandescent Not Over Traffic Lane 1 ☐ LED	☐ Incandescent ☐ LED ☐ Back Lights Included ☐ Side Lights Included	6

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
____/____ ☐ Not Required	☐ Yes Installed on *(MM/YYYY)* ____/____ ☐ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None	Count 0 Specify type ____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☐ No Storage Distance * ____ Stop Line Distance * ____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☐ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* ____/____ Width * ____ Length * ____
☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☒ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* ____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 500	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☒ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	35 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2008 AADT 005200	18 %	☐ Yes ☒ No Average Number per Day 0	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by ____ Organization ____ Phone ____ Date ____

Locomotive Operational Profile

Average Load Factor for Passenger Locomotives

Throttle Notch	% Time in Notch	% of Full Power in Notch	% Full Power x % Time
Idle	47.4%	0.4%	0.002
Dynamic Brake	6.2%	2.1%	0.001
1	7.0%	5.0%	0.004
2	5.1%	11.4%	0.006
3	5.7%	23.5%	0.013
4	4.7%	34.3%	0.016
5	4.0%	48.1%	0.019
6	2.9%	64.3%	0.019
7	1.4%	86.6%	0.012
8	15.6%	102.5%	0.160
Composite			**0.252**

Average Load Factor for Line Haul Locomotives

Throttle Notch	% Time in Notch	% of Full Power in Notch	% Full Power x % Time
Idle	38.0%	0.4%	0.002
Dynamic Brake	12.5%	2.1%	0.003
1	6.5%	5.0%	0.003
2	6.5%	11.4%	0.007
3	5.2%	23.5%	0.012
4	4.7%	34.3%	0.016
5	3.8%	48.1%	0.018
6	3.9%	64.3%	0.025
7	3.0%	86.6%	0.026
8	16.2%	102.5%	0.166
Composite			**0.279**

Table 4-6

EPA Estimated Duty-Cycles for Current In-Use Locomotive (Percent Time in Notch)

Throttle Notch	Line-haul	Passenger	Switch
Idle	38.0	47.4	59.8
Dynamic Brake	12.5	6.2	0.0
1	6.5	7.0	12.4
2	6.5	5.1	12.3
3	5.2	5.7	5.8
4	4.4	4.7	3.6
5	3.8	4.0	3.6
6	3.9	2.9	1.5
7	3.0	1.4	0.2
8	16.2	15.6	0.8

https://yosemite.epa.gov/ee/epa/ria.nsf/vwAN/TS0000510E-01.pdf/$file/TS0000510E-01.pdf

Table 6.8: Estimated Average Load Factor

Notch	% of Full Power in Notch	% of Operating Time in Notch	% Full Power x % Time
DB	2.1%	12.5%	0.003
Idle	0.4%	38.0%	0.002
1	5.0%	6.5%	0.003
2	11.4%	6.5%	0.007
3	23.5%	5.2%	0.012
4	34.3%	4.4%	0.015
5	48.1%	3.8%	0.018
6	64.3%	3.9%	0.025
7	86.6%	3.0%	0.026
8	102.5%	16.2%	0.166
Average line haul locomotive load factor:			**0.28**

https://www.portoflosangeles.org/pdf/2013_Air_Emissions_Inventory_Full_Report.pdf

Emission Parameters for Metrolink Locomotives

Assumption: total fleet consists of 52 locomotives
Assumption: 20 locomotives with Tier 4 are in service by 2018
the remaining 32 locomotives are Tier 2
Assumption: by 2023 all locomotives are Tier 4

Project Buildout Year: **2019**

USEPA Rail Locomotive Emission Factors (g/hp-hr)

Tier	NOx	CO	PM10	PM2.5	DPM	HC
Tier 2	5.5	1.5	0.1	0.1	0.1	0.3
Tier 4	1.3	1.5	0.03	0.03	0.03	0.14

Source: Dieselnet 2017, Table 3
Website: https://dieselnet.com/standards/us/loco.php

Total Locomotive Fleet 52

Fleet Tier Mix, Composite Emission Factor, and Horsepower

Horsepower	Tier	Horsepower	Model
	Tier 2	3200	EMD F40PH
	Tier 4	4700	EMD F-125

Fleet Mix				Composite Emission Factor (g/hp-hr)				Composite Horsepower
Year	Tier 2	Tier 4	Total	PM10,PM2.5	NOx	CO	HC	
2018	32	20	52					3777
2019	26	26	52	**0.065**	**3.400**	**1.5**	**0.220**	3950
2020	20	32	52	0.057				4123
2021	14	38	52	0.049				4296
2022	8	44	52	0.041				4469
2023	0	52	52	0.030				4700
2024	0	52	52	0.030				4700
2025	0	52	52	0.030				4700
2026 to 2088	0	52	52	0.030				4700
			Average 2019 to 2088	**0.031**				**Average 2019 to 2088** **4672**

Emission Parameters for Amtrak Locomotives

Assumption: total fleet consists of 20 locomotives for Pacific Surfliner
Assumption: 20 locomotives with Tier 4 are in service by 2020

Assumption: Project Operational Year: 2019

USEPA Rail Locomotive Emission Factors (g/hp-hr)

Tier	NOx	CO	PM10	PM2.5	DPM	HC
Tier 0	8	5	0.22	0.22	0.22	1
Tier 4	1.3	1.5	0.03	0.03	0.03	0.14

Source: Dieselnet 2017, Table 3
Website: https://dieselnet.com/standards/us/loco.php

Total Locomotive Fleet 20

Fleet Tier Mix, Composite Emission Factor, and Horsepower

Horsepower	Tier	Horsepower	Model
	Tier 0+	3200	EMD F40PH
	Tier 4	4400	Siemens Charger

Fleet Mix

Year	Tier 0+	Tier 4	Total	Composite Emission Factor (g/hp-hr) PM10,PM2.5	NOx	CO	HC	Composite Horsepower
2018	20	0	20					3200
2019	10	10	20	**0.125**	**4.650**	**3.3**	**0.570**	3800
2020	0	20	20	0.030				4400
2021	0	20	20	0.030				4400
2022	0	20	20	0.030				4400
2023	0	20	20	0.030				4400
2024	0	20	20	0.030				4400
2025	0	20	20	0.030				4400
2026 to 2088	0	20	20	0.030				4400
			Average 2019-2088	**0.031**			**Average 2019-2088**	**4391**

Emission Parameters for BNSF' Locomotives

USEPA Rail Locomotive Emission Factors (g/hp-hr)

Tier	NOx	CO	PM10	PM2.5	DPM	HC
Tier 2	5.5	1.5	0.1	0.1	0.1	0.3
Tier 4	1.3	1.5	0.03	0.03	0.03	0.14

Source: Dieselnet 2017, Table 3
Website: https://dieselnet.com/standards/us/loco.php

USEPA Emission Standards for Locomotives
EPA-420-F-09-025 Website: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100500B.pdf

Emission Factors (g/gal)

	PM10,PM2.5 (g/gal)	PM10.PM2.5 (g/hp-hr)	NOx (g/gal)	NOx (g/hp-hr)	CO (g/gal)	CO (g/hp-hr)	HC (g/gal)	HC (g/hp-hr)
2019	2.5	0.1202	103	4.952	31	1.4904	3.900	0.188
2020	2.3							
2021	2.2							
2022	2.0							
2023	1.9							
2024	1.7							
2025	1.6							
2026	1.5							
2027	1.4							
2028	1.3							
2029	1.1							
2030	1.0							
2031	1.0							
2032	0.9							
2033	0.8							
2034	0.7							
2035	0.7							
2036	0.6							
2037	0.6							
2038	0.5							
2039	0.5							
2040 ro 2088	0.4							
Average (g/gal)	0.6629							

Conversion from Grams/gallon to grams/BHP-hr: 20.8

Average (g/hp-hr) 0.0319

Amtrak + Metrolink + BNSF Peak Hour CO Emissions 2019

Schedules	**Metrolink**	**Amtrak**	**BNSF**	**Total**	
Number of Weekday Peak Hour Diesel Trains (In/Outbound)	4	1	1	6	Note 1and Note 2
Engine Horsepower	3950	3800	4400		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.0144	0.0144	0.0144		
Total Run Time Along Rail Line Segment (hours/peak hour)	0.0577	0.0144	0.0144	0.0866	
CO Emission Factor (g/hp-hr)	1.500	3.250	1.490		Note 7
Total Emissions along Rail Line Segment (grams/peak hour)	85.54	44.57	47.34	177.45	
Total Emissions along Rail Line Segment (pounds/peak hour)	0.188	0.098	0.104	0.391	
Average Emissions along Rail Line Segment (grams/sec)	0.023761	0.012382	0.013149	0.049292	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF Peak Hour NOx Emissions 2019

Schedules	**Metrolink**	**Amtrak**	**BNSF**	**Total**	
Number of Weekday Peak Hour Diesel Trains (In/Outbound)	4	1	1	6	Note 1and Note 2
Engine Horsepower	3950	3800	4400		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.0144	0.0144	0.0144		
Total Run Time Along Rail Line Segment (hours/peak hour)	0.0577	0.0144	0.0144	0.0866	
NOx Emission Factor (g/hp-hr)	3.400	4.650	4.952		Note 7
Total Emissions along Rail Line Segment (grams/peak hour)	193.9	63.8	157.3	414.9	
total Emissions along Rail Line Segment (pounds/peak hour)	0.427	0.140	0.346	0.914	
Average Emissions along Rail Line Segment (grams/sec)	0.0539	0.0177	0.0437	0.1153	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF Annual NOx Emissions

Schedules	**Metrolink**	**Amtrak**	**BNSF**	**Total**	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	4672	4391	4400		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
NOx Emission Factor (g/hp-hr)	3.400	4.650	4.952		Note 7
Total Emissions along Rail Line Segment (grams/year)	479982.0	643854.1	57249.8	1181085.9	
Total Emissions along Rail Line Segment (tons/year)	0.52861	0.70909	0.06305	1.30076	
Average Emissions along Rail Line Segment (grams/sec)	1.522E-02	2.042E-02	1.815E-03	3.564E-02	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF PM10/DPM Emissions

Schedules	**Metrolink**	**Amtrak**	**BNSF**	**Total**	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	4672	4391	4400		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.28		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
DPM Emission Factor (g/hp-hr)	0.031	0.031	0.032		Note 7
Total Emissions along Rail Line Segment (grams/year)	4419.7	4341.8	412.6	9174.2	
Total Emissions along Rail Line Segment (tons/year)	0.00487	0.00478	0.00045	0.01010	
Average Emissions along Rail Line Segment (grams/sec)	1.401E-04	1.377E-04	1.308E-05	2.778E-04	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

SCAQMD Facility Information Detail Permitted Stationary Source Database

SCAQMD Permit Facility ID#: 2825 **MCP Foods Inc**
424-425 South Atchison Street
Anaheim, CA 92805

Emission Assumption: the facility operates on a 24/7 basis

Emission Inventory - Criteria Pollutants

	Emissions (tons/year)					Max	Hourly Average	Hourly Average
Pollutant	**2012**	**2013**	**2014**	**2015**	**2016**	**(tons/year)**	**(lb/hr)**	**(g/sec)**
CO	3.53	3.20	2.57	2.53	2.23	3.53	0.81	0.102
NOx	2.27	2.01	1.65	1.72	1.58	2.27	0.52	0.065
TOG	21.43	34.54	17.70	17.58	15.69	34.54	7.89	0.994
SOx	0.03	0.03	0.02	0.02	0.02	0.03	0.01	0.001
TSP	5.59	6.07	4.90	5.18	4.96	6.07	1.39	0.175
PM10	3.90	4.20	2.60	2.70	2.63	4.20	0.96	0.121
PM2.5	2.40	2.60	1.00	1.00	0.94	2.60	0.59	0.075

Note 1: PM10 and PM2.5 derived from ARB CEIDARS database from PM

SOUTH COAST AQMD

Facility INformation Detail (FIND)

Emissions

Facility ID	2825
Company Name	MCP FOODS INC
Address	424-25 S ATCHISON ST
	ANAHEIM, CA 92805

Select AER Year: 2012

Criteria Pollutants (Tons per Year):

Pollutant ID	Pollutant Description	Annual Emissions
CO	Carbon Monoxide	3.534
NOX	Nitrogen Oxides	2.268
ROG	Reactive Organic Gases	21.432
SOX	Sulfur Oxides	0.030
TSP	Total Suspended Particulates	5.589

Toxic Pollutants (Pounds per Year):

Pollutant ID	Pollutant Description	Annual Emissions
7664417	Ammonia	322.518
71432	Benzene	0.647
50000	Formaldehyde	1.373
91203	Naphthalene	0.030
1151	PAHs, total, with components not reported	0.010

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

Facility INformation Detail (FIND)

Emissions

Facility ID	2825
Company Name	MCP FOODS INC
Address	424-25 S ATCHISON ST
	ANAHEIM, CA 92805

Select AER Year: 2013

Criteria Pollutants (Tons per Year):

Pollutant ID	Pollutant Description	Annual Emissions
CO	Carbon Monoxide	3.201
NOX	Nitrogen Oxides	2.012
ROG	Reactive Organic Gases	34.539
SOX	Sulfur Oxides	0.027
TSP	Total Suspended Particulates	6.070

Toxic Pollutants (Pounds per Year):

Pollutant ID	Pollutant Description	Annual Emissions
7664417	Ammonia	290.854
71432	Benzene	0.582
50000	Formaldehyde	1.236
91203	Naphthalene	0.027
1151	PAHs, total, with components not reported	0.009

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Emissions

Facility ID	2825
Company Name	MCP FOODS INC
Address	424-25 S ATCHISON ST
	ANAHEIM, CA 92805

Select AER Year: 2014

Criteria Pollutants (Tons per Year):

Pollutant ID	Pollutant Description	Annual Emissions
CO	Carbon Monoxide	2.566
NOX	Nitrogen Oxides	1.645
PM	Particulate Matter	4.902
SOX	Sulfur Oxides	0.021
VOC	Volatile Organic Compounds	17.703

Toxic Pollutants (Pounds per Year):

Pollutant ID	Pollutant Description	Annual Emissions
95636	1,2,4TRIMEBENZE	0.013
106990	1,3-Butadiene	0.011
75070	Acetaldehyde	45.667
107028	Acrolein	0.198
7664417	Ammonia	232.669
7440382	Arsenic	0.000
71432	Benzene	0.507
7440439	Cadmium	0.000
7782505	Chlorine	0.004
18540299	Chromium (VI)	0.000
7440508	Copper	0.000
100414	ETHYL BENZENE	0.572
50000	Formaldehyde	1.042
110543	HEXANE	0.384
7647010	Hydrochloric acid	0.001
7439921	Lead (inorganic)	0.000
108383	M-XYLENE	0.049
1634044	ME T-BUTYLETHER	0.020
7439965	Manganese	0.000
7439976	Mercury	0.000
67561	Methanol	0.007
78933	Methyl ethyl ketone	0.000
91203	Naphthalene	0.023
7440020	Nickel	0.000
1151	PAHs, total, with components not reported	0.007
7782492	Selenium	0.000
100425	Styrene	0.001
108883	Toluene	2.211
1330207	Xylenes	1.587
95476	o-Xylene	0.017

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

Facility INformation Detail (FIND)

Emissions

Facility ID	2825
Company Name	MCP FOODS INC
Address	424-25 S ATCHISON ST
	ANAHEIM, CA 92805

Select AER Year: 2015

Criteria Pollutants (Tons per Year):

Pollutant ID	Pollutant Description	Annual Emissions
CO	Carbon Monoxide	2.525
NOX	Nitrogen Oxides	1.716
PM	Particulate Matter	5.184
SOX	Sulfur Oxides	0.021
VOC	Volatile Organic Compounds	17.583

Toxic Pollutants (Pounds per Year):

Pollutant ID	Pollutant Description	Annual Emissions
106990	1,3-Butadiene	0.014
7664417	Ammonia	231.397
7440382	Arsenic	0.000
71432	Benzene	0.517
7440439	Cadmium	0.000
18540299	Chromium (VI)	0.000
50000	Formaldehyde	1.055
7439921	Lead (inorganic)	0.000
91203	Naphthalene	0.023
7440020	Nickel	0.000
1151	PAHs, total, with components not reported	0.007

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

Facility INformation Detail (FIND)

Emissions

Facility ID	2825
Company Name	MCP FOODS INC
Address	424-25 S ATCHISON ST
	ANAHEIM, CA 92805

Select AER Year: 2016

Criteria Pollutants (Tons per Year):

Pollutant ID	Pollutant Description	Annual Emissions
CO	Carbon Monoxide	2.230
NOX	Nitrogen Oxides	1.582
PM	Particulate Matter	4.961
SOX	Sulfur Oxides	0.019
VOC	Volatile Organic Compounds	15.689

Toxic Pollutants (Pounds per Year):

Pollutant ID	Pollutant Description	Annual Emissions
106990	1,3-Butadiene	0.006
7664417	Ammonia	207.391
7440382	Arsenic	0.000
71432	Benzene	0.438
7440439	Cadmium	0.000
18540299	Chromium (VI)	0.000
50000	Formaldehyde	0.927
7439921	Lead (inorganic)	0.000
91203	Naphthalene	0.020
7440020	Nickel	0.000
1151	PAHs, total, with components not reported	0.006

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - PEAK HOUR CO *** 15:04:25
PAGE 1

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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 144 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 8000000.0 ; 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:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: CO

**Model Calculates 2 Short Term Average(s) of: 1-HR 8-HR

**This Run Includes: 144 Source(s); 1 Source Group(s); and 209 Receptor(s)

with: 1 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 143 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
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) = 50.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.8 MB of RAM.

**Detailed Error/Message File: RAIL_SS_CO.ERR
**File for Summary of Results: RAIL_SS_CO.SUM

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
2825	0	0.10200E+00	416152.8	3743995.7	55.8	12.19	-0.00	0.01	0.01	YES	YES	NO	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000001	0	0.34266E-03	416203.0	3744218.8	50.3	3.89	3.78	1.81	YES	
L0000002	0	0.34266E-03	416205.1	3744210.9	50.0	3.89	3.78	1.81	YES	
L0000003	0	0.34266E-03	416207.2	3744203.1	49.8	3.89	3.78	1.81	YES	
L0000004	0	0.34266E-03	416209.3	3744195.2	49.5	3.89	3.78	1.81	YES	
L0000005	0	0.34266E-03	416211.4	3744187.4	49.4	3.89	3.78	1.81	YES	
L0000006	0	0.34266E-03	416213.5	3744179.5	49.2	3.89	3.78	1.81	YES	
L0000007	0	0.34266E-03	416215.6	3744171.6	48.9	3.89	3.78	1.81	YES	
L0000008	0	0.34266E-03	416217.8	3744163.8	48.6	3.89	3.78	1.81	YES	
L0000009	0	0.34266E-03	416219.9	3744155.9	48.2	3.89	3.78	1.81	YES	
L0000010	0	0.34266E-03	416222.0	3744148.1	48.1	3.89	3.78	1.81	YES	
L0000011	0	0.34266E-03	416224.1	3744140.2	48.3	3.89	3.78	1.81	YES	
L0000012	0	0.34266E-03	416226.2	3744132.4	48.5	3.89	3.78	1.81	YES	
L0000013	0	0.34266E-03	416228.3	3744124.5	48.6	3.89	3.78	1.81	YES	
L0000014	0	0.34266E-03	416230.4	3744116.7	48.8	3.89	3.78	1.81	YES	
L0000015	0	0.34266E-03	416232.5	3744108.8	49.0	3.89	3.78	1.81	YES	
L0000016	0	0.34266E-03	416234.6	3744101.0	49.1	3.89	3.78	1.81	YES	
L0000017	0	0.34266E-03	416236.8	3744093.1	49.3	3.89	3.78	1.81	YES	
L0000018	0	0.34266E-03	416238.9	3744085.2	49.5	3.89	3.78	1.81	YES	
L0000019	0	0.34266E-03	416241.0	3744077.4	49.5	3.89	3.78	1.81	YES	
L0000020	0	0.34266E-03	416243.1	3744069.5	49.5	3.89	3.78	1.81	YES	
L0000021	0	0.34266E-03	416245.2	3744061.7	49.5	3.89	3.78	1.81	YES	
L0000022	0	0.34266E-03	416247.3	3744053.8	49.5	3.89	3.78	1.81	YES	
L0000023	0	0.34266E-03	416249.4	3744046.0	49.5	3.89	3.78	1.81	YES	
L0000024	0	0.34266E-03	416251.5	3744038.1	49.7	3.89	3.78	1.81	YES	
L0000025	0	0.34266E-03	416253.6	3744030.3	49.9	3.89	3.78	1.81	YES	
L0000026	0	0.34266E-03	416255.7	3744022.4	50.1	3.89	3.78	1.81	YES	
L0000027	0	0.34266E-03	416257.9	3744014.5	50.2	3.89	3.78	1.81	YES	
L0000028	0	0.34266E-03	416260.0	3744006.7	50.4	3.89	3.78	1.81	YES	
L0000029	0	0.34266E-03	416262.1	3743998.8	50.6	3.89	3.78	1.81	YES	
L0000030	0	0.34266E-03	416264.2	3743991.0	50.7	3.89	3.78	1.81	YES	
L0000031	0	0.34266E-03	416266.3	3743983.1	50.8	3.89	3.78	1.81	YES	
L0000032	0	0.34266E-03	416268.4	3743975.3	50.9	3.89	3.78	1.81	YES	
L0000033	0	0.34266E-03	416270.5	3743967.4	50.8	3.89	3.78	1.81	YES	
L0000034	0	0.34266E-03	416272.6	3743959.6	50.3	3.89	3.78	1.81	YES	
L0000035	0	0.34266E-03	416274.7	3743951.7	49.8	3.89	3.78	1.81	YES	
L0000036	0	0.34266E-03	416276.8	3743943.8	49.3	3.89	3.78	1.81	YES	
L0000037	0	0.34266E-03	416279.0	3743936.0	48.7	3.89	3.78	1.81	YES	
L0000038	0	0.34266E-03	416281.1	3743928.1	48.2	3.89	3.78	1.81	YES	
L0000039	0	0.34266E-03	416283.2	3743920.3	47.8	3.89	3.78	1.81	YES	
L0000040	0	0.34266E-03	416285.3	3743912.4	47.3	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000041	0	0.34266E-03	416287.4	3743904.6	47.1	3.89	3.78	1.81	YES	
L0000042	0	0.34266E-03	416289.5	3743896.7	46.9	3.89	3.78	1.81	YES	
L0000043	0	0.34266E-03	416291.6	3743888.9	46.7	3.89	3.78	1.81	YES	
L0000044	0	0.34266E-03	416293.7	3743881.0	46.5	3.89	3.78	1.81	YES	
L0000045	0	0.34266E-03	416295.8	3743873.2	46.9	3.89	3.78	1.81	YES	
L0000046	0	0.34266E-03	416298.0	3743865.3	47.3	3.89	3.78	1.81	YES	
L0000047	0	0.34266E-03	416300.1	3743857.4	47.7	3.89	3.78	1.81	YES	
L0000048	0	0.34266E-03	416302.2	3743849.6	48.0	3.89	3.78	1.81	YES	
L0000049	0	0.34266E-03	416304.3	3743841.7	48.3	3.89	3.78	1.81	YES	
L0000050	0	0.34266E-03	416306.4	3743833.9	48.5	3.89	3.78	1.81	YES	
L0000051	0	0.34266E-03	416308.5	3743826.0	48.8	3.89	3.78	1.81	YES	
L0000052	0	0.34266E-03	416310.6	3743818.2	49.1	3.89	3.78	1.81	YES	
L0000053	0	0.34266E-03	416312.7	3743810.3	49.5	3.89	3.78	1.81	YES	
L0000054	0	0.34266E-03	416314.8	3743802.5	49.9	3.89	3.78	1.81	YES	
L0000055	0	0.34266E-03	416316.9	3743794.6	50.3	3.89	3.78	1.81	YES	
L0000056	0	0.34266E-03	416319.1	3743786.7	50.6	3.89	3.78	1.81	YES	
L0000057	0	0.34266E-03	416321.2	3743778.9	50.7	3.89	3.78	1.81	YES	
L0000058	0	0.34266E-03	416323.3	3743771.0	50.9	3.89	3.78	1.81	YES	
L0000059	0	0.34266E-03	416325.4	3743763.2	51.0	3.89	3.78	1.81	YES	
L0000060	0	0.34266E-03	416327.5	3743755.3	51.1	3.89	3.78	1.81	YES	
L0000061	0	0.34266E-03	416329.6	3743747.5	51.0	3.89	3.78	1.81	YES	
L0000062	0	0.34266E-03	416331.7	3743739.6	51.0	3.89	3.78	1.81	YES	
L0000063	0	0.34266E-03	416333.8	3743731.8	50.8	3.89	3.78	1.81	YES	
L0000064	0	0.34266E-03	416335.9	3743723.9	50.8	3.89	3.78	1.81	YES	
L0000065	0	0.34266E-03	416338.0	3743716.1	50.9	3.89	3.78	1.81	YES	
L0000066	0	0.34266E-03	416340.2	3743708.2	51.0	3.89	3.78	1.81	YES	
L0000067	0	0.34266E-03	416342.3	3743700.3	51.1	3.89	3.78	1.81	YES	
L0000068	0	0.34266E-03	416344.4	3743692.5	51.0	3.89	3.78	1.81	YES	
L0000069	0	0.34266E-03	416346.5	3743684.6	50.9	3.89	3.78	1.81	YES	
L0000070	0	0.34266E-03	416348.6	3743676.8	50.8	3.89	3.78	1.81	YES	
L0000071	0	0.34266E-03	416350.7	3743668.9	50.7	3.89	3.78	1.81	YES	
L0000072	0	0.34266E-03	416352.8	3743661.1	50.6	3.89	3.78	1.81	YES	
L0000073	0	0.34266E-03	416354.9	3743653.2	50.4	3.89	3.78	1.81	YES	
L0000074	0	0.34266E-03	416357.0	3743645.4	50.3	3.89	3.78	1.81	YES	
L0000075	0	0.34266E-03	416359.2	3743637.5	50.3	3.89	3.78	1.81	YES	
L0000076	0	0.34266E-03	416361.3	3743629.6	50.5	3.89	3.78	1.81	YES	
L0000077	0	0.34266E-03	416363.4	3743621.8	50.7	3.89	3.78	1.81	YES	
L0000078	0	0.34266E-03	416365.5	3743613.9	50.8	3.89	3.78	1.81	YES	
L0000079	0	0.34266E-03	416367.6	3743606.1	50.9	3.89	3.78	1.81	YES	
L0000080	0	0.34266E-03	416369.7	3743598.2	51.0	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000081	0	0.34266E-03	416371.8	3743590.4	51.2	3.89	3.78	1.81	YES	
L0000082	0	0.34266E-03	416373.9	3743582.5	51.4	3.89	3.78	1.81	YES	
L0000083	0	0.34266E-03	416376.0	3743574.7	51.9	3.89	3.78	1.81	YES	
L0000084	0	0.34266E-03	416378.1	3743566.8	52.5	3.89	3.78	1.81	YES	
L0000085	0	0.34266E-03	416380.3	3743559.0	52.9	3.89	3.78	1.81	YES	
L0000086	0	0.34266E-03	416382.4	3743551.1	53.4	3.89	3.78	1.81	YES	
L0000087	0	0.34266E-03	416384.5	3743543.2	53.1	3.89	3.78	1.81	YES	

L0000088	0	0.34266E-03	416386.6	3743535.4	52.8	3.89	3.78	1.81	YES
L0000089	0	0.34266E-03	416388.7	3743527.5	52.4	3.89	3.78	1.81	YES
L0000090	0	0.34266E-03	416390.8	3743519.7	52.0	3.89	3.78	1.81	YES
L0000091	0	0.34266E-03	416392.9	3743511.8	51.7	3.89	3.78	1.81	YES
L0000092	0	0.34266E-03	416395.0	3743504.0	51.5	3.89	3.78	1.81	YES
L0000093	0	0.34266E-03	416397.1	3743496.1	51.2	3.89	3.78	1.81	YES
L0000094	0	0.34266E-03	416399.2	3743488.3	51.0	3.89	3.78	1.81	YES
L0000095	0	0.34266E-03	416401.4	3743480.4	51.1	3.89	3.78	1.81	YES
L0000096	0	0.34266E-03	416403.5	3743472.5	51.2	3.89	3.78	1.81	YES
L0000097	0	0.34266E-03	416405.6	3743464.7	51.2	3.89	3.78	1.81	YES
L0000098	0	0.34266E-03	416407.7	3743456.8	51.1	3.89	3.78	1.81	YES
L0000099	0	0.34266E-03	416409.8	3743449.0	50.8	3.89	3.78	1.81	YES
L0000100	0	0.34266E-03	416411.9	3743441.1	50.5	3.89	3.78	1.81	YES
L0000101	0	0.34266E-03	416414.0	3743433.3	50.2	3.89	3.78	1.81	YES
L0000102	0	0.34266E-03	416416.1	3743425.4	49.9	3.89	3.78	1.81	YES
L0000103	0	0.34266E-03	416418.2	3743417.6	49.8	3.89	3.78	1.81	YES
L0000104	0	0.34266E-03	416420.3	3743409.7	49.8	3.89	3.78	1.81	YES
L0000105	0	0.34266E-03	416422.5	3743401.9	49.8	3.89	3.78	1.81	YES
L0000106	0	0.34266E-03	416424.6	3743394.0	49.7	3.89	3.78	1.81	YES
L0000107	0	0.34266E-03	416426.7	3743386.1	49.5	3.89	3.78	1.81	YES
L0000108	0	0.34266E-03	416428.8	3743378.3	49.3	3.89	3.78	1.81	YES
L0000109	0	0.34266E-03	416430.9	3743370.4	49.0	3.89	3.78	1.81	YES
L0000110	0	0.34266E-03	416433.0	3743362.6	48.8	3.89	3.78	1.81	YES
L0000111	0	0.34266E-03	416435.1	3743354.7	48.5	3.89	3.78	1.81	YES
L0000112	0	0.34266E-03	416437.2	3743346.9	48.2	3.89	3.78	1.81	YES
L0000113	0	0.34266E-03	416439.3	3743339.0	48.0	3.89	3.78	1.81	YES
L0000114	0	0.34266E-03	416441.5	3743331.2	48.2	3.89	3.78	1.81	YES
L0000115	0	0.34266E-03	416443.6	3743323.3	48.3	3.89	3.78	1.81	YES
L0000116	0	0.34266E-03	416445.7	3743315.4	48.4	3.89	3.78	1.81	YES
L0000117	0	0.34266E-03	416447.8	3743307.6	48.5	3.89	3.78	1.81	YES
L0000118	0	0.34266E-03	416449.9	3743299.7	48.7	3.89	3.78	1.81	YES
L0000119	0	0.34266E-03	416452.0	3743291.9	48.9	3.89	3.78	1.81	YES
L0000120	0	0.34266E-03	416454.1	3743284.0	49.1	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000121	0	0.34266E-03	416456.2	3743276.2	49.1	3.89	3.78	1.81	YES	
L0000122	0	0.34266E-03	416458.3	3743268.3	49.1	3.89	3.78	1.81	YES	
L0000123	0	0.34266E-03	416460.4	3743260.5	49.0	3.89	3.78	1.81	YES	
L0000124	0	0.34266E-03	416462.6	3743252.6	49.0	3.89	3.78	1.81	YES	
L0000125	0	0.34266E-03	416464.7	3743244.8	49.1	3.89	3.78	1.81	YES	
L0000126	0	0.34266E-03	416466.8	3743236.9	49.3	3.89	3.78	1.81	YES	
L0000127	0	0.34266E-03	416468.9	3743229.0	49.5	3.89	3.78	1.81	YES	
L0000128	0	0.34266E-03	416471.0	3743221.2	49.6	3.89	3.78	1.81	YES	
L0000129	0	0.34266E-03	416473.1	3743213.3	49.8	3.89	3.78	1.81	YES	
L0000130	0	0.34266E-03	416475.2	3743205.5	50.0	3.89	3.78	1.81	YES	
L0000131	0	0.34266E-03	416477.3	3743197.6	50.2	3.89	3.78	1.81	YES	
L0000132	0	0.34266E-03	416479.4	3743189.8	50.4	3.89	3.78	1.81	YES	
L0000133	0	0.34266E-03	416481.5	3743181.9	50.5	3.89	3.78	1.81	YES	
L0000134	0	0.34266E-03	416483.7	3743174.1	50.6	3.89	3.78	1.81	YES	
L0000135	0	0.34266E-03	416485.8	3743166.2	50.8	3.89	3.78	1.81	YES	
L0000136	0	0.34266E-03	416487.9	3743158.3	51.0	3.89	3.78	1.81	YES	
L0000137	0	0.34266E-03	416490.0	3743150.5	51.0	3.89	3.78	1.81	YES	
L0000138	0	0.34266E-03	416492.1	3743142.6	51.0	3.89	3.78	1.81	YES	
L0000139	0	0.34266E-03	416494.2	3743134.8	51.0	3.89	3.78	1.81	YES	
L0000140	0	0.34266E-03	416496.3	3743126.9	51.0	3.89	3.78	1.81	YES	
L0000141	0	0.34266E-03	416498.4	3743119.1	51.1	3.89	3.78	1.81	YES	
L0000142	0	0.34266E-03	416500.5	3743111.2	51.2	3.89	3.78	1.81	YES	
L0000143	0	0.34266E-03	416502.7	3743103.4	51.4	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE IDs

ALL L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,
L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,
L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,
L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,
L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,
L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,
L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,
L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,
L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,
L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,
L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

URBAN ID URBAN POP SOURCE IDs

8000000. L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,

L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,

L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,

L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,

L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,

L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,

L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,

L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,

L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,

L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,

L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,

L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,

L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 2825

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	0.0,	0.0,	0.0,	0.0,	0.0,
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,	0.0,
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,	0.0,
9	0.0,	0.0,	0.0,	0.0,	0.0,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	10.7,	56.1,	52.9,	-62.5,	31.7,	12	10.7,	55.3,	55.4,	-68.7,	25.0,
13	10.7,	52.9,	56.1,	-72.8,	17.5,	14	10.7,	48.9,	55.1,	-74.7,	9.5,
15	10.7,	43.4,	52.5,	-74.3,	1.1,	16	10.7,	36.6,	48.2,	-71.6,	-7.2,
17	10.7,	36.6,	48.2,	-69.6,	-15.4,	18	10.7,	43.4,	52.5,	-68.4,	-23.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	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	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	10.7,	56.1,	52.9,	9.6,	-31.7,	30	10.7,	55.3,	55.4,	13.4,	-25.0,
31	10.7,	52.9,	56.1,	16.7,	-17.5,	32	10.7,	48.9,	55.1,	19.6,	-9.5,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	10.7,	43.4,	52.5,	15.9,	23.0,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416414.0,	3743528.5,	52.9,	52.9,	0.0);	(416426.4,	3743529.0,	53.2,	53.2,	0.0);
(416409.3,	3743546.4,	53.8,	53.8,	0.0);	(416419.9,	3743547.5,	53.9,	53.9,	0.0);
(416439.9,	3743547.5,	53.3,	53.3,	0.0);	(416459.9,	3743547.5,	52.0,	52.0,	0.0);
(416479.9,	3743547.5,	50.6,	50.6,	0.0);	(416499.9,	3743547.5,	49.6,	49.6,	0.0);
(416403.3,	3743566.4,	54.1,	54.1,	0.0);	(416419.9,	3743567.5,	54.8,	54.8,	0.0);
(416439.9,	3743567.5,	54.3,	56.0,	0.0);	(416459.9,	3743567.5,	52.6,	58.0,	0.0);
(416479.9,	3743567.5,	51.3,	58.0,	0.0);	(416499.9,	3743567.5,	50.4,	50.4,	0.0);
(416519.9,	3743567.5,	50.2,	50.2,	0.0);	(416539.9,	3743567.5,	50.4,	50.4,	0.0);

(416399.9, 3743587.5, 54.2, 58.0, 0.0); (416419.9, 3743587.5, 55.7, 55.7, 0.0);
(416439.9, 3743587.5, 55.5, 58.0, 0.0); (416459.9, 3743587.5, 53.5, 58.0, 0.0);
(416479.9, 3743587.5, 52.0, 58.0, 0.0); (416499.9, 3743587.5, 51.2, 51.2, 0.0);
(416519.9, 3743587.5, 51.0, 51.0, 0.0); (416539.9, 3743587.5, 51.2, 51.2, 0.0);
(416393.5, 3743607.4, 54.1, 58.0, 0.0); (416419.9, 3743607.5, 56.8, 58.0, 0.0);
(416439.9, 3743607.5, 56.8, 58.0, 0.0); (416459.9, 3743607.5, 54.8, 58.0, 0.0);
(416479.9, 3743607.5, 52.9, 58.0, 0.0); (416499.9, 3743607.5, 51.6, 51.6, 0.0);
(416519.9, 3743607.5, 51.0, 51.0, 0.0); (416539.9, 3743607.5, 51.6, 51.6, 0.0);
(416387.8, 3743627.9, 53.0, 58.0, 0.0); (416399.9, 3743627.5, 54.4, 58.0, 0.0);
(416419.9, 3743627.5, 56.0, 56.0, 0.0); (416439.9, 3743627.5, 56.4, 56.4, 0.0);
(416459.9, 3743627.5, 55.6, 55.6, 0.0); (416479.9, 3743627.5, 54.0, 54.0, 0.0);
(416499.9, 3743627.5, 52.6, 52.6, 0.0); (416519.9, 3743627.5, 51.6, 51.6, 0.0);
(416381.5, 3743647.5, 52.4, 52.4, 0.0); (416399.9, 3743647.5, 54.2, 54.2, 0.0);
(416419.9, 3743647.5, 55.2, 55.2, 0.0); (416439.9, 3743647.5, 55.8, 55.8, 0.0);
(416459.9, 3743647.5, 55.8, 55.8, 0.0); (416479.9, 3743647.5, 54.8, 54.8, 0.0);
(416499.9, 3743647.5, 53.5, 53.5, 0.0); (416519.9, 3743647.5, 52.0, 52.0, 0.0);
(416379.9, 3743667.5, 52.9, 55.0, 0.0); (416399.9, 3743667.5, 54.9, 54.9, 0.0);
(416419.9, 3743667.5, 55.0, 55.0, 0.0); (416439.9, 3743667.5, 55.1, 55.1, 0.0);
(416459.9, 3743667.5, 55.1, 55.1, 0.0); (416479.9, 3743667.5, 55.0, 55.0, 0.0);
(416499.9, 3743667.5, 54.0, 55.0, 0.0); (416519.9, 3743667.5, 52.0, 52.0, 0.0);
(416371.8, 3743687.4, 52.6, 52.6, 0.0); (416379.9, 3743687.5, 52.8, 52.8, 0.0);
(416399.9, 3743687.5, 53.2, 55.0, 0.0); (416419.9, 3743687.5, 53.2, 53.2, 0.0);
(416439.9, 3743687.5, 53.6, 53.6, 0.0); (416459.9, 3743687.5, 54.4, 54.4, 0.0);
(416479.9, 3743687.5, 54.0, 54.0, 0.0); (416499.9, 3743687.5, 53.2, 53.2, 0.0);
(416519.9, 3743687.5, 52.0, 52.0, 0.0); (416366.2, 3743708.4, 52.5, 52.5, 0.0);
(416379.9, 3743707.5, 52.4, 52.4, 0.0); (416399.9, 3743707.5, 51.8, 51.8, 0.0);
(416419.9, 3743707.5, 51.8, 51.8, 0.0); (416439.9, 3743707.5, 52.3, 52.3, 0.0);
(416459.9, 3743707.5, 53.5, 53.5, 0.0); (416479.9, 3743707.5, 53.0, 53.0, 0.0);
(416499.9, 3743707.5, 52.3, 52.3, 0.0); (416519.9, 3743707.5, 51.5, 51.5, 0.0);
(416360.4, 3743727.5, 51.7, 51.7, 0.0); (416379.9, 3743727.5, 51.8, 51.8, 0.0);
(416399.9, 3743727.5, 51.1, 51.1, 0.0); (416419.9, 3743727.5, 51.1, 51.1, 0.0);
(416439.9, 3743727.5, 51.4, 51.4, 0.0); (416459.9, 3743727.5, 52.2, 52.2, 0.0);
(416479.9, 3743727.5, 52.1, 52.1, 0.0); (416499.9, 3743727.5, 51.4, 51.4, 0.0);
(416516.3, 3743727.5, 50.4, 50.4, 0.0); (416355.5, 3743747.4, 52.1, 52.1, 0.0);
(416364.6, 3743747.9, 52.4, 52.4, 0.0); (416379.9, 3743747.5, 52.3, 52.3, 0.0);
(416399.9, 3743747.5, 51.6, 51.6, 0.0); (416419.9, 3743747.5, 51.2, 51.2, 0.0);
(416439.9, 3743747.5, 51.1, 51.1, 0.0); (416459.9, 3743747.5, 51.4, 51.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416479.9, 3743747.5, 51.4, 51.4, 0.0); (416499.9, 3743747.5, 50.9, 50.9, 0.0);
(416349.8, 3743767.9, 52.5, 52.5, 0.0); (416363.3, 3743767.9, 53.2, 53.2, 0.0);
(416379.9, 3743767.5, 53.2, 53.2, 0.0); (416399.9, 3743767.5, 52.5, 52.5, 0.0);
(416419.9, 3743767.5, 51.7, 51.7, 0.0); (416439.9, 3743767.5, 51.2, 51.2, 0.0);
(416459.9, 3743767.5, 51.2, 51.2, 0.0); (416479.9, 3743767.5, 50.9, 50.9, 0.0);
(416499.9, 3743767.5, 50.5, 50.5, 0.0); (416344.2, 3743787.4, 52.4, 55.0, 0.0);
(416359.9, 3743787.5, 53.9, 55.0, 0.0); (416379.9, 3743787.5, 54.5, 54.5, 0.0);
(416399.9, 3743787.5, 53.8, 53.8, 0.0); (416419.9, 3743787.5, 52.6, 52.6, 0.0);
(416439.9, 3743787.5, 51.9, 51.9, 0.0); (416459.9, 3743787.5, 51.9, 51.9, 0.0);
(416479.9, 3743787.5, 50.7, 50.7, 0.0); (416499.9, 3743787.5, 50.0, 50.0, 0.0);
(416340.7, 3743805.9, 51.5, 55.0, 0.0); (416359.9, 3743807.5, 53.4, 53.4, 0.0);
(416379.9, 3743807.5, 54.1, 54.1, 0.0); (416399.9, 3743807.5, 53.4, 53.4, 0.0);
(416419.9, 3743807.5, 52.9, 52.9, 0.0); (416439.9, 3743807.5, 52.4, 52.4, 0.0);
(416459.9, 3743807.5, 52.0, 52.0, 0.0); (416479.9, 3743807.5, 51.1, 51.1, 0.0);
(416495.3, 3743807.5, 50.5, 50.5, 0.0); (416333.5, 3743827.3, 50.3, 50.3, 0.0);
(416343.9, 3743827.9, 51.1, 54.0, 0.0); (416359.9, 3743827.5, 52.6, 54.0, 0.0);
(416379.9, 3743827.5, 53.2, 53.2, 0.0); (416399.9, 3743827.5, 52.8, 52.8, 0.0);
(416419.9, 3743827.5, 52.6, 52.6, 0.0); (416439.9, 3743827.5, 52.2, 52.2, 0.0);
(416459.9, 3743827.5, 51.8, 51.8, 0.0); (416479.9, 3743827.5, 51.2, 51.2, 0.0);
(416327.7, 3743848.4, 49.2, 49.2, 0.0); (416339.9, 3743847.5, 50.1, 50.1, 0.0);
(416359.9, 3743847.5, 51.5, 51.5, 0.0); (416379.9, 3743847.5, 52.1, 52.1, 0.0);
(416399.9, 3743847.5, 52.1, 52.1, 0.0); (416419.9, 3743847.5, 51.5, 51.5, 0.0);
(416439.9, 3743847.5, 51.1, 51.1, 0.0); (416459.9, 3743847.5, 51.1, 51.1, 0.0);
(416479.9, 3743847.5, 51.0, 51.0, 0.0); (416323.0, 3743867.7, 48.3, 48.3, 0.0);

(416339.9,	3743867.5,	49.4,	49.4,	0.0);	(416359.9,	3743867.5,	50.3,	50.3,	0.0);
(416379.9,	3743867.5,	50.6,	50.6,	0.0);	(416399.9,	3743867.5,	50.2,	50.2,	0.0);
(416419.9,	3743867.5,	50.0,	50.0,	0.0);	(416439.9,	3743867.5,	50.0,	50.0,	0.0);
(416459.9,	3743867.5,	50.4,	50.4,	0.0);	(416479.9,	3743867.5,	50.8,	50.8,	0.0);
(416319.9,	3743887.5,	47.8,	47.8,	0.0);	(416339.9,	3743887.5,	49.0,	49.0,	0.0);
(416359.9,	3743887.5,	49.5,	49.5,	0.0);	(416379.9,	3743887.5,	49.5,	49.5,	0.0);
(416399.9,	3743887.5,	49.0,	49.0,	0.0);	(416419.9,	3743887.5,	49.0,	49.0,	0.0);
(416439.9,	3743887.5,	49.2,	49.2,	0.0);	(416459.9,	3743887.5,	49.8,	49.8,	0.0);
(416474.9,	3743886.6,	50.3,	50.3,	0.0);	(416312.3,	3743907.0,	48.0,	48.0,	0.0);
(416324.4,	3743907.5,	48.4,	48.4,	0.0);	(416339.9,	3743907.5,	49.0,	49.0,	0.0);
(416359.9,	3743907.5,	49.0,	49.0,	0.0);	(416379.9,	3743907.5,	49.0,	49.0,	0.0);
(416399.9,	3743907.5,	49.0,	49.0,	0.0);	(416419.9,	3743907.5,	49.0,	49.0,	0.0);
(416439.9,	3743907.5,	49.0,	49.0,	0.0);	(416459.9,	3743907.5,	49.1,	49.1,	0.0);
(416306.6,	3743928.1,	48.6,	48.6,	0.0);	(416322.2,	3743927.9,	49.0,	49.0,	0.0);
(416339.9,	3743927.5,	49.6,	49.6,	0.0);	(416359.9,	3743927.5,	49.6,	49.6,	0.0);
(416379.9,	3743927.5,	49.6,	49.6,	0.0);	(416399.9,	3743927.5,	49.6,	49.6,	0.0);
(416419.9,	3743927.5,	49.2,	49.2,	0.0);	(416439.9,	3743927.5,	49.0,	49.0,	0.0);
(416459.9,	3743927.5,	49.0,	49.0,	0.0);	(416301.9,	3743947.7,	49.1,	49.1,	0.0);
(416319.9,	3743947.5,	49.2,	49.2,	0.0);	(416339.9,	3743947.5,	49.8,	49.8,	0.0);
(416359.9,	3743947.5,	49.9,	49.9,	0.0);	(416379.9,	3743947.5,	50.0,	50.0,	0.0);
(416399.9,	3743947.5,	50.0,	50.0,	0.0);	(416419.9,	3743947.5,	49.5,	49.5,	0.0);

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - PEAK HOUR CO *** 15:04:25
PAGE 12
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416439.9,	3743947.5,	49.2,	49.2,	0.0);	(416459.9,	3743947.5,	49.0,	49.0,	0.0);
(416307.1,	3743967.2,	49.2,	49.2,	0.0);	(416319.9,	3743967.5,	49.0,	49.0,	0.0);
(416339.9,	3743967.5,	49.1,	49.1,	0.0);	(416359.9,	3743967.5,	49.7,	49.7,	0.0);
(416379.9,	3743967.5,	50.0,	50.0,	0.0);	(416399.9,	3743967.5,	50.0,	50.0,	0.0);
(416419.9,	3743967.5,	49.9,	49.9,	0.0);	(416439.9,	3743967.5,	49.6,	49.6,	0.0);
(416319.9,	3743987.5,	47.2,	47.2,	0.0);	(416339.9,	3743987.5,	47.2,	47.2,	0.0);
(416359.9,	3743987.5,	48.3,	48.3,	0.0);	(416379.9,	3743987.5,	49.2,	49.2,	0.0);
(416399.9,	3743987.5,	50.0,	50.0,	0.0);	(416419.9,	3743987.5,	50.0,	50.0,	0.0);
(416439.9,	3743987.5,	49.9,	49.9,	0.0);	(416379.9,	3744007.5,	48.7,	48.7,	0.0);
(416399.9,	3744007.5,	50.0,	50.0,	0.0);	(416419.9,	3744007.5,	50.0,	50.0,	0.0);
(416439.9,	3744007.5,	50.1,	50.1,	0.0);	(416436.8,	3744021.3,	50.2,	50.2,	0.0);
(416510.3,	3743748.2,	50.4,	50.4,	0.0);	(416297.6,	3743966.8,	49.7,	49.7,	0.0);
(416305.1,	3743986.1,	47.9,	51.0,	0.0);	(416291.2,	3743985.6,	49.3,	49.3,	0.0);
(416358.9,	3744002.6,	47.3,	47.3,	0.0);	(416339.0,	3743998.5,	46.1,	46.1,	0.0);
(416319.0,	3743996.1,	46.4,	46.4,	0.0);					

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - PEAK HOUR CO *** 15:04:25
PAGE 13
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
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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,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

Surface file: ..\ANAH8.SFC Met Version: 14134
Profile file: ..\ANAH8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2006 Year: 2006

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
06	01	01	1	01	-2.9	0.060	-9.000	-9.000	-999.	35.	6.6	0.45	1.00	1.00	0.90	39.	9.1	285.4	5.5
06	01	01	1	02	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	64.	9.1	285.4	5.5
06	01	01	1	03	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	103.	9.1	284.9	5.5
06	01	01	1	04	-2.1	0.060	-9.000	-9.000	-999.	35.	9.4	0.45	1.00	1.00	0.90	76.	9.1	284.9	5.5
06	01	01	1	05	-5.9	0.087	-9.000	-9.000	-999.	61.	10.0	0.45	1.00	1.00	1.30	93.	9.1	284.9	5.5
06	01	01	1	06	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	59.	9.1	284.9	5.5
06	01	01	1	07	-6.1	0.087	-9.000	-9.000	-999.	61.	9.6	0.45	1.00	1.00	1.30	58.	9.1	284.2	5.5
06	01	01	1	08	-9.6	0.199	-9.000	-9.000	-999.	213.	73.9	0.45	1.00	0.53	1.80	39.	9.1	284.9	5.5
06	01	01	1	09	33.2	0.322	0.787	0.005	528.	438.	-90.3	0.45	1.00	0.30	2.20	61.	9.1	286.4	5.5
06	01	01	1	10	27.9	0.211	0.832	0.005	742.	239.	-30.3	0.45	1.00	0.23	1.30	187.	9.1	287.0	5.5
06	01	01	1	11	25.2	0.209	0.819	0.005	784.	230.	-32.7	0.45	1.00	0.20	1.30	221.	9.1	287.5	5.5
06	01	01	1	12	75.8	0.233	1.237	0.015	899.	270.	-15.0	0.45	1.00	0.19	1.30	126.	9.1	288.8	5.5
06	01	01	1	13	47.6	0.282	1.084	0.016	963.	359.	-42.3	0.45	1.00	0.19	1.80	77.	9.1	288.8	5.5
06	01	01	1	14	70.8	0.339	1.275	0.017	1053.	473.	-49.4	0.45	1.00	0.20	2.20	50.	9.1	289.2	5.5
06	01	01	1	15	29.3	0.212	0.960	0.017	1088.	244.	-29.3	0.45	1.00	0.24	1.30	179.	9.1	289.2	5.5
06	01	01	1	16	4.4	0.299	0.510	0.017	1091.	393.	-550.5	0.45	1.00	0.32	2.20	116.	9.1	288.1	5.5
06	01	01	1	17	-11.9	0.173	-9.000	-9.000	-999.	182.	39.1	0.45	1.00	0.59	1.80	67.	9.1	287.5	5.5
06	01	01	1	18	-10.6	0.191	-9.000	-9.000	-999.	201.	59.5	0.45	1.00	1.00	1.80	127.	9.1	287.0	5.5
06	01	01	1	19	-10.6	0.191	-9.000	-9.000	-999.	200.	59.1	0.45	1.00	1.00	1.80	145.	9.1	285.9	5.5
06	01	01	1	20	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	71.	9.1	285.4	5.5
06	01	01	1	21	-18.5	0.332	-9.000	-9.000	-999.	458.	177.5	0.45	1.00	1.00	2.70	56.	9.1	284.9	5.5
06	01	01	1	22	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	65.	9.1	285.4	5.5
06	01	01	1	23	-10.6	0.191	-9.000	-9.000	-999.	213.	59.1	0.45	1.00	1.00	1.80	70.	9.1	285.9	5.5
06	01	01	1	24	-14.2	0.257	-9.000	-9.000	-999.	313.	107.1	0.45	1.00	1.00	2.20	66.	9.1	286.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
06	01	01	01	5.5	0	-999.	-99.00	285.4	99.0	-99.00	-99.00
06	01	01	01	9.1	1	39.	0.90	-999.0	99.0	-99.00	-99.00

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	12.20107	(12071901)	416426.40	3743528.99	11.51518	(12071901)
416409.26	3743546.45	13.44276	(12071901)	416419.88	3743547.54	12.82444	(12071901)
416439.88	3743547.54	11.88984	(09102821)	416459.88	3743547.54	11.14203	(09102821)

416479.88	3743547.54	10.09309	(09063003)	416499.88	3743547.54	9.16658	(09063003)
416403.32	3743566.45	14.87442	(12071901)	416419.88	3743567.54	14.06836	(12071901)
416439.88	3743567.54	13.64652	(09102821)	416459.88	3743567.54	12.27595	(09102821)
416479.88	3743567.54	10.92776	(09063003)	416499.88	3743567.54	9.80614	(12111021)
416519.88	3743567.54	9.03918	(12021522)	416539.88	3743567.54	8.78345	(07091020)
416399.88	3743587.54	16.20793	(12071901)	416419.88	3743587.54	16.76188	(09102821)
416439.88	3743587.54	15.80447	(09102821)	416459.88	3743587.54	13.60241	(09063003)
416479.88	3743587.54	11.79501	(12111021)	416499.88	3743587.54	10.59935	(12021522)
416519.88	3743587.54	10.06022	(07091020)	416539.88	3743587.54	10.03915	(07091020)
416393.55	3743607.36	17.66062	(12071901)	416419.88	3743607.54	19.06111	(09102821)
416439.88	3743607.54	17.89097	(09063003)	416459.88	3743607.54	15.22298	(12111021)
416479.88	3743607.54	12.93430	(12021522)	416499.88	3743607.54	11.56489	(07091020)
416519.88	3743607.54	11.37785	(07091020)	416539.88	3743607.54	11.05036	(07091020)
416387.84	3743627.90	18.87598	(09102821)	416399.88	3743627.54	19.52205	(09102821)
416419.88	3743627.54	20.06067	(09102821)	416439.88	3743627.54	18.73412	(09063003)
416459.88	3743627.54	16.59209	(12021522)	416479.88	3743627.54	14.37036	(07091020)
416499.88	3743627.54	13.74015	(07091020)	416519.88	3743627.54	12.60904	(07091020)
416381.51	3743647.54	20.60486	(09102821)	416399.88	3743647.54	21.18213	(09102821)
416419.88	3743647.54	20.60632	(09063003)	416439.88	3743647.54	19.17054	(12021522)
416459.88	3743647.54	17.63735	(12021522)	416479.88	3743647.54	17.20491	(07091020)
416499.88	3743647.54	15.60988	(07091020)	416519.88	3743647.54	13.51394	(08092519)
416379.88	3743667.54	22.92763	(09102821)	416399.88	3743667.54	23.35371	(09063003)
416419.88	3743667.54	21.44400	(12111021)	416439.88	3743667.54	19.80179	(12021522)
416459.88	3743667.54	19.90718	(07091020)	416479.88	3743667.54	19.15212	(07091020)
416499.88	3743667.54	16.82684	(08092519)	416519.88	3743667.54	14.33820	(07082821)
416371.75	3743687.44	24.92846	(09102821)	416379.88	3743687.54	24.18032	(09063003)
416399.88	3743687.54	22.46449	(12111021)	416419.88	3743687.54	20.65245	(12021522)
416439.88	3743687.54	21.01373	(07091020)	416459.88	3743687.54	21.24717	(07091020)
416479.88	3743687.54	19.22683	(08092519)	416499.88	3743687.54	17.29469	(07082821)
416519.88	3743687.54	15.15097	(09063001)	416366.21	3743708.44	26.77032	(09063003)
416379.88	3743707.54	24.78577	(12111021)	416399.88	3743707.54	21.98204	(12021522)
416419.88	3743707.54	21.62541	(07091020)	416439.88	3743707.54	21.68469	(07091020)
416459.88	3743707.54	21.20486	(08092519)	416479.88	3743707.54	19.45260	(07082821)
416499.88	3743707.54	17.47393	(09063001)	416519.88	3743707.54	18.05091	(07110403)
416360.42	3743727.54	27.61743	(09063003)	416379.88	3743727.54	25.00504	(12021522)
416399.88	3743727.54	23.70582	(07091020)	416419.88	3743727.54	23.24796	(07091020)
416439.88	3743727.54	21.62962	(08092519)	416459.88	3743727.54	21.16653	(07082821)

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - PEAK HOUR CO *** 15:04:25
PAGE 16

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416479.88	3743727.54	20.50209	(07110403)	416499.88	3743727.54	21.34495	(07110403)
416516.30	3743727.54	20.48489	(07110403)	416355.49	3743747.36	29.38961	(12021522)
416364.59	3743747.90	28.62082	(12021522)	416379.88	3743747.54	27.69532	(07091020)
416399.88	3743747.54	26.57358	(07091020)	416419.88	3743747.54	24.07185	(08092519)
416439.88	3743747.54	22.83394	(07082821)	416459.88	3743747.54	24.06388	(07110403)
416479.88	3743747.54	25.04770	(07110403)	416499.88	3743747.54	23.89536	(07110403)
416349.83	3743767.90	31.74082	(12021522)	416363.32	3743767.90	32.72770	(07091020)
416379.88	3743767.54	32.23208	(07091020)	416399.88	3743767.54	28.47848	(08092519)
416419.88	3743767.54	26.00622	(07082821)	416439.88	3743767.54	28.48672	(07110403)
416459.88	3743767.54	29.03552	(07110403)	416479.88	3743767.54	27.29913	(07110403)
416499.88	3743767.54	25.08462	(08072723)	416344.22	3743787.36	35.13851	(07091020)
416359.88	3743787.54	37.96028	(07091020)	416379.88	3743787.54	36.15420	(07082821)
416399.88	3743787.54	33.83948	(07110403)	416419.88	3743787.54	35.30571	(07110403)
416439.88	3743787.54	34.34072	(07110403)	416459.88	3743787.54	32.20875	(06051602)
416479.88	3743787.54	28.61504	(08072723)	416499.88	3743787.54	25.53198	(09080321)
416340.71	3743805.95	37.19322	(07091020)	416359.88	3743807.54	37.64463	(07082821)

416379.88	3743807.54	41.42588	(07110403)	416399.88	3743807.54	43.04351	(07110403)
416419.88	3743807.54	40.77704	(07110403)	416439.88	3743807.54	37.29695	(08072723)
416459.88	3743807.54	33.64299	(07101103)	416479.88	3743807.54	30.04466	(08031207)
416495.31	3743807.54	27.69093	(09032006)	416333.49	3743827.31	37.85928	(08092519)
416343.86	3743827.90	37.54042	(07110403)	416359.88	3743827.54	45.68789	(07110403)
416379.88	3743827.54	49.53490	(07110403)	416399.88	3743827.54	45.88203	(06051602)
416419.88	3743827.54	42.14017	(08072723)	416439.88	3743827.54	38.30407	(08031207)
416459.88	3743827.54	34.69083	(09032006)	416479.88	3743827.54	31.39428	(07050123)
416327.66	3743848.44	45.81601	(07110403)	416339.88	3743847.54	48.94744	(07110403)
416359.88	3743847.54	51.73319	(07110403)	416379.88	3743847.54	50.23583	(08072723)
416399.88	3743847.54	45.78135	(07101103)	416419.88	3743847.54	41.72860	(09032006)
416439.88	3743847.54	38.15827	(07050123)	416459.88	3743847.54	35.05119	(08010708)
416479.88	3743847.54	31.42734	(08010708)	416322.96	3743867.72	55.98456	(07110403)
416339.88	3743867.54	54.50811	(06051602)	416359.88	3743867.54	51.82469	(07101103)
416379.88	3743867.54	48.92936	(09032006)	416399.88	3743867.54	45.09793	(07050123)
416419.88	3743867.54	41.21493	(08010708)	416439.88	3743867.54	36.81750	(08010708)
416459.88	3743867.54	31.89196	(08010708)	416479.88	3743867.54	26.83341	(08010708)
416319.88	3743887.54	59.24637	(08072723)	416339.88	3743887.54	55.34622	(08031207)
416359.88	3743887.54	52.39058	(07050123)	416379.88	3743887.54	48.91435	(08010708)
416399.88	3743887.54	43.26386	(08010708)	416419.88	3743887.54	36.33754	(08010708)
416439.88	3743887.54	29.62580	(08010708)	416459.88	3743887.54	23.73167	(08010708)
416474.86	3743886.63	22.74909	(09081704)	416312.31	3743906.99	60.91101	(09032006)
416324.40	3743907.54	58.52966	(07050123)	416339.88	3743907.54	55.85046	(08010708)
416359.88	3743907.54	49.53085	(08010708)	416379.88	3743907.54	41.28533	(08010708)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	32.89328	(08010708)	416419.88	3743907.54	26.47820	(07080124)
416439.88	3743907.54	25.15569	(06073104)	416459.88	3743907.54	23.64546	(06020522)
416306.58	3743928.08	59.85112	(08010708)	416322.23	3743927.90	52.75586	(08010708)
416339.88	3743927.54	44.01809	(08010708)	416359.88	3743927.54	33.97835	(08010708)
416379.88	3743927.54	28.72468	(06073104)	416399.88	3743927.54	27.84260	(06020522)
416419.88	3743927.54	26.19142	(06020522)	416439.88	3743927.54	24.06387	(06020522)
416459.88	3743927.54	21.84535	(06020522)	416301.87	3743947.72	41.46877	(09011102)
416319.88	3743947.54	32.09795	(07022321)	416339.88	3743947.54	28.70061	(06021621)
416359.88	3743947.54	27.62898	(06020522)	416379.88	3743947.54	25.91081	(06020522)
416399.88	3743947.54	23.78492	(06020522)	416419.88	3743947.54	21.36959	(06020522)
416439.88	3743947.54	18.89337	(06020522)	416459.88	3743947.54	16.63016	(06020522)
416307.12	3743967.18	23.79208	(06021621)	416319.88	3743967.54	22.74410	(06021621)
416339.88	3743967.54	21.10084	(06021621)	416359.88	3743967.54	19.26514	(06021621)
416379.88	3743967.54	17.38346	(06021621)	416399.88	3743967.54	15.56203	(12030419)
416419.88	3743967.54	14.18168	(12030419)	416439.88	3743967.54	12.75235	(12030419)
416319.88	3743987.54	13.42996	(12042518)	416339.88	3743987.54	11.83409	(07102323)
416359.88	3743987.54	11.08676	(12030419)	416379.88	3743987.54	10.34095	(12030419)
416399.88	3743987.54	9.62211	(07102323)	416419.88	3743987.54	8.92442	(07102323)
416439.88	3743987.54	8.28050	(07102323)	416379.88	3744007.54	10.03742	(09083120)
416399.88	3744007.54	9.53224	(09083120)	416419.88	3744007.54	8.84491	(09083120)
416439.88	3744007.54	8.24522	(09083120)	416436.78	3744021.35	8.28816	(06071220)
416510.28	3743748.17	22.67372	(06051602)	416297.59	3743966.85	24.58368	(06021621)
416305.11	3743986.12	15.62542	(12042518)	416291.25	3743985.57	18.84948	(12042518)
416358.87	3744002.60	10.74132	(09083120)	416339.02	3743998.54	11.68348	(09080421)
416319.04	3743996.11	13.60825	(12042518)				

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 8TH HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	9.09598	(12091421)	416426.40	3743528.99	7.23546	(06080204)
416409.26	3743546.45	9.13236	(12101718)	416419.88	3743547.54	7.58051	(06080204)
416439.88	3743547.54	6.37171	(09122302)	416459.88	3743547.54	5.42843	(06080203)
416479.88	3743547.54	5.33305	(07091020)	416499.88	3743547.54	5.84147	(07091020)
416403.32	3743566.45	9.32617	(12091421)	416419.88	3743567.54	7.52098	(08031004)
416439.88	3743567.54	6.45814	(09122302)	416459.88	3743567.54	5.95269	(07091020)
416479.88	3743567.54	6.49084	(07091020)	416499.88	3743567.54	6.74663	(12071901)
416519.88	3743567.54	7.38489	(08092519)	416539.88	3743567.54	6.37849	(09102821)
416399.88	3743587.54	8.96192	(09080101)	416419.88	3743587.54	8.12303	(09122302)
416439.88	3743587.54	6.92494	(07091020)	416459.88	3743587.54	7.42347	(07091020)
416479.88	3743587.54	8.29535	(12071901)	416499.88	3743587.54	8.35827	(08092519)
416519.88	3743587.54	7.42334	(09102821)	416539.88	3743587.54	6.58259	(09063003)
416393.55	3743607.36	9.55784	(07100718)	416419.88	3743607.54	8.49848	(09122302)
416439.88	3743607.54	9.46426	(07091020)	416459.88	3743607.54	10.10936	(07091020)
416479.88	3743607.54	9.80613	(08092519)	416499.88	3743607.54	8.70858	(09102821)
416519.88	3743607.54	7.50432	(09063003)	416539.88	3743607.54	8.05527	(12021522)
416387.84	3743627.90	9.55286	(09052707)	416399.88	3743627.54	8.41601	(09122302)
416419.88	3743627.54	9.72026	(07091020)	416439.88	3743627.54	12.07057	(07091020)
416459.88	3743627.54	11.98371	(08092519)	416479.88	3743627.54	11.22479	(09102821)
416499.88	3743627.54	9.12651	(09102801)	416519.88	3743627.54	9.16366	(12021522)
416381.51	3743647.54	9.87116	(09052707)	416399.88	3743647.54	9.51014	(07091020)
416419.88	3743647.54	12.09648	(07091020)	416439.88	3743647.54	13.30222	(08092519)
416459.88	3743647.54	14.25841	(09102821)	416479.88	3743647.54	11.73234	(09102801)
416499.88	3743647.54	11.35573	(12021522)	416519.88	3743647.54	9.60804	(09051823)
416379.88	3743667.54	10.23183	(07091020)	416399.88	3743667.54	12.92591	(07091020)
416419.88	3743667.54	14.87860	(12071901)	416439.88	3743667.54	16.22033	(09102821)
416459.88	3743667.54	13.81651	(09102801)	416479.88	3743667.54	14.03839	(12021522)
416499.88	3743667.54	12.15376	(09051823)	416519.88	3743667.54	12.35262	(09051823)
416371.75	3743687.44	12.11888	(07091020)	416379.88	3743687.54	13.05152	(07091020)
416399.88	3743687.54	16.01242	(12071901)	416419.88	3743687.54	17.08500	(09102821)
416439.88	3743687.54	14.71424	(09102801)	416459.88	3743687.54	15.56775	(12021522)
416479.88	3743687.54	14.20973	(09051823)	416499.88	3743687.54	15.10106	(09051823)
416519.88	3743687.54	13.76668	(09111618)	416366.21	3743708.44	15.36998	(07091020)
416379.88	3743707.54	17.52288	(07091020)	416399.88	3743707.54	18.36721	(08092519)
416419.88	3743707.54	15.30424	(07082821)	416439.88	3743707.54	16.01788	(07122622)
416459.88	3743707.54	16.09071	(09051823)	416479.88	3743707.54	17.10108	(07091020)
416499.88	3743707.54	16.82747	(07080821)	416519.88	3743707.54	16.40492	(06051602)
416360.42	3743727.54	18.89500	(07091020)	416379.88	3743727.54	20.26950	(08092519)
416399.88	3743727.54	16.80198	(07082821)	416419.88	3743727.54	17.35726	(07122622)
416439.88	3743727.54	16.89159	(09051823)	416459.88	3743727.54	18.26099	(07091020)

♀*** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - PEAK HOUR CO *** 15:04:25
PAGE 19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 8TH HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

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

416479.88	3743727.54	19.49159	(09063001)	416499.88	3743727.54	19.85075	(06051602)
416516.30	3743727.54	19.74014	(06051602)	416355.49	3743747.36	21.69663	(08092519)
416364.59	3743747.90	24.12453	(08092519)	416379.88	3743747.54	19.63342	(07082821)
416399.88	3743747.54	20.02638	(07122622)	416419.88	3743747.54	19.32827	(09051823)
416439.88	3743747.54	20.43091	(07110403)	416459.88	3743747.54	21.53098	(06051602)
416479.88	3743747.54	23.75238	(06051602)	416499.88	3743747.54	23.26771	(09011602)
416349.83	3743767.90	26.84454	(09102821)	416363.32	3743767.90	24.12647	(07082821)
416379.88	3743767.54	24.48838	(07122622)	416399.88	3743767.54	23.50606	(09051823)
416419.88	3743767.54	25.06324	(12032824)	416439.88	3743767.54	26.08433	(06051602)
416459.88	3743767.54	27.91331	(06051602)	416479.88	3743767.54	26.62691	(07092920)
416499.88	3743767.54	24.76859	(06042105)	416344.22	3743787.36	26.17396	(07082821)
416359.88	3743787.54	29.15172	(07122622)	416379.88	3743787.54	30.64358	(09051823)
416399.88	3743787.54	32.77429	(09063001)	416419.88	3743787.54	33.08371	(06051602)
416439.88	3743787.54	33.42912	(12032824)	416459.88	3743787.54	31.68561	(07053004)
416479.88	3743787.54	28.21413	(09020106)	416499.88	3743787.54	25.18830	(08083005)
416340.71	3743805.95	28.79275	(07122622)	416359.88	3743807.54	32.52740	(09051823)
416379.88	3743807.54	37.39285	(06051602)	416399.88	3743807.54	41.02066	(06051602)
416419.88	3743807.54	39.72249	(09011602)	416439.88	3743807.54	36.80074	(06042105)
416459.88	3743807.54	33.02726	(06051103)	416479.88	3743807.54	29.39029	(12081524)
416495.31	3743807.54	27.01653	(06021120)	416333.49	3743827.31	31.74378	(12032824)
416343.86	3743827.90	37.10162	(12010303)	416359.88	3743827.54	42.18259	(06051602)
416379.88	3743827.54	47.95789	(06051602)	416399.88	3743827.54	45.12246	(07053004)
416419.88	3743827.54	41.59672	(09020106)	416439.88	3743827.54	37.64447	(09032006)
416459.88	3743827.54	33.84248	(06111519)	416479.88	3743827.54	30.46255	(09032006)
416327.66	3743848.44	41.98534	(06051602)	416339.88	3743847.54	46.15120	(06051602)
416359.88	3743847.54	50.66399	(09011602)	416379.88	3743847.54	49.65731	(09020106)
416399.88	3743847.54	45.22706	(08083005)	416419.88	3743847.54	40.84549	(08071304)
416439.88	3743847.54	37.15493	(09032006)	416459.88	3743847.54	34.23145	(08021820)
416479.88	3743847.54	29.86949	(09072004)	416322.96	3743867.72	54.16067	(06051602)
416339.88	3743867.54	53.69636	(06051103)	416359.88	3743867.54	51.11269	(07113020)
416379.88	3743867.54	48.24790	(08110618)	416399.88	3743867.54	44.06280	(06020402)
416419.88	3743867.54	40.21540	(09072004)	416439.88	3743867.54	34.87061	(06091119)
416459.88	3743867.54	29.44981	(07022321)	416479.88	3743867.54	25.19836	(07022321)
416319.88	3743887.54	58.61207	(06051602)	416339.88	3743887.54	54.48523	(12081524)
416359.88	3743887.54	51.10707	(08010708)	416379.88	3743887.54	47.66422	(09072004)
416399.88	3743887.54	40.86060	(07082621)	416419.88	3743887.54	33.79047	(07022321)
416439.88	3743887.54	28.12129	(07022321)	416459.88	3743887.54	23.49683	(12052105)
416474.86	3743886.63	22.62648	(07110722)	416312.31	3743906.99	59.98606	(08110618)
416324.40	3743907.54	57.36644	(12101404)	416339.88	3743907.54	54.39300	(09072004)
416359.88	3743907.54	46.62081	(07082621)	416379.88	3743907.54	38.81986	(07022321)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 8TH HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	31.70656	(07022321)	416419.88	3743907.54	26.34179	(09082004)
416439.88	3743907.54	24.88476	(12081722)	416459.88	3743907.54	23.40179	(06111518)
416306.58	3743928.08	57.47790	(09072004)	416322.23	3743927.90	49.61628	(07022321)
416339.88	3743927.54	42.13455	(07022321)	416359.88	3743927.54	33.49943	(07022321)
416379.88	3743927.54	28.50299	(07062001)	416399.88	3743927.54	27.61693	(09062601)
416419.88	3743927.54	25.94727	(09062601)	416439.88	3743927.54	23.83907	(07111303)
416459.88	3743927.54	21.63996	(07111303)	416301.87	3743947.72	40.99315	(06091119)
416319.88	3743947.54	31.35630	(09030220)	416339.88	3743947.54	28.63597	(06081824)
416359.88	3743947.54	27.55044	(06081824)	416379.88	3743947.54	25.81556	(06081824)
416399.88	3743947.54	23.68853	(06040722)	416419.88	3743947.54	21.27588	(09062601)
416439.88	3743947.54	18.81321	(09062601)	416459.88	3743947.54	16.56612	(09062601)
416307.12	3743967.18	23.60282	(06080622)	416319.88	3743967.54	22.57735	(06080622)
416339.88	3743967.54	20.96596	(06080622)	416359.88	3743967.54	19.15228	(06080622)

416379.88	3743967.54	17.28591	(06080622)	416399.88	3743967.54	15.43212	(06081522)
416419.88	3743967.54	13.68039	(06081423)	416439.88	3743967.54	11.97255	(06081423)
416319.88	3743987.54	13.06034	(06073023)	416339.88	3743987.54	11.73106	(09080123)
416359.88	3743987.54	10.84788	(09080123)	416379.88	3743987.54	10.12357	(09080123)
416399.88	3743987.54	9.49809	(09082321)	416419.88	3743987.54	8.80752	(09082321)
416439.88	3743987.54	8.15908	(08071422)	416379.88	3744007.54	9.95015	(08081622)
416399.88	3744007.54	9.44167	(08071522)	416419.88	3744007.54	8.75691	(08071522)
416439.88	3744007.54	8.15992	(08071522)	416436.78	3744021.35	8.23108	(06071924)
416510.28	3743748.17	22.19924	(07092920)	416297.59	3743966.85	24.37748	(06080622)
416305.11	3743986.12	14.74853	(09090521)	416291.25	3743985.57	17.30014	(06071122)
416358.87	3744002.60	10.67661	(12081104)	416339.02	3743998.54	11.59745	(12081104)
416319.04	3743996.11	12.90013	(12082721)				

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	8.93893	(08020424)	416426.40	3743528.99	6.86867	(08020424)
416409.26	3743546.45	8.97065	(08020424)	416419.88	3743547.54	7.12430	(08020424)
416439.88	3743547.54	5.34134	(08020424)	416459.88	3743547.54	4.36135	(08020424)
416479.88	3743547.54	3.79924	(09102824)	416499.88	3743547.54	3.33882	(09102824)
416403.32	3743566.45	9.16634	(08020424)	416419.88	3743567.54	6.57189	(08020424)
416439.88	3743567.54	5.18883	(09102824)	416459.88	3743567.54	4.44753	(09102824)
416479.88	3743567.54	3.83526	(09102824)	416499.88	3743567.54	3.34625	(09102824)
416519.88	3743567.54	2.92718	(09102824)	416539.88	3743567.54	2.64685	(08020424)
416399.88	3743587.54	8.74765	(08020424)	416419.88	3743587.54	6.27936	(09102824)
416439.88	3743587.54	5.40818	(09102824)	416459.88	3743587.54	4.54935	(09102824)
416479.88	3743587.54	3.86116	(09102824)	416499.88	3743587.54	3.30916	(09102824)
416519.88	3743587.54	2.89682	(08020424)	416539.88	3743587.54	2.74946	(07091024)
416393.55	3743607.36	9.03342	(08020424)	416419.88	3743607.54	6.53978	(09102824)
416439.88	3743607.54	5.72189	(09102824)	416459.88	3743607.54	4.68808	(09102824)
416479.88	3743607.54	3.85941	(09102824)	416499.88	3743607.54	3.22154	(09102824)
416519.88	3743607.54	3.05255	(07091024)	416539.88	3743607.54	2.92404	(07091024)
416387.84	3743627.90	9.22546	(08020424)	416399.88	3743627.54	7.26417	(08020424)
416419.88	3743627.54	6.47829	(09102824)	416439.88	3743627.54	5.65636	(09102824)
416459.88	3743627.54	4.73000	(09102824)	416479.88	3743627.54	3.83054	(09102824)
416499.88	3743627.54	3.51800	(07091024)	416519.88	3743627.54	3.26019	(07091024)
416381.51	3743647.54	9.59821	(08020424)	416399.88	3743647.54	7.17402	(09102824)
416419.88	3743647.54	6.27510	(09102824)	416439.88	3743647.54	5.47692	(09102824)
416459.88	3743647.54	4.61893	(09102824)	416479.88	3743647.54	4.11713	(07091024)
416499.88	3743647.54	3.80807	(07091024)	416519.88	3743647.54	3.42435	(07010508)
416379.88	3743667.54	8.93691	(08020424)	416399.88	3743667.54	7.27757	(09102824)
416419.88	3743667.54	6.14927	(09102824)	416439.88	3743667.54	5.13732	(09102824)
416459.88	3743667.54	4.67098	(07091024)	416479.88	3743667.54	4.43015	(07091024)
416499.88	3743667.54	4.04013	(07010508)	416519.88	3743667.54	3.62665	(07010508)
416371.75	3743687.44	9.66947	(08020424)	416379.88	3743687.54	8.22926	(09102824)
416399.88	3743687.54	6.76855	(09102824)	416419.88	3743687.54	5.55680	(09102824)
416439.88	3743687.54	5.10550	(07091024)	416459.88	3743687.54	4.93082	(07091024)
416479.88	3743687.54	4.52759	(07010508)	416499.88	3743687.54	4.20944	(07010508)
416519.88	3743687.54	3.90591	(09111624)	416366.21	3743708.44	9.83389	(08020424)
416379.88	3743707.54	7.87968	(09102824)	416399.88	3743707.54	6.18701	(09102824)
416419.88	3743707.54	5.51139	(07091024)	416439.88	3743707.54	5.25194	(07091024)
416459.88	3743707.54	4.98858	(07010508)	416479.88	3743707.54	4.67207	(07010508)
416499.88	3743707.54	4.41267	(09111624)	416519.88	3743707.54	4.68369	(07082624)
416360.42	3743727.54	10.18079	(08020424)	416379.88	3743727.54	7.31123	(09102824)
416399.88	3743727.54	6.19733	(07091024)	416419.88	3743727.54	5.75724	(07091024)
416439.88	3743727.54	5.24537	(07091024)	416459.88	3743727.54	5.12017	(09111624)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416479.88	3743727.54	5.10651	(07082624)	416499.88	3743727.54	5.69717	(07082624)
416516.30	3743727.54	6.01926	(07082624)	416355.49	3743747.36	10.30161	(08020424)
416364.59	3743747.90	8.64000	(08020424)	416379.88	3743747.54	7.31195	(07091024)
416399.88	3743747.54	6.60188	(07091024)	416419.88	3743747.54	5.85989	(07010508)
416439.88	3743747.54	5.65816	(09111624)	416459.88	3743747.54	6.12596	(07082624)
416479.88	3743747.54	6.97856	(07082624)	416499.88	3743747.54	7.50071	(07082624)
416349.83	3743767.90	10.57884	(08020424)	416363.32	3743767.90	8.65600	(09063008)
416379.88	3743767.54	7.89304	(07091024)	416399.88	3743767.54	6.95602	(07010508)
416419.88	3743767.54	6.49025	(09111624)	416439.88	3743767.54	7.52164	(07082624)
416459.88	3743767.54	8.53846	(07082624)	416479.88	3743767.54	9.09847	(07082624)
416499.88	3743767.54	9.20357	(07082624)	416344.22	3743787.36	10.93652	(08020424)
416359.88	3743787.54	9.41062	(09063008)	416379.88	3743787.54	8.77241	(07010508)
416399.88	3743787.54	8.68052	(07082624)	416419.88	3743787.54	9.74811	(07082624)
416439.88	3743787.54	10.70951	(07082624)	416459.88	3743787.54	11.34036	(07082624)
416479.88	3743787.54	10.98597	(07082624)	416499.88	3743787.54	10.39300	(07082624)
416340.71	3743805.95	10.90054	(08020424)	416359.88	3743807.54	9.68921	(09111624)
416379.88	3743807.54	11.07636	(07082624)	416399.88	3743807.54	12.63526	(07082624)
416419.88	3743807.54	13.62376	(07082624)	416439.88	3743807.54	13.86125	(07082624)
416459.88	3743807.54	13.41131	(07082624)	416479.88	3743807.54	12.15423	(07082624)
416495.31	3743807.54	11.05297	(07082624)	416333.49	3743827.31	11.83696	(09111624)
416343.86	3743827.90	11.18135	(07082624)	416359.88	3743827.54	13.15770	(07082624)
416379.88	3743827.54	15.68167	(07082624)	416399.88	3743827.54	16.53994	(07082624)
416419.88	3743827.54	16.57432	(07082624)	416439.88	3743827.54	15.54013	(07082624)
416459.88	3743827.54	13.80502	(07082624)	416479.88	3743827.54	11.87118	(07082624)
416327.66	3743848.44	14.72032	(07082624)	416339.88	3743847.54	15.63771	(07082624)
416359.88	3743847.54	18.01409	(07082624)	416379.88	3743847.54	19.43479	(07082624)
416399.88	3743847.54	18.86187	(07082624)	416419.88	3743847.54	16.84928	(07082624)
416439.88	3743847.54	14.58873	(07082624)	416459.88	3743847.54	12.32499	(07082624)
416479.88	3743847.54	10.18723	(07082624)	416322.96	3743867.72	20.06933	(07082624)
416339.88	3743867.54	21.12583	(07082624)	416359.88	3743867.54	21.51524	(07082624)
416379.88	3743867.54	20.27670	(07082624)	416399.88	3743867.54	17.60392	(07082624)
416419.88	3743867.54	14.67266	(07082624)	416439.88	3743867.54	11.98280	(07082624)
416459.88	3743867.54	9.70747	(07082624)	416479.88	3743867.54	8.42352	(06080624)
416319.88	3743887.54	25.22779	(07082624)	416339.88	3743887.54	23.85829	(07082624)
416359.88	3743887.54	21.19335	(07082624)	416379.88	3743887.54	17.76765	(07082624)
416399.88	3743887.54	14.21193	(07082624)	416419.88	3743887.54	11.13959	(07082624)
416439.88	3743887.54	9.76431	(06080624)	416459.88	3743887.54	9.44675	(06080624)
416474.86	3743886.63	9.13625	(06080624)	416312.31	3743906.99	27.36571	(07082624)
416324.40	3743907.54	24.70236	(07082624)	416339.88	3743907.54	21.23356	(07082624)
416359.88	3743907.54	16.80619	(07082624)	416379.88	3743907.54	12.95504	(07082624)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

RAIL_SS_CO

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	11.40100	(06080624)	416419.88	3743907.54	10.83651	(06080624)
416439.88	3743907.54	10.11713	(06080624)	416459.88	3743907.54	9.34253	(06080624)
416306.58	3743928.08	23.64502	(07082624)	416322.23	3743927.90	18.95798	(07082624)
416339.88	3743927.54	14.78009	(07082624)	416359.88	3743927.54	12.86302	(06080624)
416379.88	3743927.54	12.14570	(06080624)	416399.88	3743927.54	11.28326	(06080624)
416419.88	3743927.54	10.29016	(06080624)	416439.88	3743927.54	9.29636	(06080624)
416459.88	3743927.54	8.38196	(06080624)	416301.87	3743947.72	16.29336	(07082624)
416319.88	3743947.54	13.88822	(06080624)	416339.88	3743947.54	12.87068	(06080624)
416359.88	3743947.54	11.79952	(06080624)	416379.88	3743947.54	10.72402	(06080624)
416399.88	3743947.54	9.67742	(06080624)	416419.88	3743947.54	8.64032	(06080624)
416439.88	3743947.54	7.68906	(06080624)	416459.88	3743947.54	6.86268	(06080624)
416307.12	3743967.18	13.51278	(12111824)	416319.88	3743967.54	11.95211	(12111824)
416339.88	3743967.54	10.24028	(12111824)	416359.88	3743967.54	9.18816	(06080624)
416379.88	3743967.54	8.30181	(06081524)	416399.88	3743967.54	7.54474	(06081524)
416419.88	3743967.54	6.86702	(06081524)	416439.88	3743967.54	6.22936	(06081524)
416319.88	3743987.54	10.66126	(08020424)	416339.88	3743987.54	9.07962	(06092824)
416359.88	3743987.54	8.11346	(06092824)	416379.88	3743987.54	7.38893	(07101424)
416399.88	3743987.54	6.78658	(07101424)	416419.88	3743987.54	6.18677	(07101424)
416439.88	3743987.54	5.65778	(07101424)	416379.88	3744007.54	7.22190	(07101424)
416399.88	3744007.54	6.70878	(07101424)	416419.88	3744007.54	6.12478	(07101424)
416439.88	3744007.54	5.62763	(07101424)	416436.78	3744021.35	5.57726	(07101424)
416510.28	3743748.17	7.64771	(07082624)	416297.59	3743966.85	15.47985	(08020424)
416305.11	3743986.12	12.86901	(08020424)	416291.25	3743985.57	16.33064	(08020424)
416358.87	3744002.60	7.99733	(08020324)	416339.02	3743998.54	9.03793	(08020324)
416319.04	3743996.11	10.62647	(08020324)				

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - PEAK HOUR CO *** 15:04:25
PAGE 24

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

** CONC OF CO 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	60.91101	ON 09032006: AT (416312.31, 3743906.99, 47.98, 47.98, 0.00)	DC	
	HIGH 8TH HIGH VALUE IS	59.98606	ON 08110618: AT (416312.31, 3743906.99, 47.98, 47.98, 0.00)	DC	

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

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - PEAK HOUR CO *** 15:04:25
PAGE 25

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO 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	27.36571	ON 07082624: AT (416312.31, 3743906.99, 47.98, 47.98, 0.00)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 814 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 61 Calm Hours Identified

A Total of 753 Missing Hours Identified (1.72 Percent)

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

******** WARNING MESSAGES ********
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 12010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 2 year gap

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

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - ANNUAL NO2 *** 14:32:46
PAGE 1

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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 144 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 8000000.0 ; 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. Ambient Ratio Method (ARM) Used for NO2 Conversion
with a 1-hour NO2/NOx Ratio of 0.800
with an Annual NO2/NOx Ratio of 0.750
7. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: NO2

**NOTE: Special processing requirements applicable for the 1-hour NO2 NAAQS have been disabled!!!
User has specified non-standard averaging periods:
High ranked 1-hour values are NOT averaged across the number of years modeled, and
complete years of data are NOT required.

**Model Calculates ANNUAL Averages Only

**This Run Includes: 144 Source(s); 1 Source Group(s); and 209 Receptor(s)

with: 1 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 143 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs External File(s) of Concurrent Values for Postprocessing (POSTFILE 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) = 50.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.8 MB of RAM.

**Detailed Error/Message File: RAIL_SS_ANNUAL NOX.ERR
**File for Summary of Results: RAIL_SS_ANNUAL NOX.SUM

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
2825	0	0.65000E-01	416152.8	3743994.4	55.8	12.19	-0.00	0.01	0.01	YES	YES	NO	

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - ANNUAL NO2 *** 14:32:46

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
L0000001	0	0.25385E-03	416203.0	3744218.8	50.3	3.89	3.78	1.81	YES	
L0000002	0	0.25385E-03	416205.1	3744210.9	50.0	3.89	3.78	1.81	YES	
L0000003	0	0.25385E-03	416207.2	3744203.1	49.8	3.89	3.78	1.81	YES	
L0000004	0	0.25385E-03	416209.3	3744195.2	49.5	3.89	3.78	1.81	YES	
L0000005	0	0.25385E-03	416211.4	3744187.4	49.4	3.89	3.78	1.81	YES	
L0000006	0	0.25385E-03	416213.5	3744179.5	49.2	3.89	3.78	1.81	YES	
L0000007	0	0.25385E-03	416215.6	3744171.6	48.9	3.89	3.78	1.81	YES	
L0000008	0	0.25385E-03	416217.8	3744163.8	48.6	3.89	3.78	1.81	YES	
L0000009	0	0.25385E-03	416219.9	3744155.9	48.2	3.89	3.78	1.81	YES	
L0000010	0	0.25385E-03	416222.0	3744148.1	48.1	3.89	3.78	1.81	YES	
L0000011	0	0.25385E-03	416224.1	3744140.2	48.3	3.89	3.78	1.81	YES	
L0000012	0	0.25385E-03	416226.2	3744132.4	48.5	3.89	3.78	1.81	YES	
L0000013	0	0.25385E-03	416228.3	3744124.5	48.6	3.89	3.78	1.81	YES	
L0000014	0	0.25385E-03	416230.4	3744116.7	48.8	3.89	3.78	1.81	YES	
L0000015	0	0.25385E-03	416232.5	3744108.8	49.0	3.89	3.78	1.81	YES	
L0000016	0	0.25385E-03	416234.6	3744101.0	49.1	3.89	3.78	1.81	YES	
L0000017	0	0.25385E-03	416236.8	3744093.1	49.3	3.89	3.78	1.81	YES	
L0000018	0	0.25385E-03	416238.9	3744085.2	49.5	3.89	3.78	1.81	YES	
L0000019	0	0.25385E-03	416241.0	3744077.4	49.5	3.89	3.78	1.81	YES	
L0000020	0	0.25385E-03	416243.1	3744069.5	49.5	3.89	3.78	1.81	YES	
L0000021	0	0.25385E-03	416245.2	3744061.7	49.5	3.89	3.78	1.81	YES	
L0000022	0	0.25385E-03	416247.3	3744053.8	49.5	3.89	3.78	1.81	YES	
L0000023	0	0.25385E-03	416249.4	3744046.0	49.5	3.89	3.78	1.81	YES	
L0000024	0	0.25385E-03	416251.5	3744038.1	49.7	3.89	3.78	1.81	YES	
L0000025	0	0.25385E-03	416253.6	3744030.3	49.9	3.89	3.78	1.81	YES	
L0000026	0	0.25385E-03	416255.7	3744022.4	50.1	3.89	3.78	1.81	YES	
L0000027	0	0.25385E-03	416257.9	3744014.5	50.2	3.89	3.78	1.81	YES	
L0000028	0	0.25385E-03	416260.0	3744006.7	50.4	3.89	3.78	1.81	YES	
L0000029	0	0.25385E-03	416262.1	3743998.8	50.6	3.89	3.78	1.81	YES	
L0000030	0	0.25385E-03	416264.2	3743991.0	50.7	3.89	3.78	1.81	YES	
L0000031	0	0.25385E-03	416266.3	3743983.1	50.8	3.89	3.78	1.81	YES	
L0000032	0	0.25385E-03	416268.4	3743975.3	50.9	3.89	3.78	1.81	YES	
L0000033	0	0.25385E-03	416270.5	3743967.4	50.8	3.89	3.78	1.81	YES	
L0000034	0	0.25385E-03	416272.6	3743959.6	50.3	3.89	3.78	1.81	YES	

L0000035	0	0.25385E-03	416274.7	3743951.7	49.8	3.89	3.78	1.81	YES
L0000036	0	0.25385E-03	416276.8	3743943.8	49.3	3.89	3.78	1.81	YES
L0000037	0	0.25385E-03	416279.0	3743936.0	48.7	3.89	3.78	1.81	YES
L0000038	0	0.25385E-03	416281.1	3743928.1	48.2	3.89	3.78	1.81	YES
L0000039	0	0.25385E-03	416283.2	3743920.3	47.8	3.89	3.78	1.81	YES
L0000040	0	0.25385E-03	416285.3	3743912.4	47.3	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
L0000041	0	0.25385E-03	416287.4	3743904.6	47.1	3.89	3.78	1.81	YES	
L0000042	0	0.25385E-03	416289.5	3743896.7	46.9	3.89	3.78	1.81	YES	
L0000043	0	0.25385E-03	416291.6	3743888.9	46.7	3.89	3.78	1.81	YES	
L0000044	0	0.25385E-03	416293.7	3743881.0	46.5	3.89	3.78	1.81	YES	
L0000045	0	0.25385E-03	416295.8	3743873.2	46.9	3.89	3.78	1.81	YES	
L0000046	0	0.25385E-03	416298.0	3743865.3	47.3	3.89	3.78	1.81	YES	
L0000047	0	0.25385E-03	416300.1	3743857.4	47.7	3.89	3.78	1.81	YES	
L0000048	0	0.25385E-03	416302.2	3743849.6	48.0	3.89	3.78	1.81	YES	
L0000049	0	0.25385E-03	416304.3	3743841.7	48.3	3.89	3.78	1.81	YES	
L0000050	0	0.25385E-03	416306.4	3743833.9	48.5	3.89	3.78	1.81	YES	
L0000051	0	0.25385E-03	416308.5	3743826.0	48.8	3.89	3.78	1.81	YES	
L0000052	0	0.25385E-03	416310.6	3743818.2	49.1	3.89	3.78	1.81	YES	
L0000053	0	0.25385E-03	416312.7	3743810.3	49.5	3.89	3.78	1.81	YES	
L0000054	0	0.25385E-03	416314.8	3743802.5	49.9	3.89	3.78	1.81	YES	
L0000055	0	0.25385E-03	416316.9	3743794.6	50.3	3.89	3.78	1.81	YES	
L0000056	0	0.25385E-03	416319.1	3743786.7	50.6	3.89	3.78	1.81	YES	
L0000057	0	0.25385E-03	416321.2	3743778.9	50.7	3.89	3.78	1.81	YES	
L0000058	0	0.25385E-03	416323.3	3743771.0	50.9	3.89	3.78	1.81	YES	
L0000059	0	0.25385E-03	416325.4	3743763.2	51.0	3.89	3.78	1.81	YES	
L0000060	0	0.25385E-03	416327.5	3743755.3	51.1	3.89	3.78	1.81	YES	
L0000061	0	0.25385E-03	416329.6	3743747.5	51.0	3.89	3.78	1.81	YES	
L0000062	0	0.25385E-03	416331.7	3743739.6	51.0	3.89	3.78	1.81	YES	
L0000063	0	0.25385E-03	416333.8	3743731.8	50.8	3.89	3.78	1.81	YES	
L0000064	0	0.25385E-03	416335.9	3743723.9	50.8	3.89	3.78	1.81	YES	
L0000065	0	0.25385E-03	416338.0	3743716.1	50.9	3.89	3.78	1.81	YES	
L0000066	0	0.25385E-03	416340.2	3743708.2	51.0	3.89	3.78	1.81	YES	
L0000067	0	0.25385E-03	416342.3	3743700.3	51.1	3.89	3.78	1.81	YES	
L0000068	0	0.25385E-03	416344.4	3743692.5	51.0	3.89	3.78	1.81	YES	
L0000069	0	0.25385E-03	416346.5	3743684.6	50.9	3.89	3.78	1.81	YES	
L0000070	0	0.25385E-03	416348.6	3743676.8	50.8	3.89	3.78	1.81	YES	
L0000071	0	0.25385E-03	416350.7	3743668.9	50.7	3.89	3.78	1.81	YES	
L0000072	0	0.25385E-03	416352.8	3743661.1	50.6	3.89	3.78	1.81	YES	
L0000073	0	0.25385E-03	416354.9	3743653.2	50.4	3.89	3.78	1.81	YES	
L0000074	0	0.25385E-03	416357.0	3743645.4	50.3	3.89	3.78	1.81	YES	
L0000075	0	0.25385E-03	416359.2	3743637.5	50.3	3.89	3.78	1.81	YES	
L0000076	0	0.25385E-03	416361.3	3743629.6	50.5	3.89	3.78	1.81	YES	
L0000077	0	0.25385E-03	416363.4	3743621.8	50.7	3.89	3.78	1.81	YES	
L0000078	0	0.25385E-03	416365.5	3743613.9	50.8	3.89	3.78	1.81	YES	
L0000079	0	0.25385E-03	416367.6	3743606.1	50.9	3.89	3.78	1.81	YES	
L0000080	0	0.25385E-03	416369.7	3743598.2	51.0	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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

SOURCE ID	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
L0000081	0	0.25385E-03	416371.8	3743590.4	51.2	3.89	3.78	1.81	YES	
L0000082	0	0.25385E-03	416373.9	3743582.5	51.4	3.89	3.78	1.81	YES	
L0000083	0	0.25385E-03	416376.0	3743574.7	51.9	3.89	3.78	1.81	YES	
L0000084	0	0.25385E-03	416378.1	3743566.8	52.5	3.89	3.78	1.81	YES	
L0000085	0	0.25385E-03	416380.3	3743559.0	52.9	3.89	3.78	1.81	YES	
L0000086	0	0.25385E-03	416382.4	3743551.1	53.4	3.89	3.78	1.81	YES	
L0000087	0	0.25385E-03	416384.5	3743543.2	53.1	3.89	3.78	1.81	YES	
L0000088	0	0.25385E-03	416386.6	3743535.4	52.8	3.89	3.78	1.81	YES	
L0000089	0	0.25385E-03	416388.7	3743527.5	52.4	3.89	3.78	1.81	YES	
L0000090	0	0.25385E-03	416390.8	3743519.7	52.0	3.89	3.78	1.81	YES	
L0000091	0	0.25385E-03	416392.9	3743511.8	51.7	3.89	3.78	1.81	YES	
L0000092	0	0.25385E-03	416395.0	3743504.0	51.5	3.89	3.78	1.81	YES	
L0000093	0	0.25385E-03	416397.1	3743496.1	51.2	3.89	3.78	1.81	YES	
L0000094	0	0.25385E-03	416399.2	3743488.3	51.0	3.89	3.78	1.81	YES	
L0000095	0	0.25385E-03	416401.4	3743480.4	51.1	3.89	3.78	1.81	YES	
L0000096	0	0.25385E-03	416403.5	3743472.5	51.2	3.89	3.78	1.81	YES	
L0000097	0	0.25385E-03	416405.6	3743464.7	51.2	3.89	3.78	1.81	YES	
L0000098	0	0.25385E-03	416407.7	3743456.8	51.1	3.89	3.78	1.81	YES	
L0000099	0	0.25385E-03	416409.8	3743449.0	50.8	3.89	3.78	1.81	YES	
L0000100	0	0.25385E-03	416411.9	3743441.1	50.5	3.89	3.78	1.81	YES	
L0000101	0	0.25385E-03	416414.0	3743433.3	50.2	3.89	3.78	1.81	YES	
L0000102	0	0.25385E-03	416416.1	3743425.4	49.9	3.89	3.78	1.81	YES	
L0000103	0	0.25385E-03	416418.2	3743417.6	49.8	3.89	3.78	1.81	YES	
L0000104	0	0.25385E-03	416420.3	3743409.7	49.8	3.89	3.78	1.81	YES	
L0000105	0	0.25385E-03	416422.5	3743401.9	49.8	3.89	3.78	1.81	YES	
L0000106	0	0.25385E-03	416424.6	3743394.0	49.7	3.89	3.78	1.81	YES	
L0000107	0	0.25385E-03	416426.7	3743386.1	49.5	3.89	3.78	1.81	YES	
L0000108	0	0.25385E-03	416428.8	3743378.3	49.3	3.89	3.78	1.81	YES	
L0000109	0	0.25385E-03	416430.9	3743370.4	49.0	3.89	3.78	1.81	YES	
L0000110	0	0.25385E-03	416433.0	3743362.6	48.8	3.89	3.78	1.81	YES	
L0000111	0	0.25385E-03	416435.1	3743354.7	48.5	3.89	3.78	1.81	YES	
L0000112	0	0.25385E-03	416437.2	3743346.9	48.2	3.89	3.78	1.81	YES	
L0000113	0	0.25385E-03	416439.3	3743339.0	48.0	3.89	3.78	1.81	YES	
L0000114	0	0.25385E-03	416441.5	3743331.2	48.2	3.89	3.78	1.81	YES	
L0000115	0	0.25385E-03	416443.6	3743323.3	48.3	3.89	3.78	1.81	YES	
L0000116	0	0.25385E-03	416445.7	3743315.4	48.4	3.89	3.78	1.81	YES	
L0000117	0	0.25385E-03	416447.8	3743307.6	48.5	3.89	3.78	1.81	YES	
L0000118	0	0.25385E-03	416449.9	3743299.7	48.7	3.89	3.78	1.81	YES	
L0000119	0	0.25385E-03	416452.0	3743291.9	48.9	3.89	3.78	1.81	YES	
L0000120	0	0.25385E-03	416454.1	3743284.0	49.1	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	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
L0000121	0	0.25385E-03	416456.2	3743276.2	49.1	3.89	3.78	1.81	YES	
L0000122	0	0.25385E-03	416458.3	3743268.3	49.1	3.89	3.78	1.81	YES	
L0000123	0	0.25385E-03	416460.4	3743260.5	49.0	3.89	3.78	1.81	YES	
L0000124	0	0.25385E-03	416462.6	3743252.6	49.0	3.89	3.78	1.81	YES	
L0000125	0	0.25385E-03	416464.7	3743244.8	49.1	3.89	3.78	1.81	YES	
L0000126	0	0.25385E-03	416466.8	3743236.9	49.3	3.89	3.78	1.81	YES	
L0000127	0	0.25385E-03	416468.9	3743229.0	49.5	3.89	3.78	1.81	YES	
L0000128	0	0.25385E-03	416471.0	3743221.2	49.6	3.89	3.78	1.81	YES	
L0000129	0	0.25385E-03	416473.1	3743213.3	49.8	3.89	3.78	1.81	YES	
L0000130	0	0.25385E-03	416475.2	3743205.5	50.0	3.89	3.78	1.81	YES	
L0000131	0	0.25385E-03	416477.3	3743197.6	50.2	3.89	3.78	1.81	YES	
L0000132	0	0.25385E-03	416479.4	3743189.8	50.4	3.89	3.78	1.81	YES	
L0000133	0	0.25385E-03	416481.5	3743181.9	50.5	3.89	3.78	1.81	YES	
L0000134	0	0.25385E-03	416483.7	3743174.1	50.6	3.89	3.78	1.81	YES	
L0000135	0	0.25385E-03	416485.8	3743166.2	50.8	3.89	3.78	1.81	YES	

Rail_SS_Annual NOX

L0000136	0	0.25385E-03	416487.9	3743158.3	51.0	3.89	3.78	1.81	YES
L0000137	0	0.25385E-03	416490.0	3743150.5	51.0	3.89	3.78	1.81	YES
L0000138	0	0.25385E-03	416492.1	3743142.6	51.0	3.89	3.78	1.81	YES
L0000139	0	0.25385E-03	416494.2	3743134.8	51.0	3.89	3.78	1.81	YES
L0000140	0	0.25385E-03	416496.3	3743126.9	51.0	3.89	3.78	1.81	YES
L0000141	0	0.25385E-03	416498.4	3743119.1	51.1	3.89	3.78	1.81	YES
L0000142	0	0.25385E-03	416500.5	3743111.2	51.2	3.89	3.78	1.81	YES
L0000143	0	0.25385E-03	416502.7	3743103.4	51.4	3.89	3.78	1.81	YES

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - ANNUAL NO2 *** 14:32:46
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*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
	L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
	L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
	L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
	L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
	L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,
	L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,
	L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,
	L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,
	L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,
	L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,
	L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,
	L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,
	L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,
	L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,
	L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
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*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
	8000000.	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,

L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,

L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,

L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,

L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,

L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,

L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,

L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,

L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,

L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,

L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,

L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,

L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,

L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,

L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,

L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,

L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,

L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
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*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 2825

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	0.0,	0.0,	0.0,	0.0,	0.0,
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,	0.0,
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,	0.0,
9	0.0,	0.0,	0.0,	0.0,	0.0,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	10.7,	55.8,	52.8,	-62.6,	32.5,	12	10.7,	55.4,	55.2,	-68.8,	25.7,
13	10.7,	53.4,	55.9,	-73.0,	18.2,	14	10.7,	49.8,	54.8,	-75.0,	10.1,
15	10.7,	44.6,	52.2,	-74.7,	1.6,	16	10.7,	38.1,	47.9,	-72.1,	-6.8,
17	10.7,	36.7,	46.8,	-69.6,	-15.1,	18	10.7,	43.4,	51.4,	-68.6,	-22.9,
19	0.0,	0.0,	0.0,	0.0,	0.0,	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	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	10.7,	55.8,	52.8,	9.7,	-32.5,	30	10.7,	55.4,	55.2,	13.7,	-25.7,
31	10.7,	53.4,	55.9,	17.2,	-18.2,	32	10.7,	49.8,	54.8,	20.1,	-10.1,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	10.7,	43.4,	51.4,	17.2,	22.9,

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*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

(416414.0, 3743528.5,	52.9,	52.9,	0.0);	(416426.4, 3743529.0,	53.2,	53.2,	0.0);
(416409.3, 3743546.4,	53.8,	53.8,	0.0);	(416419.9, 3743547.5,	53.9,	53.9,	0.0);
(416439.9, 3743547.5,	53.3,	53.3,	0.0);	(416459.9, 3743547.5,	52.0,	52.0,	0.0);
(416479.9, 3743547.5,	50.6,	50.6,	0.0);	(416499.9, 3743547.5,	49.6,	49.6,	0.0);
(416403.3, 3743566.4,	54.1,	54.1,	0.0);	(416419.9, 3743567.5,	54.8,	54.8,	0.0);
(416439.9, 3743567.5,	54.3,	56.0,	0.0);	(416459.9, 3743567.5,	52.6,	58.0,	0.0);
(416479.9, 3743567.5,	51.3,	58.0,	0.0);	(416499.9, 3743567.5,	50.4,	50.4,	0.0);
(416519.9, 3743567.5,	50.2,	50.2,	0.0);	(416539.9, 3743567.5,	50.4,	50.4,	0.0);
(416399.9, 3743587.5,	54.2,	58.0,	0.0);	(416419.9, 3743587.5,	55.7,	55.7,	0.0);
(416439.9, 3743587.5,	55.5,	58.0,	0.0);	(416459.9, 3743587.5,	53.5,	58.0,	0.0);
(416479.9, 3743587.5,	52.0,	58.0,	0.0);	(416499.9, 3743587.5,	51.2,	51.2,	0.0);
(416519.9, 3743587.5,	51.0,	51.0,	0.0);	(416539.9, 3743587.5,	51.2,	51.2,	0.0);
(416393.5, 3743607.4,	54.1,	58.0,	0.0);	(416419.9, 3743607.5,	56.8,	58.0,	0.0);
(416439.9, 3743607.5,	56.8,	58.0,	0.0);	(416459.9, 3743607.5,	54.8,	58.0,	0.0);
(416479.9, 3743607.5,	52.9,	58.0,	0.0);	(416499.9, 3743607.5,	51.6,	51.6,	0.0);
(416519.9, 3743607.5,	51.0,	51.0,	0.0);	(416539.9, 3743607.5,	51.6,	51.6,	0.0);
(416387.8, 3743627.9,	53.0,	58.0,	0.0);	(416399.9, 3743627.5,	54.4,	58.0,	0.0);
(416419.9, 3743627.5,	56.0,	56.0,	0.0);	(416439.9, 3743627.5,	56.4,	56.4,	0.0);
(416459.9, 3743627.5,	55.6,	55.6,	0.0);	(416479.9, 3743627.5,	54.0,	54.0,	0.0);
(416499.9, 3743627.5,	52.6,	52.6,	0.0);	(416519.9, 3743627.5,	51.6,	51.6,	0.0);
(416381.5, 3743647.5,	52.4,	52.4,	0.0);	(416399.9, 3743647.5,	54.2,	54.2,	0.0);
(416419.9, 3743647.5,	55.2,	55.2,	0.0);	(416439.9, 3743647.5,	55.8,	55.8,	0.0);
(416459.9, 3743647.5,	55.8,	55.8,	0.0);	(416479.9, 3743647.5,	54.8,	54.8,	0.0);
(416499.9, 3743647.5,	53.5,	53.5,	0.0);	(416519.9, 3743647.5,	52.0,	52.0,	0.0);
(416379.9, 3743667.5,	52.9,	55.0,	0.0);	(416399.9, 3743667.5,	54.9,	54.9,	0.0);
(416419.9, 3743667.5,	55.0,	55.0,	0.0);	(416439.9, 3743667.5,	55.1,	55.1,	0.0);
(416459.9, 3743667.5,	55.1,	55.1,	0.0);	(416479.9, 3743667.5,	55.0,	55.0,	0.0);
(416499.9, 3743667.5,	54.0,	55.0,	0.0);	(416519.9, 3743667.5,	52.0,	52.0,	0.0);
(416371.8, 3743687.4,	52.6,	52.6,	0.0);	(416379.9, 3743687.5,	52.8,	52.8,	0.0);
(416399.9, 3743687.5,	53.2,	55.0,	0.0);	(416419.9, 3743687.5,	53.2,	53.2,	0.0);
(416439.9, 3743687.5,	53.6,	53.6,	0.0);	(416459.9, 3743687.5,	54.4,	54.4,	0.0);
(416479.9, 3743687.5,	54.0,	54.0,	0.0);	(416499.9, 3743687.5,	53.2,	53.2,	0.0);
(416519.9, 3743687.5,	52.0,	52.0,	0.0);	(416366.2, 3743708.4,	52.5,	52.5,	0.0);
(416379.9, 3743707.5,	52.4,	52.4,	0.0);	(416399.9, 3743707.5,	51.8,	51.8,	0.0);
(416419.9, 3743707.5,	51.8,	51.8,	0.0);	(416439.9, 3743707.5,	52.3,	52.3,	0.0);
(416459.9, 3743707.5,	53.5,	53.5,	0.0);	(416479.9, 3743707.5,	53.0,	53.0,	0.0);
(416499.9, 3743707.5,	52.3,	52.3,	0.0);	(416519.9, 3743707.5,	51.5,	51.5,	0.0);
(416360.4, 3743727.5,	51.7,	51.7,	0.0);	(416379.9, 3743727.5,	51.8,	51.8,	0.0);
(416399.9, 3743727.5,	51.1,	51.1,	0.0);	(416419.9, 3743727.5,	51.1,	51.1,	0.0);
(416439.9, 3743727.5,	51.4,	51.4,	0.0);	(416459.9, 3743727.5,	52.2,	52.2,	0.0);
(416479.9, 3743727.5,	52.1,	52.1,	0.0);	(416499.9, 3743727.5,	51.4,	51.4,	0.0);
(416516.3, 3743727.5,	50.4,	50.4,	0.0);	(416355.5, 3743747.4,	52.1,	52.1,	0.0);
(416364.6, 3743747.9,	52.4,	52.4,	0.0);	(416379.9, 3743747.5,	52.3,	52.3,	0.0);
(416399.9, 3743747.5,	51.6,	51.6,	0.0);	(416419.9, 3743747.5,	51.2,	51.2,	0.0);
(416439.9, 3743747.5,	51.1,	51.1,	0.0);	(416459.9, 3743747.5,	51.4,	51.4,	0.0);

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

(416479.9, 3743747.5,	51.4,	51.4,	0.0);	(416499.9, 3743747.5,	50.9,	50.9,	0.0);
(416349.8, 3743767.9,	52.5,	52.5,	0.0);	(416363.3, 3743767.9,	53.2,	53.2,	0.0);
(416379.9, 3743767.5,	53.2,	53.2,	0.0);	(416399.9, 3743767.5,	52.5,	52.5,	0.0);
(416419.9, 3743767.5,	51.7,	51.7,	0.0);	(416439.9, 3743767.5,	51.2,	51.2,	0.0);
(416459.9, 3743767.5,	51.2,	51.2,	0.0);	(416479.9, 3743767.5,	50.9,	50.9,	0.0);
(416499.9, 3743767.5,	50.5,	50.5,	0.0);	(416344.2, 3743787.4,	52.4,	55.0,	0.0);
(416359.9, 3743787.5,	53.9,	55.0,	0.0);	(416379.9, 3743787.5,	54.5,	54.5,	0.0);
(416399.9, 3743787.5,	53.8,	53.8,	0.0);	(416419.9, 3743787.5,	52.6,	52.6,	0.0);
(416439.9, 3743787.5,	51.9,	51.9,	0.0);	(416459.9, 3743787.5,	51.9,	51.9,	0.0);
(416479.9, 3743787.5,	50.7,	50.7,	0.0);	(416499.9, 3743787.5,	50.0,	50.0,	0.0);
(416340.7, 3743805.9,	51.5,	55.0,	0.0);	(416359.9, 3743807.5,	53.4,	53.4,	0.0);
(416379.9, 3743807.5,	54.1,	54.1,	0.0);	(416399.9, 3743807.5,	53.4,	53.4,	0.0);
(416419.9, 3743807.5,	52.9,	52.9,	0.0);	(416439.9, 3743807.5,	52.4,	52.4,	0.0);
(416459.9, 3743807.5,	52.0,	52.0,	0.0);	(416479.9, 3743807.5,	51.1,	51.1,	0.0);
(416495.3, 3743807.5,	50.5,	50.5,	0.0);	(416333.5, 3743827.3,	50.3,	50.3,	0.0);

(416343.9, 3743827.9, 51.1, 54.0, 0.0); (416359.9, 3743827.5, 52.6, 54.0, 0.0);
(416379.9, 3743827.5, 53.2, 53.2, 0.0); (416399.9, 3743827.5, 52.8, 52.8, 0.0);
(416419.9, 3743827.5, 52.6, 52.6, 0.0); (416439.9, 3743827.5, 52.2, 52.2, 0.0);
(416459.9, 3743827.5, 51.8, 51.8, 0.0); (416479.9, 3743827.5, 51.2, 51.2, 0.0);
(416327.7, 3743848.4, 49.2, 49.2, 0.0); (416339.9, 3743847.5, 50.1, 50.1, 0.0);
(416359.9, 3743847.5, 51.5, 51.5, 0.0); (416379.9, 3743847.5, 52.1, 52.1, 0.0);
(416399.9, 3743847.5, 52.1, 52.1, 0.0); (416419.9, 3743847.5, 51.5, 51.5, 0.0);
(416439.9, 3743847.5, 51.1, 51.1, 0.0); (416459.9, 3743847.5, 51.1, 51.1, 0.0);
(416479.9, 3743847.5, 51.0, 51.0, 0.0); (416323.0, 3743867.7, 48.3, 48.3, 0.0);
(416339.9, 3743867.5, 49.4, 49.4, 0.0); (416359.9, 3743867.5, 50.3, 50.3, 0.0);
(416379.9, 3743867.5, 50.6, 50.6, 0.0); (416399.9, 3743867.5, 50.2, 50.2, 0.0);
(416419.9, 3743867.5, 50.0, 50.0, 0.0); (416439.9, 3743867.5, 50.0, 50.0, 0.0);
(416459.9, 3743867.5, 50.4, 50.4, 0.0); (416479.9, 3743867.5, 50.8, 50.8, 0.0);
(416319.9, 3743887.5, 47.8, 47.8, 0.0); (416339.9, 3743887.5, 49.0, 49.0, 0.0);
(416359.9, 3743887.5, 49.5, 49.5, 0.0); (416379.9, 3743887.5, 49.5, 49.5, 0.0);
(416399.9, 3743887.5, 49.0, 49.0, 0.0); (416419.9, 3743887.5, 49.0, 49.0, 0.0);
(416439.9, 3743887.5, 49.2, 49.2, 0.0); (416459.9, 3743887.5, 49.8, 49.8, 0.0);
(416474.9, 3743886.6, 50.3, 50.3, 0.0); (416312.3, 3743907.0, 48.0, 48.0, 0.0);
(416324.4, 3743907.5, 48.4, 48.4, 0.0); (416339.9, 3743907.5, 49.0, 49.0, 0.0);
(416359.9, 3743907.5, 49.0, 49.0, 0.0); (416379.9, 3743907.5, 49.0, 49.0, 0.0);
(416399.9, 3743907.5, 49.0, 49.0, 0.0); (416419.9, 3743907.5, 49.0, 49.0, 0.0);
(416439.9, 3743907.5, 49.0, 49.0, 0.0); (416459.9, 3743907.5, 49.1, 49.1, 0.0);
(416306.6, 3743928.1, 48.6, 48.6, 0.0); (416322.2, 3743927.9, 49.0, 49.0, 0.0);
(416339.9, 3743927.5, 49.6, 49.6, 0.0); (416359.9, 3743927.5, 49.6, 49.6, 0.0);
(416379.9, 3743927.5, 49.6, 49.6, 0.0); (416399.9, 3743927.5, 49.6, 49.6, 0.0);
(416419.9, 3743927.5, 49.2, 49.2, 0.0); (416439.9, 3743927.5, 49.0, 49.0, 0.0);
(416459.9, 3743927.5, 49.0, 49.0, 0.0); (416301.9, 3743947.7, 49.1, 49.1, 0.0);
(416319.9, 3743947.5, 49.2, 49.2, 0.0); (416339.9, 3743947.5, 49.8, 49.8, 0.0);
(416359.9, 3743947.5, 49.9, 49.9, 0.0); (416379.9, 3743947.5, 50.0, 50.0, 0.0);
(416399.9, 3743947.5, 50.0, 50.0, 0.0); (416419.9, 3743947.5, 49.5, 49.5, 0.0);

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - ANNUAL NO2 *** 14:32:46
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*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

(416439.9, 3743947.5, 49.2, 49.2, 0.0); (416459.9, 3743947.5, 49.0, 49.0, 0.0);
(416307.1, 3743967.2, 49.2, 49.2, 0.0); (416319.9, 3743967.5, 49.0, 49.0, 0.0);
(416339.9, 3743967.5, 49.1, 49.1, 0.0); (416359.9, 3743967.5, 49.7, 49.7, 0.0);
(416379.9, 3743967.5, 50.0, 50.0, 0.0); (416399.9, 3743967.5, 50.0, 50.0, 0.0);
(416419.9, 3743967.5, 49.9, 49.9, 0.0); (416439.9, 3743967.5, 49.6, 49.6, 0.0);
(416319.9, 3743987.5, 47.2, 47.2, 0.0); (416339.9, 3743987.5, 47.2, 47.2, 0.0);
(416359.9, 3743987.5, 48.3, 48.3, 0.0); (416379.9, 3743987.5, 49.2, 49.2, 0.0);
(416399.9, 3743987.5, 50.0, 50.0, 0.0); (416419.9, 3743987.5, 50.0, 50.0, 0.0);
(416439.9, 3743987.5, 49.9, 49.9, 0.0); (416379.9, 3744007.5, 48.7, 48.7, 0.0);
(416399.9, 3744007.5, 50.0, 50.0, 0.0); (416419.9, 3744007.5, 50.0, 50.0, 0.0);
(416439.9, 3744007.5, 50.1, 50.1, 0.0); (416436.8, 3744021.3, 50.2, 50.2, 0.0);
(416510.3, 3743748.2, 50.4, 50.4, 0.0); (416297.6, 3743966.8, 49.7, 49.7, 0.0);
(416305.1, 3743986.1, 47.9, 51.0, 0.0); (416291.2, 3743985.6, 49.3, 49.3, 0.0);
(416358.9, 3744002.6, 47.3, 47.3, 0.0); (416339.0, 3743998.5, 46.1, 46.1, 0.0);
(416319.0, 3743996.1, 46.4, 46.4, 0.0);

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - ANNUAL NO2 *** 14:32:46
PAGE 13
*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 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,

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

Surface file: ..\ANAH8.SFC Met Version: 14134
Profile file: ..\ANAH8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2006 Year: 2006

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
06	01	01	1	01	-2.9	0.060	-9.000	-9.000	-999.	35.	6.6	0.45	1.00	1.00	0.90	39.	9.1	285.4	5.5
06	01	01	1	02	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	64.	9.1	285.4	5.5
06	01	01	1	03	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	103.	9.1	284.9	5.5
06	01	01	1	04	-2.1	0.060	-9.000	-9.000	-999.	35.	9.4	0.45	1.00	1.00	0.90	76.	9.1	284.9	5.5
06	01	01	1	05	-5.9	0.087	-9.000	-9.000	-999.	61.	10.0	0.45	1.00	1.00	1.30	93.	9.1	284.9	5.5
06	01	01	1	06	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	59.	9.1	284.9	5.5
06	01	01	1	07	-6.1	0.087	-9.000	-9.000	-999.	61.	9.6	0.45	1.00	1.00	1.30	58.	9.1	284.2	5.5
06	01	01	1	08	-9.6	0.199	-9.000	-9.000	-999.	213.	73.9	0.45	1.00	0.53	1.80	39.	9.1	284.9	5.5
06	01	01	1	09	33.2	0.322	0.787	0.005	528.	438.	-90.3	0.45	1.00	0.30	2.20	61.	9.1	286.4	5.5
06	01	01	1	10	27.9	0.211	0.832	0.005	742.	239.	-30.3	0.45	1.00	0.23	1.30	187.	9.1	287.0	5.5
06	01	01	1	11	25.2	0.209	0.819	0.005	784.	230.	-32.7	0.45	1.00	0.20	1.30	221.	9.1	287.5	5.5
06	01	01	1	12	75.8	0.233	1.237	0.015	899.	270.	-15.0	0.45	1.00	0.19	1.30	126.	9.1	288.8	5.5
06	01	01	1	13	47.6	0.282	1.084	0.016	963.	359.	-42.3	0.45	1.00	0.19	1.80	77.	9.1	288.8	5.5
06	01	01	1	14	70.8	0.339	1.275	0.017	1053.	473.	-49.4	0.45	1.00	0.20	2.20	50.	9.1	289.2	5.5
06	01	01	1	15	29.3	0.212	0.960	0.017	1088.	244.	-29.3	0.45	1.00	0.24	1.30	179.	9.1	289.2	5.5
06	01	01	1	16	4.4	0.299	0.510	0.017	1091.	393.	-550.5	0.45	1.00	0.32	2.20	116.	9.1	288.1	5.5
06	01	01	1	17	-11.9	0.173	-9.000	-9.000	-999.	182.	39.1	0.45	1.00	0.59	1.80	67.	9.1	287.5	5.5
06	01	01	1	18	-10.6	0.191	-9.000	-9.000	-999.	201.	59.5	0.45	1.00	1.00	1.80	127.	9.1	287.0	5.5
06	01	01	1	19	-10.6	0.191	-9.000	-9.000	-999.	200.	59.1	0.45	1.00	1.00	1.80	145.	9.1	285.9	5.5
06	01	01	1	20	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	71.	9.1	285.4	5.5
06	01	01	1	21	-18.5	0.332	-9.000	-9.000	-999.	458.	177.5	0.45	1.00	1.00	2.70	56.	9.1	284.9	5.5
06	01	01	1	22	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	65.	9.1	285.4	5.5
06	01	01	1	23	-10.6	0.191	-9.000	-9.000	-999.	213.	59.1	0.45	1.00	1.00	1.80	70.	9.1	285.9	5.5
06	01	01	1	24	-14.2	0.257	-9.000	-9.000	-999.	313.	107.1	0.45	1.00	1.00	2.20	66.	9.1	286.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
06	01	01	01	5.5	0	-999.	-99.00	285.4	99.0	-99.00	-99.00
06	01	01	01	9.1	1	39.	0.90	-999.0	99.0	-99.00	-99.00

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

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416413.95	3743528.49	2.18697	416426.40	3743528.99	1.66409
416409.26	3743546.45	2.18346	416419.88	3743547.54	1.71866
416439.88	3743547.54	1.26023	416459.88	3743547.54	1.00687
416479.88	3743547.54	0.84354	416499.88	3743547.54	0.72807
416403.32	3743566.45	2.21141	416419.88	3743567.54	1.56577
416439.88	3743567.54	1.19104	416459.88	3743567.54	0.96907
416479.88	3743567.54	0.82260	416499.88	3743567.54	0.71642
416519.88	3743567.54	0.63659	416539.88	3743567.54	0.57432
416399.88	3743587.54	2.09938	416419.88	3743587.54	1.42391
416439.88	3743587.54	1.12706	416459.88	3743587.54	0.93724
416479.88	3743587.54	0.80335	416499.88	3743587.54	0.70562
416519.88	3743587.54	0.63033	416539.88	3743587.54	0.57045
416393.55	3743607.36	2.16545	416419.88	3743607.54	1.27051
416439.88	3743607.54	1.04019	416459.88	3743607.54	0.91162
416479.88	3743607.54	0.78606	416499.88	3743607.54	0.69537
416519.88	3743607.54	0.62350	416539.88	3743607.54	0.56670
416387.84	3743627.90	2.20922	416399.88	3743627.54	1.71080
416419.88	3743627.54	1.23500	416439.88	3743627.54	1.01366
416459.88	3743627.54	0.88336	416479.88	3743627.54	0.77274
416499.88	3743627.54	0.68641	416519.88	3743627.54	0.61877
416381.51	3743647.54	2.29533	416399.88	3743647.54	1.58401
416419.88	3743647.54	1.21729	416439.88	3743647.54	0.99837
416459.88	3743647.54	0.86154	416479.88	3743647.54	0.76148
416499.88	3743647.54	0.68033	416519.88	3743647.54	0.61479
416379.88	3743667.54	2.11811	416399.88	3743667.54	1.47393
416419.88	3743667.54	1.16756	416439.88	3743667.54	0.97866
416459.88	3743667.54	0.84857	416479.88	3743667.54	0.75234
416499.88	3743667.54	0.67498	416519.88	3743667.54	0.61250
416371.75	3743687.44	2.28587	416379.88	3743687.54	1.91865
416399.88	3743687.54	1.40853	416419.88	3743687.54	1.13468
416439.88	3743687.54	0.95902	416459.88	3743687.54	0.83599
416479.88	3743687.54	0.74450	416499.88	3743687.54	0.67128
416519.88	3743687.54	0.61212	416366.21	3743708.44	2.30421
416379.88	3743707.54	1.76573	416399.88	3743707.54	1.34244
416419.88	3743707.54	1.10130	416439.88	3743707.54	0.94222
416459.88	3743707.54	0.82725	416479.88	3743707.54	0.74024
416499.88	3743707.54	0.67057	416519.88	3743707.54	0.61328
416360.42	3743727.54	2.36848	416379.88	3743727.54	1.64627
416399.88	3743727.54	1.28629	416419.88	3743727.54	1.07232
416439.88	3743727.54	0.92838	416459.88	3743727.54	0.82206

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - ANNUAL NO2 *** 14:32:46
PAGE 16

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416479.88	3743727.54	0.73920	416499.88	3743727.54	0.67206
416516.30	3743727.54	0.62294	416355.49	3743747.36	2.37614
416364.59	3743747.90	1.96325	416379.88	3743747.54	1.55666
416399.88	3743747.54	1.24705	416419.88	3743747.54	1.05341
416439.88	3743747.54	0.91907	416459.88	3743747.54	0.81970
416479.88	3743747.54	0.74055	416499.88	3743747.54	0.67422
416349.83	3743767.90	2.41258	416363.32	3743767.90	1.85495

416379.88	3743767.54	1.48355	416399.88	3743767.54	1.21747
416419.88	3743767.54	1.04299	416439.88	3743767.54	0.91660
416459.88	3743767.54	0.82099	416479.88	3743767.54	0.74305
416499.88	3743767.54	0.67797	416344.22	3743787.36	2.46549
416359.88	3743787.54	1.81461	416379.88	3743787.54	1.41124
416399.88	3743787.54	1.19184	416419.88	3743787.54	1.03876
416439.88	3743787.54	0.91986	416459.88	3743787.54	0.82767
416479.88	3743787.54	0.74833	416499.88	3743787.54	0.68255
416340.71	3743805.95	2.43172	416359.88	3743807.54	1.73088
416379.88	3743807.54	1.38743	416399.88	3743807.54	1.18692
416419.88	3743807.54	1.04048	416439.88	3743807.54	0.92686
416459.88	3743807.54	0.83567	416479.88	3743807.54	0.75718
416495.31	3743807.54	0.70487	416333.49	3743827.31	2.57179
416343.86	3743827.90	2.10732	416359.88	3743827.54	1.68282
416379.88	3743827.54	1.38004	416399.88	3743827.54	1.18910
416419.88	3743827.54	1.04728	416439.88	3743827.54	0.93564
416459.88	3743827.54	0.84354	416479.88	3743827.54	0.76598
416327.66	3743848.44	2.64582	416339.88	3743847.54	2.12262
416359.88	3743847.54	1.65721	416379.88	3743847.54	1.37937
416399.88	3743847.54	1.19342	416419.88	3743847.54	1.05198
416439.88	3743847.54	0.93919	416459.88	3743847.54	0.84844
416479.88	3743847.54	0.77223	416322.96	3743867.72	2.68938
416339.88	3743867.54	2.03068	416359.88	3743867.54	1.62663
416379.88	3743867.54	1.37307	416399.88	3743867.54	1.18838
416419.88	3743867.54	1.04841	416439.88	3743867.54	0.93888
416459.88	3743867.54	0.85057	416479.88	3743867.54	0.77590
416319.88	3743887.54	2.65840	416339.88	3743887.54	1.97066
416359.88	3743887.54	1.60421	416379.88	3743887.54	1.36148
416399.88	3743887.54	1.18067	416419.88	3743887.54	1.04453
416439.88	3743887.54	0.93660	416459.88	3743887.54	0.84867
416474.86	3743886.63	0.79265	416312.31	3743906.99	2.89656
416324.40	3743907.54	2.34630	416339.88	3743907.54	1.93014
416359.88	3743907.54	1.58585	416379.88	3743907.54	1.35233

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416399.88	3743907.54	1.17879	416419.88	3743907.54	1.04322
416439.88	3743907.54	0.93363	416459.88	3743907.54	0.84290
416306.58	3743928.08	3.01889	416322.23	3743927.90	2.33559
416339.88	3743927.54	1.90141	416359.88	3743927.54	1.57688
416379.88	3743927.54	1.34971	416399.88	3743927.54	1.17862
416419.88	3743927.54	1.04027	416439.88	3743927.54	0.92944
416459.88	3743927.54	0.83893	416301.87	3743947.72	3.08916
416319.88	3743947.54	2.32629	416339.88	3743947.54	1.86726
416359.88	3743947.54	1.56385	416379.88	3743947.54	1.34440
416399.88	3743947.54	1.17588	416419.88	3743947.54	1.03739
416439.88	3743947.54	0.92617	416459.88	3743947.54	0.83506
416307.12	3743967.18	2.66244	416319.88	3743967.54	2.24398
416339.88	3743967.54	1.82101	416359.88	3743967.54	1.54422
416379.88	3743967.54	1.33524	416399.88	3743967.54	1.16976
416419.88	3743967.54	1.03709	416439.88	3743967.54	0.92619
416319.88	3743987.54	2.13771	416339.88	3743987.54	1.75739
416359.88	3743987.54	1.50782	416379.88	3743987.54	1.31728
416399.88	3743987.54	1.16540	416419.88	3743987.54	1.03442
416439.88	3743987.54	0.92572	416379.88	3744007.54	1.30267
416399.88	3744007.54	1.16112	416419.88	3744007.54	1.03140

416439.88	3744007.54	0.92526	416436.78	3744021.35	0.93861
416510.28	3743748.17	0.64339	416297.59	3743966.85	3.15295
416305.11	3743986.12	2.58385	416291.25	3743985.57	3.31288
416358.87	3744002.60	1.49375	416339.02	3743998.54	1.73741
416319.04	3743996.11	2.11472			

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

** CONC OF NO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	3.31288 AT (416291.25, 3743985.57, 49.34, 49.34, 0.00) DC	
	2ND HIGHEST VALUE IS	3.15295 AT (416297.59, 3743966.85, 49.74, 49.74, 0.00) DC	
	3RD HIGHEST VALUE IS	3.08916 AT (416301.87, 3743947.72, 49.14, 49.14, 0.00) DC	
	4TH HIGHEST VALUE IS	3.01889 AT (416306.58, 3743928.08, 48.56, 48.56, 0.00) DC	
	5TH HIGHEST VALUE IS	2.89656 AT (416312.31, 3743906.99, 47.98, 47.98, 0.00) DC	
	6TH HIGHEST VALUE IS	2.68938 AT (416322.96, 3743867.72, 48.27, 48.27, 0.00) DC	
	7TH HIGHEST VALUE IS	2.66244 AT (416307.12, 3743967.18, 49.17, 49.17, 0.00) DC	
	8TH HIGHEST VALUE IS	2.65840 AT (416319.88, 3743887.54, 47.83, 47.83, 0.00) DC	
	9TH HIGHEST VALUE IS	2.64582 AT (416327.66, 3743848.44, 49.23, 49.23, 0.00) DC	
	10TH HIGHEST VALUE IS	2.58385 AT (416305.11, 3743986.12, 47.89, 51.00, 0.00) DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 814 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 61 Calm Hours Identified

A Total of 753 Missing Hours Identified (1.72 Percent)

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

******** WARNING MESSAGES ********
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 12010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 2 year gap

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

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*
♀*** AERMOD - VERSION 16216r ***   *** EAST SOUTH STREET PROJECT                              ***        03/31/17
*** AERMET - VERSION  14134 ***   *** RAIL LINE AND STATIONARY SOURCE IMPACTS - MAX 1-HOUR NO2           ***        14:40:05
                                                                                                PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  ARM  URBAN

                                   ***     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   144 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =   8000000.0 ;  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. Ambient Ratio Method (ARM) Used for NO2 Conversion
             with a  1-hour NO2/NOx Ratio of  0.800
             with an Annual NO2/NOx Ratio of  0.750
        7. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  NO2

**NOTE: Special processing requirements applicable for the 1-hour NO2 NAAQS have been disabled!!!
        User has specified H1H on the POLLUTID keyword.
        High ranked 1-hour values are NOT averaged across the number of years modeled, and
        complete years of data are NOT required.

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

**This Run Includes:     144 Source(s);       1 Source Group(s); and     209 Receptor(s)

               with:      1 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:    143 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with      0 line(s)


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

**The AERMET Input Meteorological Data Version Date:  14134

**Output Options Selected:
         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) = 50.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.8 MB of RAM.

**Detailed Error/Message File: RAIL_SS_NO21.ERR
**File for Summary of Results: RAIL_SS_NO21.SUM

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
2825	0	0.65000E-01	416152.8	3743994.4	55.8	12.19	-0.00	0.01	0.01	YES	YES	NO	

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - MAX 1-HOUR NO2 *** 14:40:05

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
L0000001	0	0.81818E-03	416203.0	3744218.8	50.3	3.89	3.78	1.81	YES	
L0000002	0	0.81818E-03	416205.1	3744210.9	50.0	3.89	3.78	1.81	YES	
L0000003	0	0.81818E-03	416207.2	3744203.1	49.8	3.89	3.78	1.81	YES	
L0000004	0	0.81818E-03	416209.3	3744195.2	49.5	3.89	3.78	1.81	YES	
L0000005	0	0.81818E-03	416211.4	3744187.4	49.4	3.89	3.78	1.81	YES	
L0000006	0	0.81818E-03	416213.5	3744179.5	49.2	3.89	3.78	1.81	YES	
L0000007	0	0.81818E-03	416215.6	3744171.6	48.9	3.89	3.78	1.81	YES	
L0000008	0	0.81818E-03	416217.8	3744163.8	48.6	3.89	3.78	1.81	YES	
L0000009	0	0.81818E-03	416219.9	3744155.9	48.2	3.89	3.78	1.81	YES	
L0000010	0	0.81818E-03	416222.0	3744148.1	48.1	3.89	3.78	1.81	YES	
L0000011	0	0.81818E-03	416224.1	3744140.2	48.3	3.89	3.78	1.81	YES	
L0000012	0	0.81818E-03	416226.2	3744132.4	48.5	3.89	3.78	1.81	YES	
L0000013	0	0.81818E-03	416228.3	3744124.5	48.6	3.89	3.78	1.81	YES	
L0000014	0	0.81818E-03	416230.4	3744116.7	48.8	3.89	3.78	1.81	YES	
L0000015	0	0.81818E-03	416232.5	3744108.8	49.0	3.89	3.78	1.81	YES	
L0000016	0	0.81818E-03	416234.6	3744101.0	49.1	3.89	3.78	1.81	YES	
L0000017	0	0.81818E-03	416236.8	3744093.1	49.3	3.89	3.78	1.81	YES	
L0000018	0	0.81818E-03	416238.9	3744085.2	49.5	3.89	3.78	1.81	YES	
L0000019	0	0.81818E-03	416241.0	3744077.4	49.5	3.89	3.78	1.81	YES	
L0000020	0	0.81818E-03	416243.1	3744069.5	49.5	3.89	3.78	1.81	YES	
L0000021	0	0.81818E-03	416245.2	3744061.7	49.5	3.89	3.78	1.81	YES	
L0000022	0	0.81818E-03	416247.3	3744053.8	49.5	3.89	3.78	1.81	YES	
L0000023	0	0.81818E-03	416249.4	3744046.0	49.5	3.89	3.78	1.81	YES	
L0000024	0	0.81818E-03	416251.5	3744038.1	49.7	3.89	3.78	1.81	YES	
L0000025	0	0.81818E-03	416253.6	3744030.3	49.9	3.89	3.78	1.81	YES	
L0000026	0	0.81818E-03	416255.7	3744022.4	50.1	3.89	3.78	1.81	YES	
L0000027	0	0.81818E-03	416257.9	3744014.5	50.2	3.89	3.78	1.81	YES	
L0000028	0	0.81818E-03	416260.0	3744006.7	50.4	3.89	3.78	1.81	YES	
L0000029	0	0.81818E-03	416262.1	3743998.8	50.6	3.89	3.78	1.81	YES	
L0000030	0	0.81818E-03	416264.2	3743991.0	50.7	3.89	3.78	1.81	YES	
L0000031	0	0.81818E-03	416266.3	3743983.1	50.8	3.89	3.78	1.81	YES	
L0000032	0	0.81818E-03	416268.4	3743975.3	50.9	3.89	3.78	1.81	YES	
L0000033	0	0.81818E-03	416270.5	3743967.4	50.8	3.89	3.78	1.81	YES	
L0000034	0	0.81818E-03	416272.6	3743959.6	50.3	3.89	3.78	1.81	YES	
L0000035	0	0.81818E-03	416274.7	3743951.7	49.8	3.89	3.78	1.81	YES	

L0000036	0	0.81818E-03	416276.8	3743943.8	49.3	3.89	3.78	1.81	YES
L0000037	0	0.81818E-03	416279.0	3743936.0	48.7	3.89	3.78	1.81	YES
L0000038	0	0.81818E-03	416281.1	3743928.1	48.2	3.89	3.78	1.81	YES
L0000039	0	0.81818E-03	416283.2	3743920.3	47.8	3.89	3.78	1.81	YES
L0000040	0	0.81818E-03	416285.3	3743912.4	47.3	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
L0000041	0	0.81818E-03	416287.4	3743904.6	47.1	3.89	3.78	1.81	YES	
L0000042	0	0.81818E-03	416289.5	3743896.7	46.9	3.89	3.78	1.81	YES	
L0000043	0	0.81818E-03	416291.6	3743888.9	46.7	3.89	3.78	1.81	YES	
L0000044	0	0.81818E-03	416293.7	3743881.0	46.5	3.89	3.78	1.81	YES	
L0000045	0	0.81818E-03	416295.8	3743873.2	46.9	3.89	3.78	1.81	YES	
L0000046	0	0.81818E-03	416298.0	3743865.3	47.3	3.89	3.78	1.81	YES	
L0000047	0	0.81818E-03	416300.1	3743857.4	47.7	3.89	3.78	1.81	YES	
L0000048	0	0.81818E-03	416302.2	3743849.6	48.0	3.89	3.78	1.81	YES	
L0000049	0	0.81818E-03	416304.3	3743841.7	48.3	3.89	3.78	1.81	YES	
L0000050	0	0.81818E-03	416306.4	3743833.9	48.5	3.89	3.78	1.81	YES	
L0000051	0	0.81818E-03	416308.5	3743826.0	48.8	3.89	3.78	1.81	YES	
L0000052	0	0.81818E-03	416310.6	3743818.2	49.1	3.89	3.78	1.81	YES	
L0000053	0	0.81818E-03	416312.7	3743810.3	49.5	3.89	3.78	1.81	YES	
L0000054	0	0.81818E-03	416314.8	3743802.5	49.9	3.89	3.78	1.81	YES	
L0000055	0	0.81818E-03	416316.9	3743794.6	50.3	3.89	3.78	1.81	YES	
L0000056	0	0.81818E-03	416319.1	3743786.7	50.6	3.89	3.78	1.81	YES	
L0000057	0	0.81818E-03	416321.2	3743778.9	50.7	3.89	3.78	1.81	YES	
L0000058	0	0.81818E-03	416323.3	3743771.0	50.9	3.89	3.78	1.81	YES	
L0000059	0	0.81818E-03	416325.4	3743763.2	51.0	3.89	3.78	1.81	YES	
L0000060	0	0.81818E-03	416327.5	3743755.3	51.1	3.89	3.78	1.81	YES	
L0000061	0	0.81818E-03	416329.6	3743747.5	51.0	3.89	3.78	1.81	YES	
L0000062	0	0.81818E-03	416331.7	3743739.6	51.0	3.89	3.78	1.81	YES	
L0000063	0	0.81818E-03	416333.8	3743731.8	50.8	3.89	3.78	1.81	YES	
L0000064	0	0.81818E-03	416335.9	3743723.9	50.8	3.89	3.78	1.81	YES	
L0000065	0	0.81818E-03	416338.0	3743716.1	50.9	3.89	3.78	1.81	YES	
L0000066	0	0.81818E-03	416340.2	3743708.2	51.0	3.89	3.78	1.81	YES	
L0000067	0	0.81818E-03	416342.3	3743700.3	51.1	3.89	3.78	1.81	YES	
L0000068	0	0.81818E-03	416344.4	3743692.5	51.0	3.89	3.78	1.81	YES	
L0000069	0	0.81818E-03	416346.5	3743684.6	50.9	3.89	3.78	1.81	YES	
L0000070	0	0.81818E-03	416348.6	3743676.8	50.8	3.89	3.78	1.81	YES	
L0000071	0	0.81818E-03	416350.7	3743668.9	50.7	3.89	3.78	1.81	YES	
L0000072	0	0.81818E-03	416352.8	3743661.1	50.6	3.89	3.78	1.81	YES	
L0000073	0	0.81818E-03	416354.9	3743653.2	50.4	3.89	3.78	1.81	YES	
L0000074	0	0.81818E-03	416357.0	3743645.4	50.3	3.89	3.78	1.81	YES	
L0000075	0	0.81818E-03	416359.2	3743637.5	50.3	3.89	3.78	1.81	YES	
L0000076	0	0.81818E-03	416361.3	3743629.6	50.5	3.89	3.78	1.81	YES	
L0000077	0	0.81818E-03	416363.4	3743621.8	50.7	3.89	3.78	1.81	YES	
L0000078	0	0.81818E-03	416365.5	3743613.9	50.8	3.89	3.78	1.81	YES	
L0000079	0	0.81818E-03	416367.6	3743606.1	50.9	3.89	3.78	1.81	YES	
L0000080	0	0.81818E-03	416369.7	3743598.2	51.0	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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

L0000081	0	0.81818E-03	416371.8	3743590.4	51.2	3.89	3.78	1.81	YES
L0000082	0	0.81818E-03	416373.9	3743582.5	51.4	3.89	3.78	1.81	YES
L0000083	0	0.81818E-03	416376.0	3743574.7	51.9	3.89	3.78	1.81	YES
L0000084	0	0.81818E-03	416378.1	3743566.8	52.5	3.89	3.78	1.81	YES
L0000085	0	0.81818E-03	416380.3	3743559.0	52.9	3.89	3.78	1.81	YES
L0000086	0	0.81818E-03	416382.4	3743551.1	53.4	3.89	3.78	1.81	YES
L0000087	0	0.81818E-03	416384.5	3743543.2	53.1	3.89	3.78	1.81	YES
L0000088	0	0.81818E-03	416386.6	3743535.4	52.8	3.89	3.78	1.81	YES
L0000089	0	0.81818E-03	416388.7	3743527.5	52.4	3.89	3.78	1.81	YES
L0000090	0	0.81818E-03	416390.8	3743519.7	52.0	3.89	3.78	1.81	YES
L0000091	0	0.81818E-03	416392.9	3743511.8	51.7	3.89	3.78	1.81	YES
L0000092	0	0.81818E-03	416395.0	3743504.0	51.5	3.89	3.78	1.81	YES
L0000093	0	0.81818E-03	416397.1	3743496.1	51.2	3.89	3.78	1.81	YES
L0000094	0	0.81818E-03	416399.2	3743488.3	51.0	3.89	3.78	1.81	YES
L0000095	0	0.81818E-03	416401.4	3743480.4	51.1	3.89	3.78	1.81	YES
L0000096	0	0.81818E-03	416403.5	3743472.5	51.2	3.89	3.78	1.81	YES
L0000097	0	0.81818E-03	416405.6	3743464.7	51.2	3.89	3.78	1.81	YES
L0000098	0	0.81818E-03	416407.7	3743456.8	51.1	3.89	3.78	1.81	YES
L0000099	0	0.81818E-03	416409.8	3743449.0	50.8	3.89	3.78	1.81	YES
L0000100	0	0.81818E-03	416411.9	3743441.1	50.5	3.89	3.78	1.81	YES
L0000101	0	0.81818E-03	416414.0	3743433.3	50.2	3.89	3.78	1.81	YES
L0000102	0	0.81818E-03	416416.1	3743425.4	49.9	3.89	3.78	1.81	YES
L0000103	0	0.81818E-03	416418.2	3743417.6	49.8	3.89	3.78	1.81	YES
L0000104	0	0.81818E-03	416420.3	3743409.7	49.8	3.89	3.78	1.81	YES
L0000105	0	0.81818E-03	416422.5	3743401.9	49.8	3.89	3.78	1.81	YES
L0000106	0	0.81818E-03	416424.6	3743394.0	49.7	3.89	3.78	1.81	YES
L0000107	0	0.81818E-03	416426.7	3743386.1	49.5	3.89	3.78	1.81	YES
L0000108	0	0.81818E-03	416428.8	3743378.3	49.3	3.89	3.78	1.81	YES
L0000109	0	0.81818E-03	416430.9	3743370.4	49.0	3.89	3.78	1.81	YES
L0000110	0	0.81818E-03	416433.0	3743362.6	48.8	3.89	3.78	1.81	YES
L0000111	0	0.81818E-03	416435.1	3743354.7	48.5	3.89	3.78	1.81	YES
L0000112	0	0.81818E-03	416437.2	3743346.9	48.2	3.89	3.78	1.81	YES
L0000113	0	0.81818E-03	416439.3	3743339.0	48.0	3.89	3.78	1.81	YES
L0000114	0	0.81818E-03	416441.5	3743331.2	48.2	3.89	3.78	1.81	YES
L0000115	0	0.81818E-03	416443.6	3743323.3	48.3	3.89	3.78	1.81	YES
L0000116	0	0.81818E-03	416445.7	3743315.4	48.4	3.89	3.78	1.81	YES
L0000117	0	0.81818E-03	416447.8	3743307.6	48.5	3.89	3.78	1.81	YES
L0000118	0	0.81818E-03	416449.9	3743299.7	48.7	3.89	3.78	1.81	YES
L0000119	0	0.81818E-03	416452.0	3743291.9	48.9	3.89	3.78	1.81	YES
L0000120	0	0.81818E-03	416454.1	3743284.0	49.1	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
L0000121	0	0.81818E-03	416456.2	3743276.2	49.1	3.89	3.78	1.81	YES	
L0000122	0	0.81818E-03	416458.3	3743268.3	49.1	3.89	3.78	1.81	YES	
L0000123	0	0.81818E-03	416460.4	3743260.5	49.0	3.89	3.78	1.81	YES	
L0000124	0	0.81818E-03	416462.6	3743252.6	49.0	3.89	3.78	1.81	YES	
L0000125	0	0.81818E-03	416464.7	3743244.8	49.1	3.89	3.78	1.81	YES	
L0000126	0	0.81818E-03	416466.8	3743236.9	49.3	3.89	3.78	1.81	YES	
L0000127	0	0.81818E-03	416468.9	3743229.0	49.5	3.89	3.78	1.81	YES	
L0000128	0	0.81818E-03	416471.0	3743221.2	49.6	3.89	3.78	1.81	YES	
L0000129	0	0.81818E-03	416473.1	3743213.3	49.8	3.89	3.78	1.81	YES	
L0000130	0	0.81818E-03	416475.2	3743205.5	50.0	3.89	3.78	1.81	YES	
L0000131	0	0.81818E-03	416477.3	3743197.6	50.2	3.89	3.78	1.81	YES	
L0000132	0	0.81818E-03	416479.4	3743189.8	50.4	3.89	3.78	1.81	YES	
L0000133	0	0.81818E-03	416481.5	3743181.9	50.5	3.89	3.78	1.81	YES	
L0000134	0	0.81818E-03	416483.7	3743174.1	50.6	3.89	3.78	1.81	YES	
L0000135	0	0.81818E-03	416485.8	3743166.2	50.8	3.89	3.78	1.81	YES	
L0000136	0	0.81818E-03	416487.9	3743158.3	51.0	3.89	3.78	1.81	YES	

L0000137	0	0.81818E-03	416490.0	3743150.5	51.0	3.89	3.78	1.81	YES
L0000138	0	0.81818E-03	416492.1	3743142.6	51.0	3.89	3.78	1.81	YES
L0000139	0	0.81818E-03	416494.2	3743134.8	51.0	3.89	3.78	1.81	YES
L0000140	0	0.81818E-03	416496.3	3743126.9	51.0	3.89	3.78	1.81	YES
L0000141	0	0.81818E-03	416498.4	3743119.1	51.1	3.89	3.78	1.81	YES
L0000142	0	0.81818E-03	416500.5	3743111.2	51.2	3.89	3.78	1.81	YES
L0000143	0	0.81818E-03	416502.7	3743103.4	51.4	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 , L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 , L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 , L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 , L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 , L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 , L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 , L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 , L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 , L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 , L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 , L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
	8000000.	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,

L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,

L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,

L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,

L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,

L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,

L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,

L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,

L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,

L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,

L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,

L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,

L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,

L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,

L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,

L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,

L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 2825

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	0.0,	0.0,	0.0,	0.0,	0.0,
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,	0.0,
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,	0.0,
9	0.0,	0.0,	0.0,	0.0,	0.0,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	10.7,	54.2,	50.7,	-63.3,	32.0,	12	10.7,	53.9,	53.3,	-69.6,	24.9,
13	10.7,	51.9,	54.2,	-73.7,	17.1,	14	10.7,	48.4,	53.6,	-75.6,	8.7,
15	10.7,	43.4,	51.3,	-75.3,	0.1,	16	10.7,	37.1,	47.4,	-72.6,	-8.5,
17	10.7,	34.2,	45.5,	-69.4,	-16.9,	18	10.7,	41.0,	49.9,	-68.0,	-24.7,
19	0.0,	0.0,	0.0,	0.0,	0.0,	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	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	10.7,	54.2,	50.7,	12.6,	-32.0,	30	10.7,	53.9,	53.3,	16.3,	-24.9,
31	10.7,	51.9,	54.2,	19.5,	-17.1,	32	0.0,	0.0,	0.0,	0.0,	0.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	10.7,	41.0,	49.9,	18.1,	24.7,

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

(416414.0, 3743528.5,	52.9,	52.9,	0.0);	(416426.4, 3743529.0,	53.2,	53.2,	0.0);
(416409.3, 3743546.4,	53.8,	53.8,	0.0);	(416419.9, 3743547.5,	53.9,	53.9,	0.0);
(416439.9, 3743547.5,	53.3,	53.3,	0.0);	(416459.9, 3743547.5,	52.0,	52.0,	0.0);
(416479.9, 3743547.5,	50.6,	50.6,	0.0);	(416499.9, 3743547.5,	49.6,	49.6,	0.0);
(416403.3, 3743566.4,	54.1,	54.1,	0.0);	(416419.9, 3743567.5,	54.8,	54.8,	0.0);
(416439.9, 3743567.5,	54.3,	56.0,	0.0);	(416459.9, 3743567.5,	52.6,	58.0,	0.0);
(416479.9, 3743567.5,	51.3,	58.0,	0.0);	(416499.9, 3743567.5,	50.4,	50.4,	0.0);
(416519.9, 3743567.5,	50.2,	50.2,	0.0);	(416539.9, 3743567.5,	50.4,	50.4,	0.0);
(416399.9, 3743587.5,	54.2,	58.0,	0.0);	(416419.9, 3743587.5,	55.7,	55.7,	0.0);
(416439.9, 3743587.5,	55.5,	58.0,	0.0);	(416459.9, 3743587.5,	53.5,	58.0,	0.0);
(416479.9, 3743587.5,	52.0,	58.0,	0.0);	(416499.9, 3743587.5,	51.2,	51.2,	0.0);
(416519.9, 3743587.5,	51.0,	51.0,	0.0);	(416539.9, 3743587.5,	51.2,	51.2,	0.0);
(416393.5, 3743607.4,	54.1,	58.0,	0.0);	(416419.9, 3743607.5,	56.8,	58.0,	0.0);
(416439.9, 3743607.5,	56.8,	58.0,	0.0);	(416459.9, 3743607.5,	54.8,	58.0,	0.0);
(416479.9, 3743607.5,	52.9,	58.0,	0.0);	(416499.9, 3743607.5,	51.6,	51.6,	0.0);
(416519.9, 3743607.5,	51.0,	51.0,	0.0);	(416539.9, 3743607.5,	51.6,	51.6,	0.0);
(416387.8, 3743627.9,	53.0,	58.0,	0.0);	(416399.9, 3743627.5,	54.4,	58.0,	0.0);
(416419.9, 3743627.5,	56.0,	56.0,	0.0);	(416439.9, 3743627.5,	56.4,	56.4,	0.0);
(416459.9, 3743627.5,	55.6,	55.6,	0.0);	(416479.9, 3743627.5,	54.0,	54.0,	0.0);
(416499.9, 3743627.5,	52.6,	52.6,	0.0);	(416519.9, 3743627.5,	51.6,	51.6,	0.0);
(416381.5, 3743647.5,	52.4,	52.4,	0.0);	(416399.9, 3743647.5,	54.2,	54.2,	0.0);
(416419.9, 3743647.5,	55.2,	55.2,	0.0);	(416439.9, 3743647.5,	55.8,	55.8,	0.0);
(416459.9, 3743647.5,	55.8,	55.8,	0.0);	(416479.9, 3743647.5,	54.8,	54.8,	0.0);
(416499.9, 3743647.5,	53.5,	53.5,	0.0);	(416519.9, 3743647.5,	52.0,	52.0,	0.0);
(416379.9, 3743667.5,	52.9,	55.0,	0.0);	(416399.9, 3743667.5,	54.9,	54.9,	0.0);
(416419.9, 3743667.5,	55.0,	55.0,	0.0);	(416439.9, 3743667.5,	55.1,	55.1,	0.0);
(416459.9, 3743667.5,	55.1,	55.1,	0.0);	(416479.9, 3743667.5,	55.0,	55.0,	0.0);
(416499.9, 3743667.5,	54.0,	55.0,	0.0);	(416519.9, 3743667.5,	52.0,	52.0,	0.0);
(416371.8, 3743687.4,	52.6,	52.6,	0.0);	(416379.9, 3743687.5,	52.8,	52.8,	0.0);
(416399.9, 3743687.5,	53.2,	55.0,	0.0);	(416419.9, 3743687.5,	53.2,	53.2,	0.0);
(416439.9, 3743687.5,	53.6,	53.6,	0.0);	(416459.9, 3743687.5,	54.4,	54.4,	0.0);
(416479.9, 3743687.5,	54.0,	54.0,	0.0);	(416499.9, 3743687.5,	53.2,	53.2,	0.0);
(416519.9, 3743687.5,	52.0,	52.0,	0.0);	(416366.2, 3743708.4,	52.5,	52.5,	0.0);
(416379.9, 3743707.5,	52.4,	52.4,	0.0);	(416399.9, 3743707.5,	51.8,	51.8,	0.0);
(416419.9, 3743707.5,	51.8,	51.8,	0.0);	(416439.9, 3743707.5,	52.3,	52.3,	0.0);
(416459.9, 3743707.5,	53.5,	53.5,	0.0);	(416479.9, 3743707.5,	53.0,	53.0,	0.0);
(416499.9, 3743707.5,	52.3,	52.3,	0.0);	(416519.9, 3743707.5,	51.5,	51.5,	0.0);
(416360.4, 3743727.5,	51.7,	51.7,	0.0);	(416379.9, 3743727.5,	51.8,	51.8,	0.0);
(416399.9, 3743727.5,	51.1,	51.1,	0.0);	(416419.9, 3743727.5,	51.1,	51.1,	0.0);
(416439.9, 3743727.5,	51.4,	51.4,	0.0);	(416459.9, 3743727.5,	52.2,	52.2,	0.0);
(416479.9, 3743727.5,	52.1,	52.1,	0.0);	(416499.9, 3743727.5,	51.4,	51.4,	0.0);
(416516.3, 3743727.5,	50.4,	50.4,	0.0);	(416355.5, 3743747.4,	52.1,	52.1,	0.0);
(416364.6, 3743747.9,	52.4,	52.4,	0.0);	(416379.9, 3743747.5,	52.3,	52.3,	0.0);
(416399.9, 3743747.5,	51.6,	51.6,	0.0);	(416419.9, 3743747.5,	51.2,	51.2,	0.0);
(416439.9, 3743747.5,	51.1,	51.1,	0.0);	(416459.9, 3743747.5,	51.4,	51.4,	0.0);

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

(416479.9, 3743747.5,	51.4,	51.4,	0.0);	(416499.9, 3743747.5,	50.9,	50.9,	0.0);
(416349.8, 3743767.9,	52.5,	52.5,	0.0);	(416363.3, 3743767.9,	53.2,	53.2,	0.0);
(416379.9, 3743767.5,	53.2,	53.2,	0.0);	(416399.9, 3743767.5,	52.5,	52.5,	0.0);
(416419.9, 3743767.5,	51.7,	51.7,	0.0);	(416439.9, 3743767.5,	51.2,	51.2,	0.0);
(416459.9, 3743767.5,	51.2,	51.2,	0.0);	(416479.9, 3743767.5,	50.9,	50.9,	0.0);
(416499.9, 3743767.5,	50.5,	50.5,	0.0);	(416344.2, 3743787.4,	52.4,	55.0,	0.0);
(416359.9, 3743787.5,	53.9,	55.0,	0.0);	(416379.9, 3743787.5,	54.5,	54.5,	0.0);
(416399.9, 3743787.5,	53.8,	53.8,	0.0);	(416419.9, 3743787.5,	52.6,	52.6,	0.0);
(416439.9, 3743787.5,	51.9,	51.9,	0.0);	(416459.9, 3743787.5,	51.9,	51.9,	0.0);
(416479.9, 3743787.5,	50.7,	50.7,	0.0);	(416499.9, 3743787.5,	50.0,	50.0,	0.0);
(416340.7, 3743805.9,	51.5,	55.0,	0.0);	(416359.9, 3743807.5,	53.4,	53.4,	0.0);
(416379.9, 3743807.5,	54.1,	54.1,	0.0);	(416399.9, 3743807.5,	53.4,	53.4,	0.0);
(416419.9, 3743807.5,	52.9,	52.9,	0.0);	(416439.9, 3743807.5,	52.4,	52.4,	0.0);
(416459.9, 3743807.5,	52.0,	52.0,	0.0);	(416479.9, 3743807.5,	51.1,	51.1,	0.0);
(416495.3, 3743807.5,	50.5,	50.5,	0.0);	(416333.5, 3743827.3,	50.3,	50.3,	0.0);
(416343.9, 3743827.9,	51.1,	54.0,	0.0);	(416359.9, 3743827.5,	52.6,	54.0,	0.0);

(416379.9, 3743827.5, 53.2, 53.2, 0.0); (416399.9, 3743827.5, 52.8, 52.8, 0.0);
(416419.9, 3743827.5, 52.6, 52.6, 0.0); (416439.9, 3743827.5, 52.2, 52.2, 0.0);
(416459.9, 3743827.5, 51.8, 51.8, 0.0); (416479.9, 3743827.5, 51.2, 51.2, 0.0);
(416327.7, 3743848.4, 49.2, 49.2, 0.0); (416339.9, 3743847.5, 50.1, 50.1, 0.0);
(416359.9, 3743847.5, 51.5, 51.5, 0.0); (416379.9, 3743847.5, 52.1, 52.1, 0.0);
(416399.9, 3743847.5, 52.1, 52.1, 0.0); (416419.9, 3743847.5, 51.5, 51.5, 0.0);
(416439.9, 3743847.5, 51.1, 51.1, 0.0); (416459.9, 3743847.5, 51.1, 51.1, 0.0);
(416479.9, 3743847.5, 51.0, 51.0, 0.0); (416323.0, 3743867.7, 48.3, 48.3, 0.0);
(416339.9, 3743867.5, 49.4, 49.4, 0.0); (416359.9, 3743867.5, 50.3, 50.3, 0.0);
(416379.9, 3743867.5, 50.6, 50.6, 0.0); (416399.9, 3743867.5, 50.2, 50.2, 0.0);
(416419.9, 3743867.5, 50.0, 50.0, 0.0); (416439.9, 3743867.5, 50.0, 50.0, 0.0);
(416459.9, 3743867.5, 50.4, 50.4, 0.0); (416479.9, 3743867.5, 50.8, 50.8, 0.0);
(416319.9, 3743887.5, 47.8, 47.8, 0.0); (416339.9, 3743887.5, 49.0, 49.0, 0.0);
(416359.9, 3743887.5, 49.5, 49.5, 0.0); (416379.9, 3743887.5, 49.5, 49.5, 0.0);
(416399.9, 3743887.5, 49.0, 49.0, 0.0); (416419.9, 3743887.5, 49.0, 49.0, 0.0);
(416439.9, 3743887.5, 49.2, 49.2, 0.0); (416459.9, 3743887.5, 49.8, 49.8, 0.0);
(416474.9, 3743886.6, 50.3, 50.3, 0.0); (416312.3, 3743907.0, 48.0, 48.0, 0.0);
(416324.4, 3743907.5, 48.4, 48.4, 0.0); (416339.9, 3743907.5, 49.0, 49.0, 0.0);
(416359.9, 3743907.5, 49.0, 49.0, 0.0); (416379.9, 3743907.5, 49.0, 49.0, 0.0);
(416399.9, 3743907.5, 49.0, 49.0, 0.0); (416419.9, 3743907.5, 49.0, 49.0, 0.0);
(416439.9, 3743907.5, 49.0, 49.0, 0.0); (416459.9, 3743907.5, 49.1, 49.1, 0.0);
(416306.6, 3743928.1, 48.6, 48.6, 0.0); (416322.2, 3743927.9, 49.0, 49.0, 0.0);
(416339.9, 3743927.5, 49.6, 49.6, 0.0); (416359.9, 3743927.5, 49.6, 49.6, 0.0);
(416379.9, 3743927.5, 49.6, 49.6, 0.0); (416399.9, 3743927.5, 49.6, 49.6, 0.0);
(416419.9, 3743927.5, 49.2, 49.2, 0.0); (416439.9, 3743927.5, 49.0, 49.0, 0.0);
(416459.9, 3743927.5, 49.0, 49.0, 0.0); (416301.9, 3743947.7, 49.1, 49.1, 0.0);
(416319.9, 3743947.5, 49.2, 49.2, 0.0); (416339.9, 3743947.5, 49.8, 49.8, 0.0);
(416359.9, 3743947.5, 49.9, 49.9, 0.0); (416379.9, 3743947.5, 50.0, 50.0, 0.0);
(416399.9, 3743947.5, 50.0, 50.0, 0.0); (416419.9, 3743947.5, 49.5, 49.5, 0.0);

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - MAX 1-HOUR NO2 *** 14:40:05
PAGE 12
*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

(416439.9, 3743947.5, 49.2, 49.2, 0.0); (416459.9, 3743947.5, 49.0, 49.0, 0.0);
(416307.1, 3743967.2, 49.2, 49.2, 0.0); (416319.9, 3743967.5, 49.0, 49.0, 0.0);
(416339.9, 3743967.5, 49.1, 49.1, 0.0); (416359.9, 3743967.5, 49.7, 49.7, 0.0);
(416379.9, 3743967.5, 50.0, 50.0, 0.0); (416399.9, 3743967.5, 50.0, 50.0, 0.0);
(416419.9, 3743967.5, 49.9, 49.9, 0.0); (416439.9, 3743967.5, 49.6, 49.6, 0.0);
(416319.9, 3743987.5, 47.2, 47.2, 0.0); (416339.9, 3743987.5, 47.2, 47.2, 0.0);
(416359.9, 3743987.5, 48.3, 48.3, 0.0); (416379.9, 3743987.5, 49.2, 49.2, 0.0);
(416399.9, 3743987.5, 50.0, 50.0, 0.0); (416419.9, 3743987.5, 50.0, 50.0, 0.0);
(416439.9, 3743987.5, 49.9, 49.9, 0.0); (416379.9, 3744007.5, 48.7, 48.7, 0.0);
(416399.9, 3744007.5, 50.0, 50.0, 0.0); (416419.9, 3744007.5, 50.0, 50.0, 0.0);
(416439.9, 3744007.5, 50.1, 50.1, 0.0); (416436.8, 3744021.3, 50.2, 50.2, 0.0);
(416510.3, 3743748.2, 50.4, 50.4, 0.0); (416297.6, 3743966.8, 49.7, 49.7, 0.0);
(416305.1, 3743986.1, 47.9, 51.0, 0.0); (416291.2, 3743985.6, 49.3, 49.3, 0.0);
(416358.9, 3744002.6, 47.3, 47.3, 0.0); (416339.0, 3743998.5, 46.1, 46.1, 0.0);
(416319.0, 3743996.1, 46.4, 46.4, 0.0);

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - MAX 1-HOUR NO2 *** 14:40:05
PAGE 13
*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** 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
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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,

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

Surface file: ..\ANAH8.SFC Met Version: 14134
Profile file: ..\ANAH8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2006 Year: 2006

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
06	01	01	1	01	-2.9	0.060	-9.000	-9.000	-999.	35.	6.6	0.45	1.00	1.00	0.90	39.	9.1	285.4	5.5
06	01	01	1	02	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	64.	9.1	285.4	5.5
06	01	01	1	03	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	103.	9.1	284.9	5.5
06	01	01	1	04	-2.1	0.060	-9.000	-9.000	-999.	35.	9.4	0.45	1.00	1.00	0.90	76.	9.1	284.9	5.5
06	01	01	1	05	-5.9	0.087	-9.000	-9.000	-999.	61.	10.0	0.45	1.00	1.00	1.30	93.	9.1	284.9	5.5
06	01	01	1	06	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	59.	9.1	284.9	5.5
06	01	01	1	07	-6.1	0.087	-9.000	-9.000	-999.	61.	9.6	0.45	1.00	1.00	1.30	58.	9.1	284.2	5.5
06	01	01	1	08	-9.6	0.199	-9.000	-9.000	-999.	213.	73.9	0.45	1.00	0.53	1.80	39.	9.1	284.9	5.5
06	01	01	1	09	33.2	0.322	0.787	0.005	528.	438.	-90.3	0.45	1.00	0.30	2.20	61.	9.1	286.4	5.5
06	01	01	1	10	27.9	0.211	0.832	0.005	742.	239.	-30.3	0.45	1.00	0.23	1.30	187.	9.1	287.0	5.5
06	01	01	1	11	25.2	0.209	0.819	0.005	784.	230.	-32.7	0.45	1.00	0.20	1.30	221.	9.1	287.5	5.5
06	01	01	1	12	75.8	0.233	1.237	0.015	899.	270.	-15.0	0.45	1.00	0.19	1.30	126.	9.1	288.8	5.5
06	01	01	1	13	47.6	0.282	1.084	0.016	963.	359.	-42.3	0.45	1.00	0.19	1.80	77.	9.1	288.8	5.5
06	01	01	1	14	70.8	0.339	1.275	0.017	1053.	473.	-49.4	0.45	1.00	0.20	2.20	50.	9.1	289.2	5.5
06	01	01	1	15	29.3	0.212	0.960	0.017	1088.	244.	-29.3	0.45	1.00	0.24	1.30	179.	9.1	289.2	5.5
06	01	01	1	16	4.4	0.299	0.510	0.017	1091.	393.	-550.5	0.45	1.00	0.32	2.20	116.	9.1	288.1	5.5
06	01	01	1	17	-11.9	0.173	-9.000	-9.000	-999.	182.	39.1	0.45	1.00	0.59	1.80	67.	9.1	287.5	5.5
06	01	01	1	18	-10.6	0.191	-9.000	-9.000	-999.	201.	59.5	0.45	1.00	1.00	1.80	127.	9.1	287.0	5.5
06	01	01	1	19	-10.6	0.191	-9.000	-9.000	-999.	200.	59.1	0.45	1.00	1.00	1.80	145.	9.1	285.9	5.5
06	01	01	1	20	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	71.	9.1	285.4	5.5
06	01	01	1	21	-18.5	0.332	-9.000	-9.000	-999.	458.	177.5	0.45	1.00	1.00	2.70	56.	9.1	284.9	5.5
06	01	01	1	22	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	65.	9.1	285.4	5.5
06	01	01	1	23	-10.6	0.191	-9.000	-9.000	-999.	213.	59.1	0.45	1.00	1.00	1.80	70.	9.1	285.9	5.5
06	01	01	1	24	-14.2	0.257	-9.000	-9.000	-999.	313.	107.1	0.45	1.00	1.00	2.20	66.	9.1	286.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
06	01	01	01	5.5	0	-999.	-99.00	285.4	99.0	-99.00	-99.00
06	01	01	01	9.1	1	39.	0.90	-999.0	99.0	-99.00	-99.00

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

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	17.74612	(09052707)	416426.40	3743528.99	14.26414	(09052707)
416409.26	3743546.45	17.57436	(09052707)	416419.88	3743547.54	14.22695	(09052707)
416439.88	3743547.54	10.05972	(09052707)	416459.88	3743547.54	8.61308	(09102821)
416479.88	3743547.54	7.48729	(09063003)	416499.88	3743547.54	6.63964	(09063003)
416403.32	3743566.45	16.07594	(08051719)	416419.88	3743567.54	12.69976	(09052707)
416439.88	3743567.54	10.68089	(09102821)	416459.88	3743567.54	9.10335	(09102821)
416479.88	3743567.54	7.79954	(09063003)	416499.88	3743567.54	6.88404	(12111021)
416519.88	3743567.54	6.23936	(12021522)	416539.88	3743567.54	5.94222	(07091020)
416399.88	3743587.54	16.17804	(09052707)	416419.88	3743587.54	14.01327	(09102821)
416439.88	3743587.54	12.06076	(09102821)	416459.88	3743587.54	9.79354	(09063003)
416479.88	3743587.54	8.22195	(12111021)	416499.88	3743587.54	7.20817	(12021522)
416519.88	3743587.54	6.73550	(07091020)	416539.88	3743587.54	6.51301	(07091020)
416393.55	3743607.36	18.02326	(09052707)	416419.88	3743607.54	15.44922	(09102821)
416439.88	3743607.54	13.86337	(09063003)	416459.88	3743607.54	10.84741	(09063003)
416479.88	3743607.54	8.84286	(12021522)	416499.88	3743607.54	7.69260	(07091020)
416519.88	3743607.54	7.32254	(07091020)	416539.88	3743607.54	6.98432	(07091020)
416387.84	3743627.90	17.95084	(09052707)	416399.88	3743627.54	15.18508	(09102821)
416419.88	3743627.54	15.20096	(09102821)	416439.88	3743627.54	14.00676	(09063003)
416459.88	3743627.54	11.56907	(12021522)	416479.88	3743627.54	9.74433	(07091020)
416499.88	3743627.54	8.86950	(07091020)	416519.88	3743627.54	7.89401	(07091020)
416381.51	3743647.54	18.52353	(09052707)	416399.88	3743647.54	15.69102	(09102821)
416419.88	3743647.54	14.68447	(09063003)	416439.88	3743647.54	13.39324	(12111021)
416459.88	3743647.54	12.21549	(12021522)	416479.88	3743647.54	11.35639	(07091020)
416499.88	3743647.54	9.94209	(07091020)	416519.88	3743647.54	8.38809	(08092519)
416379.88	3743667.54	18.21890	(09052707)	416399.88	3743667.54	16.73717	(09063003)
416419.88	3743667.54	14.99488	(12111021)	416439.88	3743667.54	13.56550	(12021522)
416459.88	3743667.54	13.13942	(07091020)	416479.88	3743667.54	12.44194	(07091020)
416499.88	3743667.54	10.68450	(08092519)	416519.88	3743667.54	8.77474	(07082821)
416371.75	3743687.44	19.06288	(09102821)	416379.88	3743687.54	17.78145	(09063003)
416399.88	3743687.54	15.53952	(12111021)	416419.88	3743687.54	13.79648	(12021522)
416439.88	3743687.54	13.61863	(07091020)	416459.88	3743687.54	13.57879	(07091020)
416479.88	3743687.54	12.13336	(08092519)	416499.88	3743687.54	10.69154	(07082821)
416519.88	3743687.54	9.11948	(09063001)	416366.21	3743708.44	20.00785	(09063003)
416379.88	3743707.54	17.51900	(12111021)	416399.88	3743707.54	14.64234	(12021522)
416419.88	3743707.54	13.80436	(07091020)	416439.88	3743707.54	13.47466	(07091020)
416459.88	3743707.54	13.21181	(08092519)	416479.88	3743707.54	11.88457	(07082821)
416499.88	3743707.54	10.52687	(09063001)	416519.88	3743707.54	9.19571	(09051823)
416360.42	3743727.54	20.33868	(09063003)	416379.88	3743727.54	16.99576	(12021522)
416399.88	3743727.54	15.27846	(07091020)	416419.88	3743727.54	14.31301	(07091020)
416439.88	3743727.54	13.03992	(08092519)	416459.88	3743727.54	12.74549	(07082821)

♀*** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 03/31/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND STATIONARY SOURCE IMPACTS - MAX 1-HOUR NO2 *** 14:40:05
PAGE 16

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416479.88	3743727.54	11.61408	(09063001)	416499.88	3743727.54	10.35151	(07090920)
416516.30	3743727.54	9.86398	(07090920)	416355.49	3743747.36	21.27549	(12021522)
416364.59	3743747.90	19.87912	(12021522)	416379.88	3743747.54	18.25228	(07091020)
416399.88	3743747.54	16.46691	(07091020)	416419.88	3743747.54	14.54922	(08092519)
416439.88	3743747.54	13.55102	(07082821)	416459.88	3743747.54	12.42559	(09051823)
416479.88	3743747.54	11.86982	(07090920)	416499.88	3743747.54	11.22406	(07090920)
416349.83	3743767.90	22.58734	(12021522)	416363.32	3743767.90	21.97898	(07091020)
416379.88	3743767.54	20.65910	(07091020)	416399.88	3743767.54	17.64198	(08092519)

416419.88	3743767.54	15.45114	(07082821)	416439.88	3743767.54	13.92295	(09051823)
416459.88	3743767.54	13.49143	(07090920)	416479.88	3743767.54	12.58975	(07090920)
416499.88	3743767.54	11.36179	(08030319)	416344.22	3743787.36	24.48455	(07091020)
416359.88	3743787.54	25.30566	(07091020)	416379.88	3743787.54	23.50193	(07082821)
416399.88	3743787.54	20.47075	(09063001)	416419.88	3743787.54	17.00563	(07090920)
416439.88	3743787.54	15.94263	(07090920)	416459.88	3743787.54	14.68107	(08030319)
416479.88	3743787.54	12.72208	(12041605)	416499.88	3743787.54	11.22942	(09070320)
416340.71	3743805.95	24.77106	(07091020)	416359.88	3743807.54	24.59765	(07082821)
416379.88	3743807.54	23.29825	(09063001)	416399.88	3743807.54	20.95511	(07090920)
416419.88	3743807.54	19.08108	(07090920)	416439.88	3743807.54	16.81908	(12041605)
416459.88	3743807.54	14.71254	(12041605)	416479.88	3743807.54	13.20488	(08080921)
416495.31	3743807.54	12.55595	(08080921)	416333.49	3743827.31	25.16760	(08092519)
416343.86	3743827.90	23.67030	(07082821)	416359.88	3743827.54	23.29177	(09051823)
416379.88	3743827.54	23.67739	(07090920)	416399.88	3743827.54	20.92432	(08030319)
416419.88	3743827.54	18.72347	(12041605)	416439.88	3743827.54	16.72472	(09070320)
416459.88	3743827.54	15.51428	(08080921)	416479.88	3743827.54	13.92410	(08080921)
416327.66	3743848.44	25.76306	(09063001)	416339.88	3743847.54	23.74309	(07090920)
416359.88	3743847.54	23.25650	(07090920)	416379.88	3743847.54	22.24930	(12041605)
416399.88	3743847.54	19.76835	(09070320)	416419.88	3743847.54	18.17644	(08080921)
416439.88	3743847.54	16.66211	(08080921)	416459.88	3743847.54	15.32983	(07091019)
416479.88	3743847.54	13.76950	(07091019)	416322.96	3743867.72	27.24535	(07090920)
416339.88	3743867.54	24.87826	(07090920)	416359.88	3743867.54	22.43952	(12041605)
416379.88	3743867.54	21.33627	(08080921)	416399.88	3743867.54	19.67029	(08080921)
416419.88	3743867.54	17.96910	(07091019)	416439.88	3743867.54	16.00573	(07091019)
416459.88	3743867.54	13.87125	(07091019)	416479.88	3743867.54	11.76102	(07091019)
416319.88	3743887.54	27.19231	(12041605)	416339.88	3743887.54	24.32717	(08080921)
416359.88	3743887.54	22.98476	(08080921)	416379.88	3743887.54	21.29872	(07091019)
416399.88	3743887.54	18.74740	(07091019)	416419.88	3743887.54	15.79129	(07091019)
416439.88	3743887.54	12.97586	(07091019)	416459.88	3743887.54	11.31189	(09081704)
416474.86	3743886.63	10.92079	(07080124)	416312.31	3743906.99	27.71332	(08080921)
416324.40	3743907.54	25.86059	(12012505)	416339.88	3743907.54	24.15533	(09030320)
416359.88	3743907.54	21.19228	(09030320)	416379.88	3743907.54	17.72498	(07091019)

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	14.29046	(07091019)	416419.88	3743907.54	12.53482	(07080124)
416439.88	3743907.54	11.91199	(06073104)	416459.88	3743907.54	11.24920	(06020522)
416306.58	3743928.08	26.17808	(09030320)	416322.23	3743927.90	22.45090	(09030320)
416339.88	3743927.54	18.61774	(09030320)	416359.88	3743927.54	14.65904	(12042106)
416379.88	3743927.54	13.61227	(08062904)	416399.88	3743927.54	13.03415	(06020522)
416419.88	3743927.54	12.23523	(06020522)	416439.88	3743927.54	11.32861	(06020522)
416459.88	3743927.54	10.39540	(06020522)	416301.87	3743947.72	19.03056	(12042106)
416319.88	3743947.54	15.45781	(08062904)	416339.88	3743947.54	14.25064	(06021621)
416359.88	3743947.54	13.28652	(06021621)	416379.88	3743947.54	12.32192	(06021621)
416399.88	3743947.54	11.32495	(06021621)	416419.88	3743947.54	10.26953	(06021621)
416439.88	3743947.54	9.24553	(06021621)	416459.88	3743947.54	8.29960	(06021621)
416307.12	3743967.18	15.16441	(08051719)	416319.88	3743967.54	12.62061	(06021621)
416339.88	3743967.54	11.16881	(06021621)	416359.88	3743967.54	10.04032	(06021621)
416379.88	3743967.54	9.05588	(06021621)	416399.88	3743967.54	8.15688	(06021621)
416419.88	3743967.54	7.47153	(12030419)	416439.88	3743967.54	6.80533	(12030419)
416319.88	3743987.54	11.42418	(08051719)	416339.88	3743987.54	9.13154	(12100119)
416359.88	3743987.54	8.03168	(09011317)	416379.88	3743987.54	7.22967	(07102323)
416399.88	3743987.54	6.64339	(07102323)	416419.88	3743987.54	6.07705	(07102323)
416439.88	3743987.54	5.58087	(07102323)	416379.88	3744007.54	7.01294	(09083120)
416399.88	3744007.54	6.51471	(09083120)	416419.88	3744007.54	5.96966	(09083120)
416439.88	3744007.54	5.50804	(09083120)	416436.78	3744021.35	5.50908	(09071120)

416510.28 3743748.17 10.65197 (07090920) 416297.59 3743966.85 18.55187 (08051719)
416305.11 3743986.12 14.30673 (08051719) 416291.25 3743985.57 19.20737 (08051719)
416358.87 3744002.60 7.84375 (09011317) 416339.02 3743998.54 8.93431 (09011317)
416319.04 3743996.11 11.14001 (08051719)

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

** CONC OF NO2 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	27.71332	ON 08080921: AT (416312.31, 3743906.99, 47.98, 47.98, 0.00)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV ARM URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 3 Warning Message(s)
A Total of 814 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 61 Calm Hours Identified

A Total of 753 Missing Hours Identified (1.72 Percent)

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

******** WARNING MESSAGES ********
CO W276 24 POLLID: Special proc for 1h-NO2/SO2 24hPM25 NAAQS disabled NO2 H1H
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 12010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 2 year gap

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

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filtration PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary Source Impacts - PM10 *** 10:31:55
PAGE 1

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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 144 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 8000000.0 ; 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:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 144 Source(s); 1 Source Group(s); and 209 Receptor(s)

with: 1 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 143 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of ANNUAL 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) = 50.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.8 MB of RAM.

*** 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
2825	0	0.12100E+00	416151.6	3743994.0	55.7	12.19	-0.00	0.01	0.01	YES	YES	NO	

*** 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
L0000001	0	0.59510E-05	416203.0	3744218.8	50.3	3.89	3.78	1.81	YES	
L0000002	0	0.59510E-05	416205.1	3744210.9	50.0	3.89	3.78	1.81	YES	
L0000003	0	0.59510E-05	416207.2	3744203.1	49.8	3.89	3.78	1.81	YES	
L0000004	0	0.59510E-05	416209.3	3744195.2	49.5	3.89	3.78	1.81	YES	
L0000005	0	0.59510E-05	416211.4	3744187.4	49.4	3.89	3.78	1.81	YES	
L0000006	0	0.59510E-05	416213.5	3744179.5	49.2	3.89	3.78	1.81	YES	
L0000007	0	0.59510E-05	416215.6	3744171.6	48.9	3.89	3.78	1.81	YES	
L0000008	0	0.59510E-05	416217.8	3744163.8	48.6	3.89	3.78	1.81	YES	
L0000009	0	0.59510E-05	416219.9	3744155.9	48.2	3.89	3.78	1.81	YES	
L0000010	0	0.59510E-05	416222.0	3744148.1	48.1	3.89	3.78	1.81	YES	
L0000011	0	0.59510E-05	416224.1	3744140.2	48.3	3.89	3.78	1.81	YES	
L0000012	0	0.59510E-05	416226.2	3744132.4	48.5	3.89	3.78	1.81	YES	
L0000013	0	0.59510E-05	416228.3	3744124.5	48.6	3.89	3.78	1.81	YES	
L0000014	0	0.59510E-05	416230.4	3744116.7	48.8	3.89	3.78	1.81	YES	
L0000015	0	0.59510E-05	416232.5	3744108.8	49.0	3.89	3.78	1.81	YES	
L0000016	0	0.59510E-05	416234.6	3744101.0	49.1	3.89	3.78	1.81	YES	
L0000017	0	0.59510E-05	416236.8	3744093.1	49.3	3.89	3.78	1.81	YES	
L0000018	0	0.59510E-05	416238.9	3744085.2	49.5	3.89	3.78	1.81	YES	
L0000019	0	0.59510E-05	416241.0	3744077.4	49.5	3.89	3.78	1.81	YES	
L0000020	0	0.59510E-05	416243.1	3744069.5	49.5	3.89	3.78	1.81	YES	
L0000021	0	0.59510E-05	416245.2	3744061.7	49.5	3.89	3.78	1.81	YES	
L0000022	0	0.59510E-05	416247.3	3744053.8	49.5	3.89	3.78	1.81	YES	
L0000023	0	0.59510E-05	416249.4	3744046.0	49.5	3.89	3.78	1.81	YES	
L0000024	0	0.59510E-05	416251.5	3744038.1	49.7	3.89	3.78	1.81	YES	
L0000025	0	0.59510E-05	416253.6	3744030.3	49.9	3.89	3.78	1.81	YES	
L0000026	0	0.59510E-05	416255.7	3744022.4	50.1	3.89	3.78	1.81	YES	
L0000027	0	0.59510E-05	416257.9	3744014.5	50.2	3.89	3.78	1.81	YES	
L0000028	0	0.59510E-05	416260.0	3744006.7	50.4	3.89	3.78	1.81	YES	
L0000029	0	0.59510E-05	416262.1	3743998.8	50.6	3.89	3.78	1.81	YES	
L0000030	0	0.59510E-05	416264.2	3743991.0	50.7	3.89	3.78	1.81	YES	
L0000031	0	0.59510E-05	416266.3	3743983.1	50.8	3.89	3.78	1.81	YES	
L0000032	0	0.59510E-05	416268.4	3743975.3	50.9	3.89	3.78	1.81	YES	
L0000033	0	0.59510E-05	416270.5	3743967.4	50.8	3.89	3.78	1.81	YES	
L0000034	0	0.59510E-05	416272.6	3743959.6	50.3	3.89	3.78	1.81	YES	
L0000035	0	0.59510E-05	416274.7	3743951.7	49.8	3.89	3.78	1.81	YES	
L0000036	0	0.59510E-05	416276.8	3743943.8	49.3	3.89	3.78	1.81	YES	
L0000037	0	0.59510E-05	416279.0	3743936.0	48.7	3.89	3.78	1.81	YES	
L0000038	0	0.59510E-05	416281.1	3743928.1	48.2	3.89	3.78	1.81	YES	
L0000039	0	0.59510E-05	416283.2	3743920.3	47.8	3.89	3.78	1.81	YES	
L0000040	0	0.59510E-05	416285.3	3743912.4	47.3	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000041	0	0.59510E-05	416287.4	3743904.6	47.1	3.89	3.78	1.81	YES	
L0000042	0	0.59510E-05	416289.5	3743896.7	46.9	3.89	3.78	1.81	YES	
L0000043	0	0.59510E-05	416291.6	3743888.9	46.7	3.89	3.78	1.81	YES	
L0000044	0	0.59510E-05	416293.7	3743881.0	46.5	3.89	3.78	1.81	YES	
L0000045	0	0.59510E-05	416295.8	3743873.2	46.9	3.89	3.78	1.81	YES	
L0000046	0	0.59510E-05	416298.0	3743865.3	47.3	3.89	3.78	1.81	YES	
L0000047	0	0.59510E-05	416300.1	3743857.4	47.7	3.89	3.78	1.81	YES	
L0000048	0	0.59510E-05	416302.2	3743849.6	48.0	3.89	3.78	1.81	YES	
L0000049	0	0.59510E-05	416304.3	3743841.7	48.3	3.89	3.78	1.81	YES	
L0000050	0	0.59510E-05	416306.4	3743833.9	48.5	3.89	3.78	1.81	YES	
L0000051	0	0.59510E-05	416308.5	3743826.0	48.8	3.89	3.78	1.81	YES	
L0000052	0	0.59510E-05	416310.6	3743818.2	49.1	3.89	3.78	1.81	YES	
L0000053	0	0.59510E-05	416312.7	3743810.3	49.5	3.89	3.78	1.81	YES	
L0000054	0	0.59510E-05	416314.8	3743802.5	49.9	3.89	3.78	1.81	YES	
L0000055	0	0.59510E-05	416316.9	3743794.6	50.3	3.89	3.78	1.81	YES	
L0000056	0	0.59510E-05	416319.1	3743786.7	50.6	3.89	3.78	1.81	YES	
L0000057	0	0.59510E-05	416321.2	3743778.9	50.7	3.89	3.78	1.81	YES	
L0000058	0	0.59510E-05	416323.3	3743771.0	50.9	3.89	3.78	1.81	YES	
L0000059	0	0.59510E-05	416325.4	3743763.2	51.0	3.89	3.78	1.81	YES	
L0000060	0	0.59510E-05	416327.5	3743755.3	51.1	3.89	3.78	1.81	YES	
L0000061	0	0.59510E-05	416329.6	3743747.5	51.0	3.89	3.78	1.81	YES	
L0000062	0	0.59510E-05	416331.7	3743739.6	51.0	3.89	3.78	1.81	YES	
L0000063	0	0.59510E-05	416333.8	3743731.8	50.8	3.89	3.78	1.81	YES	
L0000064	0	0.59510E-05	416335.9	3743723.9	50.8	3.89	3.78	1.81	YES	
L0000065	0	0.59510E-05	416338.0	3743716.1	50.9	3.89	3.78	1.81	YES	
L0000066	0	0.59510E-05	416340.2	3743708.2	51.0	3.89	3.78	1.81	YES	
L0000067	0	0.59510E-05	416342.3	3743700.3	51.1	3.89	3.78	1.81	YES	
L0000068	0	0.59510E-05	416344.4	3743692.5	51.0	3.89	3.78	1.81	YES	
L0000069	0	0.59510E-05	416346.5	3743684.6	50.9	3.89	3.78	1.81	YES	
L0000070	0	0.59510E-05	416348.6	3743676.8	50.8	3.89	3.78	1.81	YES	
L0000071	0	0.59510E-05	416350.7	3743668.9	50.7	3.89	3.78	1.81	YES	
L0000072	0	0.59510E-05	416352.8	3743661.1	50.6	3.89	3.78	1.81	YES	
L0000073	0	0.59510E-05	416354.9	3743653.2	50.4	3.89	3.78	1.81	YES	
L0000074	0	0.59510E-05	416357.0	3743645.4	50.3	3.89	3.78	1.81	YES	
L0000075	0	0.59510E-05	416359.2	3743637.5	50.3	3.89	3.78	1.81	YES	
L0000076	0	0.59510E-05	416361.3	3743629.6	50.5	3.89	3.78	1.81	YES	
L0000077	0	0.59510E-05	416363.4	3743621.8	50.7	3.89	3.78	1.81	YES	
L0000078	0	0.59510E-05	416365.5	3743613.9	50.8	3.89	3.78	1.81	YES	
L0000079	0	0.59510E-05	416367.6	3743606.1	50.9	3.89	3.78	1.81	YES	
L0000080	0	0.59510E-05	416369.7	3743598.2	51.0	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000081	0	0.59510E-05	416371.8	3743590.4	51.2	3.89	3.78	1.81	YES	
L0000082	0	0.59510E-05	416373.9	3743582.5	51.4	3.89	3.78	1.81	YES	
L0000083	0	0.59510E-05	416376.0	3743574.7	51.9	3.89	3.78	1.81	YES	
L0000084	0	0.59510E-05	416378.1	3743566.8	52.5	3.89	3.78	1.81	YES	
L0000085	0	0.59510E-05	416380.3	3743559.0	52.9	3.89	3.78	1.81	YES	

L0000086	0	0.59510E-05	416382.4	3743551.1	53.4	3.89	3.78	1.81	YES
L0000087	0	0.59510E-05	416384.5	3743543.2	53.1	3.89	3.78	1.81	YES
L0000088	0	0.59510E-05	416386.6	3743535.4	52.8	3.89	3.78	1.81	YES
L0000089	0	0.59510E-05	416388.7	3743527.5	52.4	3.89	3.78	1.81	YES
L0000090	0	0.59510E-05	416390.8	3743519.7	52.0	3.89	3.78	1.81	YES
L0000091	0	0.59510E-05	416392.9	3743511.8	51.7	3.89	3.78	1.81	YES
L0000092	0	0.59510E-05	416395.0	3743504.0	51.5	3.89	3.78	1.81	YES
L0000093	0	0.59510E-05	416397.1	3743496.1	51.2	3.89	3.78	1.81	YES
L0000094	0	0.59510E-05	416399.2	3743488.3	51.0	3.89	3.78	1.81	YES
L0000095	0	0.59510E-05	416401.4	3743480.4	51.1	3.89	3.78	1.81	YES
L0000096	0	0.59510E-05	416403.5	3743472.5	51.2	3.89	3.78	1.81	YES
L0000097	0	0.59510E-05	416405.6	3743464.7	51.2	3.89	3.78	1.81	YES
L0000098	0	0.59510E-05	416407.7	3743456.8	51.1	3.89	3.78	1.81	YES
L0000099	0	0.59510E-05	416409.8	3743449.0	50.8	3.89	3.78	1.81	YES
L0000100	0	0.59510E-05	416411.9	3743441.1	50.5	3.89	3.78	1.81	YES
L0000101	0	0.59510E-05	416414.0	3743433.3	50.2	3.89	3.78	1.81	YES
L0000102	0	0.59510E-05	416416.1	3743425.4	49.9	3.89	3.78	1.81	YES
L0000103	0	0.59510E-05	416418.2	3743417.6	49.8	3.89	3.78	1.81	YES
L0000104	0	0.59510E-05	416420.3	3743409.7	49.8	3.89	3.78	1.81	YES
L0000105	0	0.59510E-05	416422.5	3743401.9	49.8	3.89	3.78	1.81	YES
L0000106	0	0.59510E-05	416424.6	3743394.0	49.7	3.89	3.78	1.81	YES
L0000107	0	0.59510E-05	416426.7	3743386.1	49.5	3.89	3.78	1.81	YES
L0000108	0	0.59510E-05	416428.8	3743378.3	49.3	3.89	3.78	1.81	YES
L0000109	0	0.59510E-05	416430.9	3743370.4	49.0	3.89	3.78	1.81	YES
L0000110	0	0.59510E-05	416433.0	3743362.6	48.8	3.89	3.78	1.81	YES
L0000111	0	0.59510E-05	416435.1	3743354.7	48.5	3.89	3.78	1.81	YES
L0000112	0	0.59510E-05	416437.2	3743346.9	48.2	3.89	3.78	1.81	YES
L0000113	0	0.59510E-05	416439.3	3743339.0	48.0	3.89	3.78	1.81	YES
L0000114	0	0.59510E-05	416441.5	3743331.2	48.2	3.89	3.78	1.81	YES
L0000115	0	0.59510E-05	416443.6	3743323.3	48.3	3.89	3.78	1.81	YES
L0000116	0	0.59510E-05	416445.7	3743315.4	48.4	3.89	3.78	1.81	YES
L0000117	0	0.59510E-05	416447.8	3743307.6	48.5	3.89	3.78	1.81	YES
L0000118	0	0.59510E-05	416449.9	3743299.7	48.7	3.89	3.78	1.81	YES
L0000119	0	0.59510E-05	416452.0	3743291.9	48.9	3.89	3.78	1.81	YES
L0000120	0	0.59510E-05	416454.1	3743284.0	49.1	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000121	0	0.59510E-05	416456.2	3743276.2	49.1	3.89	3.78	1.81	YES	
L0000122	0	0.59510E-05	416458.3	3743268.3	49.1	3.89	3.78	1.81	YES	
L0000123	0	0.59510E-05	416460.4	3743260.5	49.0	3.89	3.78	1.81	YES	
L0000124	0	0.59510E-05	416462.6	3743252.6	49.0	3.89	3.78	1.81	YES	
L0000125	0	0.59510E-05	416464.7	3743244.8	49.1	3.89	3.78	1.81	YES	
L0000126	0	0.59510E-05	416466.8	3743236.9	49.3	3.89	3.78	1.81	YES	
L0000127	0	0.59510E-05	416468.9	3743229.0	49.5	3.89	3.78	1.81	YES	
L0000128	0	0.59510E-05	416471.0	3743221.2	49.6	3.89	3.78	1.81	YES	
L0000129	0	0.59510E-05	416473.1	3743213.3	49.8	3.89	3.78	1.81	YES	
L0000130	0	0.59510E-05	416475.2	3743205.5	50.0	3.89	3.78	1.81	YES	
L0000131	0	0.59510E-05	416477.3	3743197.6	50.2	3.89	3.78	1.81	YES	
L0000132	0	0.59510E-05	416479.4	3743189.8	50.4	3.89	3.78	1.81	YES	
L0000133	0	0.59510E-05	416481.5	3743181.9	50.5	3.89	3.78	1.81	YES	
L0000134	0	0.59510E-05	416483.7	3743174.1	50.6	3.89	3.78	1.81	YES	
L0000135	0	0.59510E-05	416485.8	3743166.2	50.8	3.89	3.78	1.81	YES	
L0000136	0	0.59510E-05	416487.9	3743158.3	51.0	3.89	3.78	1.81	YES	
L0000137	0	0.59510E-05	416490.0	3743150.5	51.0	3.89	3.78	1.81	YES	
L0000138	0	0.59510E-05	416492.1	3743142.6	51.0	3.89	3.78	1.81	YES	
L0000139	0	0.59510E-05	416494.2	3743134.8	51.0	3.89	3.78	1.81	YES	
L0000140	0	0.59510E-05	416496.3	3743126.9	51.0	3.89	3.78	1.81	YES	
L0000141	0	0.59510E-05	416498.4	3743119.1	51.1	3.89	3.78	1.81	YES	
L0000142	0	0.59510E-05	416500.5	3743111.2	51.2	3.89	3.78	1.81	YES	

L0000143 0 0.59510E-05 416502.7 3743103.4 51.4 3.89 3.78 1.81 YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE IDs
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ALL L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,
L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,
L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,
L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,
L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,
L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,
L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,
L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,
L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,
L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,
L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

URBAN ID URBAN POP SOURCE IDs
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8000000. L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 ,
L0000008 ,
L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,

L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,

L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,

L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,

L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,

L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,

L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,

L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,

L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,

L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,

L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,

L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,

L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,

L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 2825

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	0.0,	0.0,	0.0,	0.0,	0.0,
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,	0.0,
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,	0.0,
9	0.0,	0.0,	0.0,	0.0,	0.0,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	10.7,	56.4,	52.2,	-62.2,	32.3,	12	10.7,	56.1,	55.2,	-68.7,	25.6,
13	10.7,	54.2,	56.4,	-73.2,	18.1,	14	10.7,	50.6,	56.0,	-75.4,	10.0,
15	10.7,	45.5,	53.8,	-75.3,	1.6,	16	10.7,	39.0,	50.0,	-73.0,	-6.8,
17	10.7,	34.5,	47.0,	-69.5,	-15.1,	18	10.7,	41.8,	51.8,	-68.6,	-22.8,
19	0.0,	0.0,	0.0,	0.0,	0.0,	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	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	10.7,	56.4,	52.2,	10.0,	-32.3,	30	10.7,	56.1,	55.2,	13.6,	-25.6,
31	10.7,	54.2,	56.4,	16.7,	-18.1,	32	10.7,	50.6,	56.0,	19.4,	-10.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	10.7,	41.8,	51.8,	16.9,	22.8,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416414.0, 3743528.5,	52.9,	52.9,	0.0);	(416426.4, 3743529.0,	53.2,	53.2,	0.0);
(416409.3, 3743546.4,	53.8,	53.8,	0.0);	(416419.9, 3743547.5,	53.9,	53.9,	0.0);
(416439.9, 3743547.5,	53.3,	53.3,	0.0);	(416459.9, 3743547.5,	52.0,	52.0,	0.0);
(416479.9, 3743547.5,	50.6,	50.6,	0.0);	(416499.9, 3743547.5,	49.6,	49.6,	0.0);
(416403.3, 3743566.4,	54.1,	54.1,	0.0);	(416419.9, 3743567.5,	54.8,	54.8,	0.0);
(416439.9, 3743567.5,	54.3,	56.0,	0.0);	(416459.9, 3743567.5,	52.6,	58.0,	0.0);

(416479.9, 3743567.5, 51.3, 58.0, 0.0); (416499.9, 3743567.5, 50.4, 50.4, 0.0);
(416519.9, 3743567.5, 50.2, 50.2, 0.0); (416539.9, 3743567.5, 50.4, 50.4, 0.0);
(416399.9, 3743587.5, 54.2, 58.0, 0.0); (416419.9, 3743587.5, 55.7, 55.7, 0.0);
(416439.9, 3743587.5, 55.5, 58.0, 0.0); (416459.9, 3743587.5, 53.5, 58.0, 0.0);
(416479.9, 3743587.5, 52.0, 58.0, 0.0); (416499.9, 3743587.5, 51.2, 51.2, 0.0);
(416519.9, 3743587.5, 51.0, 51.0, 0.0); (416539.9, 3743587.5, 51.2, 51.2, 0.0);
(416393.5, 3743607.4, 54.1, 58.0, 0.0); (416419.9, 3743607.5, 56.8, 58.0, 0.0);
(416439.9, 3743607.5, 56.8, 58.0, 0.0); (416459.9, 3743607.5, 54.8, 58.0, 0.0);
(416479.9, 3743607.5, 52.9, 58.0, 0.0); (416499.9, 3743607.5, 51.6, 51.6, 0.0);
(416519.9, 3743607.5, 51.0, 51.0, 0.0); (416539.9, 3743607.5, 51.6, 51.6, 0.0);
(416387.8, 3743627.9, 53.0, 58.0, 0.0); (416399.9, 3743627.5, 54.4, 58.0, 0.0);
(416419.9, 3743627.5, 56.0, 56.0, 0.0); (416439.9, 3743627.5, 56.4, 56.4, 0.0);
(416459.9, 3743627.5, 55.6, 55.6, 0.0); (416479.9, 3743627.5, 54.0, 54.0, 0.0);
(416499.9, 3743627.5, 52.6, 52.6, 0.0); (416519.9, 3743627.5, 51.6, 51.6, 0.0);
(416381.5, 3743647.5, 52.4, 52.4, 0.0); (416399.9, 3743647.5, 54.2, 54.2, 0.0);
(416419.9, 3743647.5, 55.2, 55.2, 0.0); (416439.9, 3743647.5, 55.8, 55.8, 0.0);
(416459.9, 3743647.5, 55.8, 55.8, 0.0); (416479.9, 3743647.5, 54.8, 54.8, 0.0);
(416499.9, 3743647.5, 53.5, 53.5, 0.0); (416519.9, 3743647.5, 52.0, 52.0, 0.0);
(416379.9, 3743667.5, 52.9, 55.0, 0.0); (416399.9, 3743667.5, 54.9, 54.9, 0.0);
(416419.9, 3743667.5, 55.0, 55.0, 0.0); (416439.9, 3743667.5, 55.1, 55.1, 0.0);
(416459.9, 3743667.5, 55.1, 55.1, 0.0); (416479.9, 3743667.5, 55.0, 55.0, 0.0);
(416499.9, 3743667.5, 54.0, 55.0, 0.0); (416519.9, 3743667.5, 52.0, 52.0, 0.0);
(416371.8, 3743687.4, 52.6, 52.6, 0.0); (416379.9, 3743687.5, 52.8, 52.8, 0.0);
(416399.9, 3743687.5, 53.2, 55.0, 0.0); (416419.9, 3743687.5, 53.2, 53.2, 0.0);
(416439.9, 3743687.5, 53.6, 53.6, 0.0); (416459.9, 3743687.5, 54.4, 54.4, 0.0);
(416479.9, 3743687.5, 54.0, 54.0, 0.0); (416499.9, 3743687.5, 53.2, 53.2, 0.0);
(416519.9, 3743687.5, 52.0, 52.0, 0.0); (416366.2, 3743708.4, 52.5, 52.5, 0.0);
(416379.9, 3743707.5, 52.4, 52.4, 0.0); (416399.9, 3743707.5, 51.8, 51.8, 0.0);
(416419.9, 3743707.5, 51.8, 51.8, 0.0); (416439.9, 3743707.5, 52.3, 52.3, 0.0);
(416459.9, 3743707.5, 53.5, 53.5, 0.0); (416479.9, 3743707.5, 53.0, 53.0, 0.0);
(416499.9, 3743707.5, 52.3, 52.3, 0.0); (416519.9, 3743707.5, 51.5, 51.5, 0.0);
(416360.4, 3743727.5, 51.7, 51.7, 0.0); (416379.9, 3743727.5, 51.8, 51.8, 0.0);
(416399.9, 3743727.5, 51.1, 51.1, 0.0); (416419.9, 3743727.5, 51.1, 51.1, 0.0);
(416439.9, 3743727.5, 51.4, 51.4, 0.0); (416459.9, 3743727.5, 52.2, 52.2, 0.0);
(416479.9, 3743727.5, 52.1, 52.1, 0.0); (416499.9, 3743727.5, 51.4, 51.4, 0.0);
(416516.3, 3743727.5, 50.4, 50.4, 0.0); (416355.5, 3743747.4, 52.1, 52.1, 0.0);
(416364.6, 3743747.9, 52.4, 52.4, 0.0); (416379.9, 3743747.5, 52.3, 52.3, 0.0);
(416399.9, 3743747.5, 51.6, 51.6, 0.0); (416419.9, 3743747.5, 51.2, 51.2, 0.0);
(416439.9, 3743747.5, 51.1, 51.1, 0.0); (416459.9, 3743747.5, 51.4, 51.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416479.9, 3743747.5, 51.4, 51.4, 0.0); (416499.9, 3743747.5, 50.9, 50.9, 0.0);
(416349.8, 3743767.9, 52.5, 52.5, 0.0); (416363.3, 3743767.9, 53.2, 53.2, 0.0);
(416379.9, 3743767.5, 53.2, 53.2, 0.0); (416399.9, 3743767.5, 52.5, 52.5, 0.0);
(416419.9, 3743767.5, 51.7, 51.7, 0.0); (416439.9, 3743767.5, 51.2, 51.2, 0.0);
(416459.9, 3743767.5, 51.2, 51.2, 0.0); (416479.9, 3743767.5, 50.9, 50.9, 0.0);
(416499.9, 3743767.5, 50.5, 50.5, 0.0); (416344.2, 3743787.4, 52.4, 55.0, 0.0);
(416359.9, 3743787.5, 53.9, 55.0, 0.0); (416379.9, 3743787.5, 54.5, 54.5, 0.0);
(416399.9, 3743787.5, 53.8, 53.8, 0.0); (416419.9, 3743787.5, 52.6, 52.6, 0.0);
(416439.9, 3743787.5, 51.9, 51.9, 0.0); (416459.9, 3743787.5, 51.9, 51.9, 0.0);
(416479.9, 3743787.5, 50.7, 50.7, 0.0); (416499.9, 3743787.5, 50.0, 50.0, 0.0);
(416340.7, 3743805.9, 51.5, 55.0, 0.0); (416359.9, 3743807.5, 53.4, 53.4, 0.0);
(416379.9, 3743807.5, 54.1, 54.1, 0.0); (416399.9, 3743807.5, 53.4, 53.4, 0.0);
(416419.9, 3743807.5, 52.9, 52.9, 0.0); (416439.9, 3743807.5, 52.4, 52.4, 0.0);
(416459.9, 3743807.5, 52.0, 52.0, 0.0); (416479.9, 3743807.5, 51.1, 51.1, 0.0);
(416495.3, 3743807.5, 50.5, 50.5, 0.0); (416333.5, 3743827.3, 50.3, 50.3, 0.0);
(416343.9, 3743827.9, 51.1, 54.0, 0.0); (416359.9, 3743827.5, 52.6, 54.0, 0.0);
(416379.9, 3743827.5, 53.2, 53.2, 0.0); (416399.9, 3743827.5, 52.8, 52.8, 0.0);
(416419.9, 3743827.5, 52.6, 52.6, 0.0); (416439.9, 3743827.5, 52.2, 52.2, 0.0);
(416459.9, 3743827.5, 51.8, 51.8, 0.0); (416479.9, 3743827.5, 51.2, 51.2, 0.0);
(416327.7, 3743848.4, 49.2, 49.2, 0.0); (416339.9, 3743847.5, 50.1, 50.1, 0.0);
(416359.9, 3743847.5, 51.5, 51.5, 0.0); (416379.9, 3743847.5, 52.1, 52.1, 0.0);
(416399.9, 3743847.5, 52.1, 52.1, 0.0); (416419.9, 3743847.5, 51.5, 51.5, 0.0);

(416439.9, 3743847.5,	51.1,	51.1,	0.0);	(416459.9, 3743847.5,	51.1,	51.1,	0.0);
(416479.9, 3743847.5,	51.0,	51.0,	0.0);	(416323.0, 3743867.7,	48.3,	48.3,	0.0);
(416339.9, 3743867.5,	49.4,	49.4,	0.0);	(416359.9, 3743867.5,	50.3,	50.3,	0.0);
(416379.9, 3743867.5,	50.6,	50.6,	0.0);	(416399.9, 3743867.5,	50.2,	50.2,	0.0);
(416419.9, 3743867.5,	50.0,	50.0,	0.0);	(416439.9, 3743867.5,	50.0,	50.0,	0.0);
(416459.9, 3743867.5,	50.4,	50.4,	0.0);	(416479.9, 3743867.5,	50.8,	50.8,	0.0);
(416319.9, 3743887.5,	47.8,	47.8,	0.0);	(416339.9, 3743887.5,	49.0,	49.0,	0.0);
(416359.9, 3743887.5,	49.5,	49.5,	0.0);	(416379.9, 3743887.5,	49.5,	49.5,	0.0);
(416399.9, 3743887.5,	49.0,	49.0,	0.0);	(416419.9, 3743887.5,	49.0,	49.0,	0.0);
(416439.9, 3743887.5,	49.2,	49.2,	0.0);	(416459.9, 3743887.5,	49.8,	49.8,	0.0);
(416474.9, 3743886.6,	50.3,	50.3,	0.0);	(416312.3, 3743907.0,	48.0,	48.0,	0.0);
(416324.4, 3743907.5,	48.4,	48.4,	0.0);	(416339.9, 3743907.5,	49.0,	49.0,	0.0);
(416359.9, 3743907.5,	49.0,	49.0,	0.0);	(416379.9, 3743907.5,	49.0,	49.0,	0.0);
(416399.9, 3743907.5,	49.0,	49.0,	0.0);	(416419.9, 3743907.5,	49.0,	49.0,	0.0);
(416439.9, 3743907.5,	49.0,	49.0,	0.0);	(416459.9, 3743907.5,	49.1,	49.1,	0.0);
(416306.6, 3743928.1,	48.6,	48.6,	0.0);	(416322.2, 3743927.9,	49.0,	49.0,	0.0);
(416339.9, 3743927.5,	49.6,	49.6,	0.0);	(416359.9, 3743927.5,	49.6,	49.6,	0.0);
(416379.9, 3743927.5,	49.6,	49.6,	0.0);	(416399.9, 3743927.5,	49.6,	49.6,	0.0);
(416419.9, 3743927.5,	49.2,	49.2,	0.0);	(416439.9, 3743927.5,	49.0,	49.0,	0.0);
(416459.9, 3743927.5,	49.0,	49.0,	0.0);	(416301.9, 3743947.7,	49.1,	49.1,	0.0);
(416319.9, 3743947.5,	49.2,	49.2,	0.0);	(416339.9, 3743947.5,	49.8,	49.8,	0.0);
(416359.9, 3743947.5,	49.9,	49.9,	0.0);	(416379.9, 3743947.5,	50.0,	50.0,	0.0);
(416399.9, 3743947.5,	50.0,	50.0,	0.0);	(416419.9, 3743947.5,	49.5,	49.5,	0.0);

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filtration PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary Source Impacts - PM10 *** 10:31:55
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416439.9, 3743947.5,	49.2,	49.2,	0.0);	(416459.9, 3743947.5,	49.0,	49.0,	0.0);
(416307.1, 3743967.2,	49.2,	49.2,	0.0);	(416319.9, 3743967.5,	49.0,	49.0,	0.0);
(416339.9, 3743967.5,	49.1,	49.1,	0.0);	(416359.9, 3743967.5,	49.7,	49.7,	0.0);
(416379.9, 3743967.5,	50.0,	50.0,	0.0);	(416399.9, 3743967.5,	50.0,	50.0,	0.0);
(416419.9, 3743967.5,	49.9,	49.9,	0.0);	(416439.9, 3743967.5,	49.6,	49.6,	0.0);
(416319.9, 3743987.5,	47.2,	47.2,	0.0);	(416339.9, 3743987.5,	47.2,	47.2,	0.0);
(416359.9, 3743987.5,	48.3,	48.3,	0.0);	(416379.9, 3743987.5,	49.2,	49.2,	0.0);
(416399.9, 3743987.5,	50.0,	50.0,	0.0);	(416419.9, 3743987.5,	50.0,	50.0,	0.0);
(416439.9, 3743987.5,	49.9,	49.9,	0.0);	(416379.9, 3744007.5,	48.7,	48.7,	0.0);
(416399.9, 3744007.5,	50.0,	50.0,	0.0);	(416419.9, 3744007.5,	50.0,	50.0,	0.0);
(416439.9, 3744007.5,	50.1,	50.1,	0.0);	(416436.8, 3744021.3,	50.2,	50.2,	0.0);
(416510.3, 3743748.2,	50.4,	50.4,	0.0);	(416297.6, 3743966.8,	49.7,	49.7,	0.0);
(416305.1, 3743986.1,	47.9,	51.0,	0.0);	(416291.2, 3743985.6,	49.3,	49.3,	0.0);
(416358.9, 3744002.6,	47.3,	47.3,	0.0);	(416339.0, 3743998.5,	46.1,	46.1,	0.0);
(416319.0, 3743996.1,	46.4,	46.4,	0.0);				

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filtration PDF) *** 04/11/17
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 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 16216r *** *** East South Street Project (w/o MERV Filtration PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary Source Impacts - PM10 *** 10:31:55
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

Surface file: ..\anah8.sfc Met Version: 14134
Profile file: ..\anah8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2006 Year: 2006

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
06	01	01	1	01	-2.9	0.060	-9.000	-9.000	-999.	35.	6.6	0.45	1.00	1.00	0.90	39.	9.1	285.4	5.5
06	01	01	1	02	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	64.	9.1	285.4	5.5
06	01	01	1	03	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	103.	9.1	284.9	5.5
06	01	01	1	04	-2.1	0.060	-9.000	-9.000	-999.	35.	9.4	0.45	1.00	1.00	0.90	76.	9.1	284.9	5.5
06	01	01	1	05	-5.9	0.087	-9.000	-9.000	-999.	61.	10.0	0.45	1.00	1.00	1.30	93.	9.1	284.9	5.5
06	01	01	1	06	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	59.	9.1	284.9	5.5
06	01	01	1	07	-6.1	0.087	-9.000	-9.000	-999.	61.	9.6	0.45	1.00	1.00	1.30	58.	9.1	284.2	5.5
06	01	01	1	08	-9.6	0.199	-9.000	-9.000	-999.	213.	73.9	0.45	1.00	0.53	1.80	39.	9.1	284.9	5.5
06	01	01	1	09	33.2	0.322	0.787	0.005	528.	438.	-90.3	0.45	1.00	0.30	2.20	61.	9.1	286.4	5.5
06	01	01	1	10	27.9	0.211	0.832	0.005	742.	239.	-30.3	0.45	1.00	0.23	1.30	187.	9.1	287.0	5.5
06	01	01	1	11	25.2	0.209	0.819	0.005	784.	230.	-32.7	0.45	1.00	0.20	1.30	221.	9.1	287.5	5.5
06	01	01	1	12	75.8	0.233	1.237	0.015	899.	270.	-15.0	0.45	1.00	0.19	1.30	126.	9.1	288.8	5.5
06	01	01	1	13	47.6	0.282	1.084	0.016	963.	359.	-42.3	0.45	1.00	0.19	1.80	77.	9.1	288.8	5.5
06	01	01	1	14	70.8	0.339	1.275	0.017	1053.	473.	-49.4	0.45	1.00	0.20	2.20	50.	9.1	289.2	5.5
06	01	01	1	15	29.3	0.212	0.960	0.017	1088.	244.	-29.3	0.45	1.00	0.24	1.30	179.	9.1	289.2	5.5
06	01	01	1	16	4.4	0.299	0.510	0.017	1091.	393.	-550.5	0.45	1.00	0.32	2.20	116.	9.1	288.1	5.5
06	01	01	1	17	-11.9	0.173	-9.000	-9.000	-999.	182.	39.1	0.45	1.00	0.59	1.80	67.	9.1	287.5	5.5
06	01	01	1	18	-10.6	0.191	-9.000	-9.000	-999.	201.	59.5	0.45	1.00	1.00	1.80	127.	9.1	287.0	5.5
06	01	01	1	19	-10.6	0.191	-9.000	-9.000	-999.	200.	59.1	0.45	1.00	1.00	1.80	145.	9.1	285.9	5.5
06	01	01	1	20	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	71.	9.1	285.4	5.5
06	01	01	1	21	-18.5	0.332	-9.000	-9.000	-999.	458.	177.5	0.45	1.00	1.00	2.70	56.	9.1	284.9	5.5
06	01	01	1	22	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	65.	9.1	285.4	5.5
06	01	01	1	23	-10.6	0.191	-9.000	-9.000	-999.	213.	59.1	0.45	1.00	1.00	1.80	70.	9.1	285.9	5.5
06	01	01	1	24	-14.2	0.257	-9.000	-9.000	-999.	313.	107.1	0.45	1.00	1.00	2.20	66.	9.1	286.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
06	01	01	01	5.5	0	-999.	-99.00	285.4	99.0	-99.00	-99.00
06	01	01	01	9.1	1	39.	0.90	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)
♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filtration PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary Source Impacts - PM10 *** 10:31:55
PAGE 15
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416413.95	3743528.49	0.48016	416426.40	3743528.99	0.45800

RAIL_SS_PM10

416409.26	3743546.45	0.50613	416419.88	3743547.54	0.48628
416439.88	3743547.54	0.45736	416459.88	3743547.54	0.43309
416479.88	3743547.54	0.41156	416499.88	3743547.54	0.39289
416403.32	3743566.45	0.53745	416419.88	3743567.54	0.50854
416439.88	3743567.54	0.48094	416459.88	3743567.54	0.45467
416479.88	3743567.54	0.43217	416499.88	3743567.54	0.41305
416519.88	3743567.54	0.39686	416539.88	3743567.54	0.38319
416399.88	3743587.54	0.56672	416419.88	3743587.54	0.53363
416439.88	3743587.54	0.50719	416459.88	3743587.54	0.47928
416479.88	3743587.54	0.45485	416499.88	3743587.54	0.43428
416519.88	3743587.54	0.41715	416539.88	3743587.54	0.40203
416393.55	3743607.36	0.60464	416419.88	3743607.54	0.53549
416439.88	3743607.54	0.51062	416459.88	3743607.54	0.50749
416479.88	3743607.54	0.47993	416499.88	3743607.54	0.45629
416519.88	3743607.54	0.43632	416539.88	3743607.54	0.42151
416387.84	3743627.90	0.64240	416399.88	3743627.54	0.61983
416419.88	3743627.54	0.58878	416439.88	3743627.54	0.55466
416459.88	3743627.54	0.53605	416479.88	3743627.54	0.50790
416499.88	3743627.54	0.48224	416519.88	3743627.54	0.45918
416381.51	3743647.54	0.68622	416399.88	3743647.54	0.65186
416419.88	3743647.54	0.62089	416439.88	3743647.54	0.59238
416459.88	3743647.54	0.56538	416479.88	3743647.54	0.53734
416499.88	3743647.54	0.51009	416519.88	3743647.54	0.48372
416379.88	3743667.54	0.72819	416399.88	3743667.54	0.69206
416419.88	3743667.54	0.65580	416439.88	3743667.54	0.62385
416459.88	3743667.54	0.59475	416479.88	3743667.54	0.56773
416499.88	3743667.54	0.53946	416519.88	3743667.54	0.50950
416371.75	3743687.44	0.79065	416379.88	3743687.54	0.76791
416399.88	3743687.54	0.72388	416419.88	3743687.54	0.68531
416439.88	3743687.54	0.65339	416459.88	3743687.54	0.62655
416479.88	3743687.54	0.59664	416499.88	3743687.54	0.56748
416519.88	3743687.54	0.53869	416366.21	3743708.44	0.85623
416379.88	3743707.54	0.81127	416399.88	3743707.54	0.75766
416419.88	3743707.54	0.71721	416439.88	3743707.54	0.68539
416459.88	3743707.54	0.66043	416479.88	3743707.54	0.62829
416499.88	3743707.54	0.59800	416519.88	3743707.54	0.56873
416360.42	3743727.54	0.92021	416379.88	3743727.54	0.85738
416399.88	3743727.54	0.80099	416419.88	3743727.54	0.75828
416439.88	3743727.54	0.72369	416459.88	3743727.54	0.69550

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416479.88	3743727.54	0.66446	416499.88	3743727.54	0.63139
416516.30	3743727.54	0.60224	416355.49	3743747.36	1.00366
416364.59	3743747.90	0.97412	416379.88	3743747.54	0.92205
416399.88	3743747.54	0.86165	416419.88	3743747.54	0.81255
416439.88	3743747.54	0.77245	416459.88	3743747.54	0.73903
416479.88	3743747.54	0.70551	416499.88	3743747.54	0.66981
416349.83	3743767.90	1.10738	416363.32	3743767.90	1.06046
416379.88	3743767.54	1.00250	416399.88	3743767.54	0.93789
416419.88	3743767.54	0.88006	416439.88	3743767.54	0.83252
416459.88	3743767.54	0.79239	416479.88	3743767.54	0.75112
416499.88	3743767.54	0.71096	416344.22	3743787.36	1.21646
416359.88	3743787.54	1.16913	416379.88	3743787.54	1.10523
416399.88	3743787.54	1.03511	416419.88	3743787.54	0.96435
416439.88	3743787.54	0.90655	416459.88	3743787.54	0.85963

416479.88	3743787.54	0.80181	416499.88	3743787.54	0.75323
416340.71	3743805.95	1.31397	416359.88	3743807.54	1.26754
416379.88	3743807.54	1.20270	416399.88	3743807.54	1.12326
416419.88	3743807.54	1.05169	416439.88	3743807.54	0.98580
416459.88	3743807.54	0.92449	416479.88	3743807.54	0.86018
416495.31	3743807.54	0.81552	416333.49	3743827.31	1.45965
416343.86	3743827.90	1.42289	416359.88	3743827.54	1.37588
416379.88	3743827.54	1.30387	416399.88	3743827.54	1.21393
416419.88	3743827.54	1.13585	416439.88	3743827.54	1.05947
416459.88	3743827.54	0.98565	416479.88	3743827.54	0.91748
416327.66	3743848.44	1.62716	416339.88	3743847.54	1.56350
416359.88	3743847.54	1.48781	416379.88	3743847.54	1.40273
416399.88	3743847.54	1.30506	416419.88	3743847.54	1.20324
416439.88	3743847.54	1.11495	416459.88	3743847.54	1.03789
416479.88	3743847.54	0.96674	416322.96	3743867.72	1.80438
416339.88	3743867.54	1.70858	416359.88	3743867.54	1.60167
416379.88	3743867.54	1.48738	416399.88	3743867.54	1.36562
416419.88	3743867.54	1.25653	416439.88	3743867.54	1.16267
416459.88	3743867.54	1.08190	416479.88	3743867.54	1.00766
416319.88	3743887.54	2.00993	416339.88	3743887.54	1.86240
416359.88	3743887.54	1.71504	416379.88	3743887.54	1.56884
416399.88	3743887.54	1.42608	416419.88	3743887.54	1.30639
416439.88	3743887.54	1.20299	416459.88	3743887.54	1.11363
416474.86	3743886.63	1.05323	416312.31	3743906.99	2.29416
416324.40	3743907.54	2.16682	416339.88	3743907.54	2.01369
416359.88	3743907.54	1.81836	416379.88	3743907.54	1.64509

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416399.88	3743907.54	1.49130	416419.88	3743907.54	1.35616
416439.88	3743907.54	1.23770	416459.88	3743907.54	1.13379
416306.58	3743928.08	2.60160	416322.23	3743927.90	2.37353
416339.88	3743927.54	2.15452	416359.88	3743927.54	1.92214
416379.88	3743927.54	1.72338	416399.88	3743927.54	1.55255
416419.88	3743927.54	1.39715	416439.88	3743927.54	1.26629
416459.88	3743927.54	1.15600	416301.87	3743947.72	2.88126
416319.88	3743947.54	2.54771	416339.88	3743947.54	2.25786
416359.88	3743947.54	2.00434	416379.88	3743947.54	1.78844
416399.88	3743947.54	1.60358	416419.88	3743947.54	1.43523
416439.88	3743947.54	1.29508	416459.88	3743947.54	1.17741
416307.12	3743967.18	2.91917	416319.88	3743967.54	2.65721
416339.88	3743967.54	2.32029	416359.88	3743967.54	2.06401
416379.88	3743967.54	1.84092	416399.88	3743967.54	1.64501
416419.88	3743967.54	1.47844	416439.88	3743967.54	1.33108
416319.88	3743987.54	2.70208	416339.88	3743987.54	2.34318
416359.88	3743987.54	2.08649	416379.88	3743987.54	1.87265
416399.88	3743987.54	1.69006	416419.88	3743987.54	1.51637
416439.88	3743987.54	1.36638	416379.88	3744007.54	1.90974
416399.88	3744007.54	1.73459	416419.88	3744007.54	1.55335
416439.88	3744007.54	1.40181	416436.78	3744021.35	1.44505
416510.28	3743748.17	0.65135	416297.59	3743966.85	3.16815
416305.11	3743986.12	3.04314	416291.25	3743985.57	3.48351
416358.87	3744002.60	2.11847	416339.02	3743998.54	2.37026
416319.04	3743996.11	2.73772			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	1.44981	(09102824)	416426.40	3743528.99	1.52039	(09102824)
416409.26	3743546.45	1.62657	(09102824)	416419.88	3743547.54	1.70175	(09102824)
416439.88	3743547.54	1.74411	(09102824)	416459.88	3743547.54	1.68033	(09102824)
416479.88	3743547.54	1.56311	(09102824)	416499.88	3743547.54	1.42248	(09102824)
416403.32	3743566.45	1.83807	(09102824)	416419.88	3743567.54	1.96877	(09102824)
416439.88	3743567.54	1.96654	(09102824)	416459.88	3743567.54	1.82790	(09102824)
416479.88	3743567.54	1.65462	(09102824)	416499.88	3743567.54	1.47180	(09102824)
416519.88	3743567.54	1.29283	(09102824)	416539.88	3743567.54	1.12792	(09102824)
416399.88	3743587.54	2.10874	(09102824)	416419.88	3743587.54	2.25189	(09102824)
416439.88	3743587.54	2.20184	(09102824)	416459.88	3743587.54	1.97158	(09102824)
416479.88	3743587.54	1.72105	(09102824)	416499.88	3743587.54	1.48596	(09102824)
416519.88	3743587.54	1.27681	(09102824)	416539.88	3743587.54	1.08340	(09102824)
416393.55	3743607.36	2.35121	(09102824)	416419.88	3743607.54	2.53273	(09102824)
416439.88	3743607.54	2.40827	(09102824)	416459.88	3743607.54	2.10263	(09102824)
416479.88	3743607.54	1.75276	(09102824)	416499.88	3743607.54	1.45555	(09102824)
416519.88	3743607.54	1.20649	(09102824)	416539.88	3743607.54	1.04846	(07091024)
416387.84	3743627.90	2.55753	(09102824)	416399.88	3743627.54	2.67316	(09102824)
416419.88	3743627.54	2.68481	(09102824)	416439.88	3743627.54	2.47280	(09102824)
416459.88	3743627.54	2.14381	(09102824)	416479.88	3743627.54	1.74337	(09102824)
416499.88	3743627.54	1.40087	(09102824)	416519.88	3743627.54	1.17187	(07091024)
416381.51	3743647.54	2.78222	(09102824)	416399.88	3743647.54	2.90035	(09102824)
416419.88	3743647.54	2.77831	(09102824)	416439.88	3743647.54	2.47290	(09102824)
416459.88	3743647.54	2.08067	(09102824)	416479.88	3743647.54	1.66443	(09102824)
416499.88	3743647.54	1.37102	(07091024)	416519.88	3743647.54	1.25072	(07091024)
416379.88	3743667.54	3.10688	(09102824)	416399.88	3743667.54	3.13762	(09102824)
416419.88	3743667.54	2.78815	(09102824)	416439.88	3743667.54	2.34833	(09102824)
416459.88	3743667.54	1.90837	(09102824)	416479.88	3743667.54	1.59910	(07091024)
416499.88	3743667.54	1.46432	(07091024)	416519.88	3743667.54	1.29614	(07022824)
416371.75	3743687.44	3.36584	(09102824)	416379.88	3743687.54	3.30378	(09102824)
416399.88	3743687.54	3.00594	(09102824)	416419.88	3743687.54	2.54020	(09102824)
416439.88	3743687.54	2.08363	(09102824)	416459.88	3743687.54	1.77729	(07091024)
416479.88	3743687.54	1.64627	(07091024)	416499.88	3743687.54	1.51196	(07022824)
416519.88	3743687.54	1.50599	(12121824)	416366.21	3743708.44	3.60895	(09102824)
416379.88	3743707.54	3.33709	(09102824)	416399.88	3743707.54	2.77516	(09102824)
416419.88	3743707.54	2.24229	(09102824)	416439.88	3743707.54	1.88428	(07091024)
416459.88	3743707.54	1.81952	(07091024)	416479.88	3743707.54	1.72489	(12121824)
416499.88	3743707.54	1.74961	(12121824)	416519.88	3743707.54	1.88482	(07082624)
416360.42	3743727.54	3.71015	(09102824)	416379.88	3743727.54	3.17532	(09102824)
416399.88	3743727.54	2.50968	(09102824)	416419.88	3743727.54	2.05126	(07091024)
416439.88	3743727.54	1.92897	(07091024)	416459.88	3743727.54	1.95269	(12121824)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

RAIL_SS_PM10

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416479.88	3743727.54	2.03637	(07082624)	416499.88	3743727.54	2.30880	(07082624)
416516.30	3743727.54	2.44438	(07082624)	416355.49	3743747.36	3.82655	(09102824)
416364.59	3743747.90	3.53649	(09102824)	416379.88	3743747.54	2.95270	(09102824)
416399.88	3743747.54	2.32925	(07091024)	416419.88	3743747.54	2.14438	(07091024)
416439.88	3743747.54	2.20068	(12121824)	416459.88	3743747.54	2.46590	(07082624)
416479.88	3743747.54	2.84102	(07082624)	416499.88	3743747.54	3.05617	(07082624)
416349.83	3743767.90	3.84220	(09102824)	416363.32	3743767.90	3.32300	(09102824)
416379.88	3743767.54	2.73892	(07091024)	416399.88	3743767.54	2.49074	(12121824)
416419.88	3743767.54	2.58823	(12121824)	416439.88	3743767.54	3.04500	(07082624)
416459.88	3743767.54	3.48327	(07082624)	416479.88	3743767.54	3.71083	(07082624)
416499.88	3743767.54	3.74375	(07082624)	416344.22	3743787.36	3.67250	(09102824)
416359.88	3743787.54	3.16355	(07091024)	416379.88	3743787.54	3.13785	(12121824)
416399.88	3743787.54	3.39832	(07082624)	416419.88	3743787.54	3.95023	(07082624)
416439.88	3743787.54	4.36842	(07082624)	416459.88	3743787.54	4.61787	(07082624)
416479.88	3743787.54	4.46262	(07082624)	416499.88	3743787.54	4.20005	(07082624)
416340.71	3743805.95	3.29061	(07091024)	416359.88	3743807.54	3.51061	(12121824)
416379.88	3743807.54	4.33422	(07082624)	416399.88	3743807.54	5.09188	(07082624)
416419.88	3743807.54	5.53051	(07082624)	416439.88	3743807.54	5.62408	(07082624)
416459.88	3743807.54	5.42294	(07082624)	416479.88	3743807.54	4.89417	(07082624)
416495.31	3743807.54	4.43667	(07082624)	416333.49	3743827.31	3.59332	(12121824)
416343.86	3743827.90	4.08872	(07082624)	416359.88	3743827.54	5.18237	(07082624)
416379.88	3743827.54	6.30960	(07082624)	416399.88	3743827.54	6.69625	(07082624)
416419.88	3743827.54	6.69320	(07082624)	416439.88	3743827.54	6.24579	(07082624)
416459.88	3743827.54	5.53250	(07082624)	416479.88	3743827.54	4.74494	(07082624)
416327.66	3743848.44	5.29508	(07082624)	416339.88	3743847.54	6.03489	(07082624)
416359.88	3743847.54	7.25429	(07082624)	416379.88	3743847.54	7.84639	(07082624)
416399.88	3743847.54	7.57856	(07082624)	416419.88	3743847.54	6.75281	(07082624)
416439.88	3743847.54	5.82079	(07082624)	416459.88	3743847.54	4.90634	(07082624)
416479.88	3743847.54	4.05510	(07082624)	416322.96	3743867.72	7.56184	(07082624)
416339.88	3743867.54	8.34400	(07082624)	416359.88	3743867.54	8.59652	(07082624)
416379.88	3743867.54	8.08916	(07082624)	416399.88	3743867.54	6.99716	(07082624)
416419.88	3743867.54	5.81732	(07082624)	416439.88	3743867.54	4.75235	(07082624)
416459.88	3743867.54	3.86323	(07082624)	416479.88	3743867.54	3.74327	(07022824)
416319.88	3743887.54	9.67048	(07082624)	416339.88	3743887.54	9.36635	(07082624)
416359.88	3743887.54	8.34938	(07082624)	416379.88	3743887.54	6.99724	(07082624)
416399.88	3743887.54	5.60343	(07082624)	416419.88	3743887.54	4.41459	(07082624)
416439.88	3743887.54	4.20731	(07022824)	416459.88	3743887.54	3.98545	(07022824)
416474.86	3743886.63	3.81222	(07022824)	416312.31	3743906.99	10.33048	(07082624)
416324.40	3743907.54	9.48894	(07082624)	416339.88	3743907.54	8.24055	(07082624)
416359.88	3743907.54	6.57243	(07082624)	416379.88	3743907.54	5.11377	(07082624)

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filtration PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary Source Impacts - PM10 *** 10:31:55
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	4.76455	(07022824)	416419.88	3743907.54	4.45791	(07022824)
416439.88	3743907.54	4.13621	(06080624)	416459.88	3743907.54	3.83079	(06080624)
416306.58	3743928.08	8.76546	(07082624)	416322.23	3743927.90	7.24979	(07082624)
416339.88	3743927.54	5.79311	(07082624)	416359.88	3743927.54	5.28698	(07022824)
416379.88	3743927.54	5.00065	(06080624)	416399.88	3743927.54	4.65713	(06080624)
416419.88	3743927.54	4.26221	(06080624)	416439.88	3743927.54	3.87262	(06080624)
416459.88	3743927.54	3.51443	(06080624)	416301.87	3743947.72	6.56666	(06111524)
416319.88	3743947.54	5.74648	(06111524)	416339.88	3743947.54	5.41288	(06080624)
416359.88	3743947.54	5.00556	(06080624)	416379.88	3743947.54	4.57922	(06080624)
416399.88	3743947.54	4.15845	(06080624)	416419.88	3743947.54	3.73543	(06080624)
416439.88	3743947.54	3.35076	(06080624)	416459.88	3743947.54	3.01506	(06080624)

416307.12	3743967.18	6.60762 (08020324)	416319.88	3743967.54	5.97162 (08020324)
416339.88	3743967.54	5.15808 (08020324)	416359.88	3743967.54	4.54834 (12111824)
416379.88	3743967.54	4.07970 (12111824)	416399.88	3743967.54	3.68626 (08062924)
416419.88	3743967.54	3.35124 (08062924)	416439.88	3743967.54	3.03616 (08062924)
416319.88	3743987.54	6.30276 (08020324)	416339.88	3743987.54	5.40425 (08020324)
416359.88	3743987.54	4.75471 (08020324)	416379.88	3743987.54	4.22039 (08020324)
416399.88	3743987.54	3.77267 (08020324)	416419.88	3743987.54	3.46774 (09070124)
416439.88	3743987.54	3.20955 (09070124)	416379.88	3744007.54	4.32733 (08020324)
416399.88	3744007.54	3.88856 (08020324)	416419.88	3744007.54	3.55298 (09070124)
416439.88	3744007.54	3.29849 (09070124)	416436.78	3744021.35	3.31483 (09070124)
416510.28	3743748.17	3.11364 (07082624)	416297.59	3743966.85	7.20664 (08020324)
416305.11	3743986.12	7.15981 (08020324)	416291.25	3743985.57	8.28207 (08020324)
416358.87	3744002.60	4.86303 (08020324)	416339.02	3743998.54	5.49821 (08020324)
416319.04	3743996.11	6.41321 (08020324)			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	3.48351 AT (416291.25, 3743985.57, 49.34, 49.34, 0.00) DC	
	2ND HIGHEST VALUE IS	3.16815 AT (416297.59, 3743966.85, 49.74, 49.74, 0.00) DC	
	3RD HIGHEST VALUE IS	3.04314 AT (416305.11, 3743986.12, 47.89, 51.00, 0.00) DC	
	4TH HIGHEST VALUE IS	2.91917 AT (416307.12, 3743967.18, 49.17, 49.17, 0.00) DC	
	5TH HIGHEST VALUE IS	2.88126 AT (416301.87, 3743947.72, 49.14, 49.14, 0.00) DC	
	6TH HIGHEST VALUE IS	2.73772 AT (416319.04, 3743996.11, 46.39, 46.39, 0.00) DC	
	7TH HIGHEST VALUE IS	2.70208 AT (416319.88, 3743987.54, 47.25, 47.25, 0.00) DC	
	8TH HIGHEST VALUE IS	2.65721 AT (416319.88, 3743967.54, 49.03, 49.03, 0.00) DC	
	9TH HIGHEST VALUE IS	2.60160 AT (416306.58, 3743928.08, 48.56, 48.56, 0.00) DC	
	10TH HIGHEST VALUE IS	2.54771 AT (416319.88, 3743947.54, 49.25, 49.25, 0.00) DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_10 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	10.33048 ON 07082624:	AT (416312.31, 3743906.99, 47.98, 47.98, 0.00)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 814 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 61 Calm Hours Identified

A Total of 753 Missing Hours Identified (1.72 Percent)

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

******** WARNING MESSAGES ********
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 12010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 2 year gap

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

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filter PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary source Impacts - PM2.5 *** 10:40:21
PAGE 1

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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 144 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 8000000.0 ; 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:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_2.5

**Model Calculates 1 Short Term Average(s) of: 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 144 Source(s); 1 Source Group(s); and 209 Receptor(s)

with: 1 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 143 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of ANNUAL 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) = 50.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.8 MB of RAM.

**Detailed Error/Message File: Rail_SS_PM25.err
**File for Summary of Results: Rail_SS_PM25.sum

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
2825	0	0.75000E-01	416153.1	3743991.0	55.8	12.19	-0.00	0.01	0.01	YES	YES	NO	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000001	0	0.19640E-05	416203.0	3744218.8	50.3	3.89	3.78	1.81	YES	
L0000002	0	0.19640E-05	416205.1	3744210.9	50.0	3.89	3.78	1.81	YES	
L0000003	0	0.19640E-05	416207.2	3744203.1	49.8	3.89	3.78	1.81	YES	
L0000004	0	0.19640E-05	416209.3	3744195.2	49.5	3.89	3.78	1.81	YES	
L0000005	0	0.19640E-05	416211.4	3744187.4	49.4	3.89	3.78	1.81	YES	
L0000006	0	0.19640E-05	416213.5	3744179.5	49.2	3.89	3.78	1.81	YES	
L0000007	0	0.19640E-05	416215.6	3744171.6	48.9	3.89	3.78	1.81	YES	
L0000008	0	0.19640E-05	416217.8	3744163.8	48.6	3.89	3.78	1.81	YES	
L0000009	0	0.19640E-05	416219.9	3744155.9	48.2	3.89	3.78	1.81	YES	
L0000010	0	0.19640E-05	416222.0	3744148.1	48.1	3.89	3.78	1.81	YES	
L0000011	0	0.19640E-05	416224.1	3744140.2	48.3	3.89	3.78	1.81	YES	
L0000012	0	0.19640E-05	416226.2	3744132.4	48.5	3.89	3.78	1.81	YES	
L0000013	0	0.19640E-05	416228.3	3744124.5	48.6	3.89	3.78	1.81	YES	
L0000014	0	0.19640E-05	416230.4	3744116.7	48.8	3.89	3.78	1.81	YES	
L0000015	0	0.19640E-05	416232.5	3744108.8	49.0	3.89	3.78	1.81	YES	
L0000016	0	0.19640E-05	416234.6	3744101.0	49.1	3.89	3.78	1.81	YES	
L0000017	0	0.19640E-05	416236.8	3744093.1	49.3	3.89	3.78	1.81	YES	
L0000018	0	0.19640E-05	416238.9	3744085.2	49.5	3.89	3.78	1.81	YES	
L0000019	0	0.19640E-05	416241.0	3744077.4	49.5	3.89	3.78	1.81	YES	
L0000020	0	0.19640E-05	416243.1	3744069.5	49.5	3.89	3.78	1.81	YES	
L0000021	0	0.19640E-05	416245.2	3744061.7	49.5	3.89	3.78	1.81	YES	
L0000022	0	0.19640E-05	416247.3	3744053.8	49.5	3.89	3.78	1.81	YES	
L0000023	0	0.19640E-05	416249.4	3744046.0	49.5	3.89	3.78	1.81	YES	
L0000024	0	0.19640E-05	416251.5	3744038.1	49.7	3.89	3.78	1.81	YES	
L0000025	0	0.19640E-05	416253.6	3744030.3	49.9	3.89	3.78	1.81	YES	
L0000026	0	0.19640E-05	416255.7	3744022.4	50.1	3.89	3.78	1.81	YES	
L0000027	0	0.19640E-05	416257.9	3744014.5	50.2	3.89	3.78	1.81	YES	
L0000028	0	0.19640E-05	416260.0	3744006.7	50.4	3.89	3.78	1.81	YES	
L0000029	0	0.19640E-05	416262.1	3743998.8	50.6	3.89	3.78	1.81	YES	
L0000030	0	0.19640E-05	416264.2	3743991.0	50.7	3.89	3.78	1.81	YES	
L0000031	0	0.19640E-05	416266.3	3743983.1	50.8	3.89	3.78	1.81	YES	
L0000032	0	0.19640E-05	416268.4	3743975.3	50.9	3.89	3.78	1.81	YES	
L0000033	0	0.19640E-05	416270.5	3743967.4	50.8	3.89	3.78	1.81	YES	
L0000034	0	0.19640E-05	416272.6	3743959.6	50.3	3.89	3.78	1.81	YES	
L0000035	0	0.19640E-05	416274.7	3743951.7	49.8	3.89	3.78	1.81	YES	
L0000036	0	0.19640E-05	416276.8	3743943.8	49.3	3.89	3.78	1.81	YES	
L0000037	0	0.19640E-05	416279.0	3743936.0	48.7	3.89	3.78	1.81	YES	
L0000038	0	0.19640E-05	416281.1	3743928.1	48.2	3.89	3.78	1.81	YES	
L0000039	0	0.19640E-05	416283.2	3743920.3	47.8	3.89	3.78	1.81	YES	
L0000040	0	0.19640E-05	416285.3	3743912.4	47.3	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000041	0	0.19640E-05	416287.4	3743904.6	47.1	3.89	3.78	1.81	YES	
L0000042	0	0.19640E-05	416289.5	3743896.7	46.9	3.89	3.78	1.81	YES	
L0000043	0	0.19640E-05	416291.6	3743888.9	46.7	3.89	3.78	1.81	YES	
L0000044	0	0.19640E-05	416293.7	3743881.0	46.5	3.89	3.78	1.81	YES	
L0000045	0	0.19640E-05	416295.8	3743873.2	46.9	3.89	3.78	1.81	YES	
L0000046	0	0.19640E-05	416298.0	3743865.3	47.3	3.89	3.78	1.81	YES	
L0000047	0	0.19640E-05	416300.1	3743857.4	47.7	3.89	3.78	1.81	YES	
L0000048	0	0.19640E-05	416302.2	3743849.6	48.0	3.89	3.78	1.81	YES	
L0000049	0	0.19640E-05	416304.3	3743841.7	48.3	3.89	3.78	1.81	YES	
L0000050	0	0.19640E-05	416306.4	3743833.9	48.5	3.89	3.78	1.81	YES	
L0000051	0	0.19640E-05	416308.5	3743826.0	48.8	3.89	3.78	1.81	YES	
L0000052	0	0.19640E-05	416310.6	3743818.2	49.1	3.89	3.78	1.81	YES	
L0000053	0	0.19640E-05	416312.7	3743810.3	49.5	3.89	3.78	1.81	YES	
L0000054	0	0.19640E-05	416314.8	3743802.5	49.9	3.89	3.78	1.81	YES	
L0000055	0	0.19640E-05	416316.9	3743794.6	50.3	3.89	3.78	1.81	YES	
L0000056	0	0.19640E-05	416319.1	3743786.7	50.6	3.89	3.78	1.81	YES	
L0000057	0	0.19640E-05	416321.2	3743778.9	50.7	3.89	3.78	1.81	YES	
L0000058	0	0.19640E-05	416323.3	3743771.0	50.9	3.89	3.78	1.81	YES	
L0000059	0	0.19640E-05	416325.4	3743763.2	51.0	3.89	3.78	1.81	YES	
L0000060	0	0.19640E-05	416327.5	3743755.3	51.1	3.89	3.78	1.81	YES	
L0000061	0	0.19640E-05	416329.6	3743747.5	51.0	3.89	3.78	1.81	YES	
L0000062	0	0.19640E-05	416331.7	3743739.6	51.0	3.89	3.78	1.81	YES	
L0000063	0	0.19640E-05	416333.8	3743731.8	50.8	3.89	3.78	1.81	YES	
L0000064	0	0.19640E-05	416335.9	3743723.9	50.8	3.89	3.78	1.81	YES	
L0000065	0	0.19640E-05	416338.0	3743716.1	50.9	3.89	3.78	1.81	YES	
L0000066	0	0.19640E-05	416340.2	3743708.2	51.0	3.89	3.78	1.81	YES	
L0000067	0	0.19640E-05	416342.3	3743700.3	51.1	3.89	3.78	1.81	YES	
L0000068	0	0.19640E-05	416344.4	3743692.5	51.0	3.89	3.78	1.81	YES	
L0000069	0	0.19640E-05	416346.5	3743684.6	50.9	3.89	3.78	1.81	YES	
L0000070	0	0.19640E-05	416348.6	3743676.8	50.8	3.89	3.78	1.81	YES	
L0000071	0	0.19640E-05	416350.7	3743668.9	50.7	3.89	3.78	1.81	YES	
L0000072	0	0.19640E-05	416352.8	3743661.1	50.6	3.89	3.78	1.81	YES	
L0000073	0	0.19640E-05	416354.9	3743653.2	50.4	3.89	3.78	1.81	YES	
L0000074	0	0.19640E-05	416357.0	3743645.4	50.3	3.89	3.78	1.81	YES	
L0000075	0	0.19640E-05	416359.2	3743637.5	50.3	3.89	3.78	1.81	YES	
L0000076	0	0.19640E-05	416361.3	3743629.6	50.5	3.89	3.78	1.81	YES	
L0000077	0	0.19640E-05	416363.4	3743621.8	50.7	3.89	3.78	1.81	YES	
L0000078	0	0.19640E-05	416365.5	3743613.9	50.8	3.89	3.78	1.81	YES	
L0000079	0	0.19640E-05	416367.6	3743606.1	50.9	3.89	3.78	1.81	YES	
L0000080	0	0.19640E-05	416369.7	3743598.2	51.0	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000081	0	0.19640E-05	416371.8	3743590.4	51.2	3.89	3.78	1.81	YES	
L0000082	0	0.19640E-05	416373.9	3743582.5	51.4	3.89	3.78	1.81	YES	
L0000083	0	0.19640E-05	416376.0	3743574.7	51.9	3.89	3.78	1.81	YES	
L0000084	0	0.19640E-05	416378.1	3743566.8	52.5	3.89	3.78	1.81	YES	
L0000085	0	0.19640E-05	416380.3	3743559.0	52.9	3.89	3.78	1.81	YES	

L0000086	0	0.19640E-05	416382.4	3743551.1	53.4	3.89	3.78	1.81	YES
L0000087	0	0.19640E-05	416384.5	3743543.2	53.1	3.89	3.78	1.81	YES
L0000088	0	0.19640E-05	416386.6	3743535.4	52.8	3.89	3.78	1.81	YES
L0000089	0	0.19640E-05	416388.7	3743527.5	52.4	3.89	3.78	1.81	YES
L0000090	0	0.19640E-05	416390.8	3743519.7	52.0	3.89	3.78	1.81	YES
L0000091	0	0.19640E-05	416392.9	3743511.8	51.7	3.89	3.78	1.81	YES
L0000092	0	0.19640E-05	416395.0	3743504.0	51.5	3.89	3.78	1.81	YES
L0000093	0	0.19640E-05	416397.1	3743496.1	51.2	3.89	3.78	1.81	YES
L0000094	0	0.19640E-05	416399.2	3743488.3	51.0	3.89	3.78	1.81	YES
L0000095	0	0.19640E-05	416401.4	3743480.4	51.1	3.89	3.78	1.81	YES
L0000096	0	0.19640E-05	416403.5	3743472.5	51.2	3.89	3.78	1.81	YES
L0000097	0	0.19640E-05	416405.6	3743464.7	51.2	3.89	3.78	1.81	YES
L0000098	0	0.19640E-05	416407.7	3743456.8	51.1	3.89	3.78	1.81	YES
L0000099	0	0.19640E-05	416409.8	3743449.0	50.8	3.89	3.78	1.81	YES
L0000100	0	0.19640E-05	416411.9	3743441.1	50.5	3.89	3.78	1.81	YES
L0000101	0	0.19640E-05	416414.0	3743433.3	50.2	3.89	3.78	1.81	YES
L0000102	0	0.19640E-05	416416.1	3743425.4	49.9	3.89	3.78	1.81	YES
L0000103	0	0.19640E-05	416418.2	3743417.6	49.8	3.89	3.78	1.81	YES
L0000104	0	0.19640E-05	416420.3	3743409.7	49.8	3.89	3.78	1.81	YES
L0000105	0	0.19640E-05	416422.5	3743401.9	49.8	3.89	3.78	1.81	YES
L0000106	0	0.19640E-05	416424.6	3743394.0	49.7	3.89	3.78	1.81	YES
L0000107	0	0.19640E-05	416426.7	3743386.1	49.5	3.89	3.78	1.81	YES
L0000108	0	0.19640E-05	416428.8	3743378.3	49.3	3.89	3.78	1.81	YES
L0000109	0	0.19640E-05	416430.9	3743370.4	49.0	3.89	3.78	1.81	YES
L0000110	0	0.19640E-05	416433.0	3743362.6	48.8	3.89	3.78	1.81	YES
L0000111	0	0.19640E-05	416435.1	3743354.7	48.5	3.89	3.78	1.81	YES
L0000112	0	0.19640E-05	416437.2	3743346.9	48.2	3.89	3.78	1.81	YES
L0000113	0	0.19640E-05	416439.3	3743339.0	48.0	3.89	3.78	1.81	YES
L0000114	0	0.19640E-05	416441.5	3743331.2	48.2	3.89	3.78	1.81	YES
L0000115	0	0.19640E-05	416443.6	3743323.3	48.3	3.89	3.78	1.81	YES
L0000116	0	0.19640E-05	416445.7	3743315.4	48.4	3.89	3.78	1.81	YES
L0000117	0	0.19640E-05	416447.8	3743307.6	48.5	3.89	3.78	1.81	YES
L0000118	0	0.19640E-05	416449.9	3743299.7	48.7	3.89	3.78	1.81	YES
L0000119	0	0.19640E-05	416452.0	3743291.9	48.9	3.89	3.78	1.81	YES
L0000120	0	0.19640E-05	416454.1	3743284.0	49.1	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0000121	0	0.19640E-05	416456.2	3743276.2	49.1	3.89	3.78	1.81	YES	
L0000122	0	0.19640E-05	416458.3	3743268.3	49.1	3.89	3.78	1.81	YES	
L0000123	0	0.19640E-05	416460.4	3743260.5	49.0	3.89	3.78	1.81	YES	
L0000124	0	0.19640E-05	416462.6	3743252.6	49.0	3.89	3.78	1.81	YES	
L0000125	0	0.19640E-05	416464.7	3743244.8	49.1	3.89	3.78	1.81	YES	
L0000126	0	0.19640E-05	416466.8	3743236.9	49.3	3.89	3.78	1.81	YES	
L0000127	0	0.19640E-05	416468.9	3743229.0	49.5	3.89	3.78	1.81	YES	
L0000128	0	0.19640E-05	416471.0	3743221.2	49.6	3.89	3.78	1.81	YES	
L0000129	0	0.19640E-05	416473.1	3743213.3	49.8	3.89	3.78	1.81	YES	
L0000130	0	0.19640E-05	416475.2	3743205.5	50.0	3.89	3.78	1.81	YES	
L0000131	0	0.19640E-05	416477.3	3743197.6	50.2	3.89	3.78	1.81	YES	
L0000132	0	0.19640E-05	416479.4	3743189.8	50.4	3.89	3.78	1.81	YES	
L0000133	0	0.19640E-05	416481.5	3743181.9	50.5	3.89	3.78	1.81	YES	
L0000134	0	0.19640E-05	416483.7	3743174.1	50.6	3.89	3.78	1.81	YES	
L0000135	0	0.19640E-05	416485.8	3743166.2	50.8	3.89	3.78	1.81	YES	
L0000136	0	0.19640E-05	416487.9	3743158.3	51.0	3.89	3.78	1.81	YES	
L0000137	0	0.19640E-05	416490.0	3743150.5	51.0	3.89	3.78	1.81	YES	
L0000138	0	0.19640E-05	416492.1	3743142.6	51.0	3.89	3.78	1.81	YES	
L0000139	0	0.19640E-05	416494.2	3743134.8	51.0	3.89	3.78	1.81	YES	
L0000140	0	0.19640E-05	416496.3	3743126.9	51.0	3.89	3.78	1.81	YES	
L0000141	0	0.19640E-05	416498.4	3743119.1	51.1	3.89	3.78	1.81	YES	
L0000142	0	0.19640E-05	416500.5	3743111.2	51.2	3.89	3.78	1.81	YES	

L0000143 0 0.19640E-05 416502.7 3743103.4 51.4 3.89 3.78 1.81 YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE IDs

ALL L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,
L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,
L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,
L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,
L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,
L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,
L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,
L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,
L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,
L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,
L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

URBAN ID URBAN POP SOURCE IDs

8000000. L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,

L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,
L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,
L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,
L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,
L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,
L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,
L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,
L0000113 , L0000114 , L0000115 , L0000116 , L0000117 , L0000118 , L0000119 , L0000120 ,
L0000121 , L0000122 , L0000123 , L0000124 , L0000125 , L0000126 , L0000127 , L0000128 ,
L0000129 , L0000130 , L0000131 , L0000132 , L0000133 , L0000134 , L0000135 , L0000136 ,
L0000137 , L0000138 , L0000139 , L0000140 , L0000141 , L0000142 , L0000143 , 2825 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 2825

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	0.0,	0.0,	0.0,	0.0,	0.0,
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,	0.0,
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,	0.0,
9	0.0,	0.0,	0.0,	0.0,	0.0,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	0.0,	0.0,	0.0,	0.0,	0.0,	12	10.7,	56.3,	55.6,	-72.7,	27.1,
13	10.7,	54.1,	56.8,	-77.3,	18.9,	14	10.7,	50.3,	56.2,	-79.6,	10.1,
15	10.7,	44.9,	53.9,	-79.4,	1.0,	16	10.7,	38.2,	50.0,	-76.8,	-8.1,
17	10.7,	35.2,	48.0,	-73.7,	-17.0,	18	10.7,	42.4,	52.6,	-72.2,	-25.3,
19	0.0,	0.0,	0.0,	0.0,	0.0,	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	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
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	10.7,	56.3,	55.6,	17.1,	-27.1,
31	10.7,	54.1,	56.8,	20.6,	-18.9,	32	0.0,	0.0,	0.0,	0.0,	0.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	10.7,	42.4,	52.6,	19.7,	25.3,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416414.0, 3743528.5,	52.9,	52.9,	0.0);	(416426.4, 3743529.0,	53.2,	53.2,	0.0);
(416409.3, 3743546.4,	53.8,	53.8,	0.0);	(416419.9, 3743547.5,	53.9,	53.9,	0.0);
(416439.9, 3743547.5,	53.3,	53.3,	0.0);	(416459.9, 3743547.5,	52.0,	52.0,	0.0);
(416479.9, 3743547.5,	50.6,	50.6,	0.0);	(416499.9, 3743547.5,	49.6,	49.6,	0.0);
(416403.3, 3743566.4,	54.1,	54.1,	0.0);	(416419.9, 3743567.5,	54.8,	54.8,	0.0);
(416439.9, 3743567.5,	54.3,	56.0,	0.0);	(416459.9, 3743567.5,	52.6,	58.0,	0.0);

(416479.9, 3743567.5, 51.3, 58.0, 0.0); (416499.9, 3743567.5, 50.4, 50.4, 0.0);
(416519.9, 3743567.5, 50.2, 50.2, 0.0); (416539.9, 3743567.5, 50.4, 50.4, 0.0);
(416399.9, 3743587.5, 54.2, 58.0, 0.0); (416419.9, 3743587.5, 55.7, 55.7, 0.0);
(416439.9, 3743587.5, 55.5, 58.0, 0.0); (416459.9, 3743587.5, 53.5, 58.0, 0.0);
(416479.9, 3743587.5, 52.0, 58.0, 0.0); (416499.9, 3743587.5, 51.2, 51.2, 0.0);
(416519.9, 3743587.5, 51.0, 51.0, 0.0); (416539.9, 3743587.5, 51.2, 51.2, 0.0);
(416393.5, 3743607.4, 54.1, 58.0, 0.0); (416419.9, 3743607.5, 56.8, 58.0, 0.0);
(416439.9, 3743607.5, 56.8, 58.0, 0.0); (416459.9, 3743607.5, 54.8, 58.0, 0.0);
(416479.9, 3743607.5, 52.9, 58.0, 0.0); (416499.9, 3743607.5, 51.6, 51.6, 0.0);
(416519.9, 3743607.5, 51.0, 51.0, 0.0); (416539.9, 3743607.5, 51.6, 51.6, 0.0);
(416387.8, 3743627.9, 53.0, 58.0, 0.0); (416399.9, 3743627.5, 54.4, 58.0, 0.0);
(416419.9, 3743627.5, 56.0, 56.0, 0.0); (416439.9, 3743627.5, 56.4, 56.4, 0.0);
(416459.9, 3743627.5, 55.6, 55.6, 0.0); (416479.9, 3743627.5, 54.0, 54.0, 0.0);
(416499.9, 3743627.5, 52.6, 52.6, 0.0); (416519.9, 3743627.5, 51.6, 51.6, 0.0);
(416381.5, 3743647.5, 52.4, 52.4, 0.0); (416399.9, 3743647.5, 54.2, 54.2, 0.0);
(416419.9, 3743647.5, 55.2, 55.2, 0.0); (416439.9, 3743647.5, 55.8, 55.8, 0.0);
(416459.9, 3743647.5, 55.8, 55.8, 0.0); (416479.9, 3743647.5, 54.8, 54.8, 0.0);
(416499.9, 3743647.5, 53.5, 53.5, 0.0); (416519.9, 3743647.5, 52.0, 52.0, 0.0);
(416379.9, 3743667.5, 52.9, 55.0, 0.0); (416399.9, 3743667.5, 54.9, 54.9, 0.0);
(416419.9, 3743667.5, 55.0, 55.0, 0.0); (416439.9, 3743667.5, 55.1, 55.1, 0.0);
(416459.9, 3743667.5, 55.1, 55.1, 0.0); (416479.9, 3743667.5, 55.0, 55.0, 0.0);
(416499.9, 3743667.5, 54.0, 55.0, 0.0); (416519.9, 3743667.5, 52.0, 52.0, 0.0);
(416371.8, 3743687.4, 52.6, 52.6, 0.0); (416379.9, 3743687.5, 52.8, 52.8, 0.0);
(416399.9, 3743687.5, 53.2, 55.0, 0.0); (416419.9, 3743687.5, 53.2, 53.2, 0.0);
(416439.9, 3743687.5, 53.6, 53.6, 0.0); (416459.9, 3743687.5, 54.4, 54.4, 0.0);
(416479.9, 3743687.5, 54.0, 54.0, 0.0); (416499.9, 3743687.5, 53.2, 53.2, 0.0);
(416519.9, 3743687.5, 52.0, 52.0, 0.0); (416366.2, 3743708.4, 52.5, 52.5, 0.0);
(416379.9, 3743707.5, 52.4, 52.4, 0.0); (416399.9, 3743707.5, 51.8, 51.8, 0.0);
(416419.9, 3743707.5, 51.8, 51.8, 0.0); (416439.9, 3743707.5, 52.3, 52.3, 0.0);
(416459.9, 3743707.5, 53.5, 53.5, 0.0); (416479.9, 3743707.5, 53.0, 53.0, 0.0);
(416499.9, 3743707.5, 52.3, 52.3, 0.0); (416519.9, 3743707.5, 51.5, 51.5, 0.0);
(416360.4, 3743727.5, 51.7, 51.7, 0.0); (416379.9, 3743727.5, 51.8, 51.8, 0.0);
(416399.9, 3743727.5, 51.1, 51.1, 0.0); (416419.9, 3743727.5, 51.1, 51.1, 0.0);
(416439.9, 3743727.5, 51.4, 51.4, 0.0); (416459.9, 3743727.5, 52.2, 52.2, 0.0);
(416479.9, 3743727.5, 52.1, 52.1, 0.0); (416499.9, 3743727.5, 51.4, 51.4, 0.0);
(416516.3, 3743727.5, 50.4, 50.4, 0.0); (416355.5, 3743747.4, 52.1, 52.1, 0.0);
(416364.6, 3743747.9, 52.4, 52.4, 0.0); (416379.9, 3743747.5, 52.3, 52.3, 0.0);
(416399.9, 3743747.5, 51.6, 51.6, 0.0); (416419.9, 3743747.5, 51.2, 51.2, 0.0);
(416439.9, 3743747.5, 51.1, 51.1, 0.0); (416459.9, 3743747.5, 51.4, 51.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416479.9, 3743747.5, 51.4, 51.4, 0.0); (416499.9, 3743747.5, 50.9, 50.9, 0.0);
(416349.8, 3743767.9, 52.5, 52.5, 0.0); (416363.3, 3743767.9, 53.2, 53.2, 0.0);
(416379.9, 3743767.5, 53.2, 53.2, 0.0); (416399.9, 3743767.5, 52.5, 52.5, 0.0);
(416419.9, 3743767.5, 51.7, 51.7, 0.0); (416439.9, 3743767.5, 51.2, 51.2, 0.0);
(416459.9, 3743767.5, 51.2, 51.2, 0.0); (416479.9, 3743767.5, 50.9, 50.9, 0.0);
(416499.9, 3743767.5, 50.5, 50.5, 0.0); (416344.2, 3743787.4, 52.4, 55.0, 0.0);
(416359.9, 3743787.5, 53.9, 55.0, 0.0); (416379.9, 3743787.5, 54.5, 54.5, 0.0);
(416399.9, 3743787.5, 53.8, 53.8, 0.0); (416419.9, 3743787.5, 52.6, 52.6, 0.0);
(416439.9, 3743787.5, 51.9, 51.9, 0.0); (416459.9, 3743787.5, 51.9, 51.9, 0.0);
(416479.9, 3743787.5, 50.7, 50.7, 0.0); (416499.9, 3743787.5, 50.0, 50.0, 0.0);
(416340.7, 3743805.9, 51.5, 55.0, 0.0); (416359.9, 3743807.5, 53.4, 53.4, 0.0);
(416379.9, 3743807.5, 54.1, 54.1, 0.0); (416399.9, 3743807.5, 53.4, 53.4, 0.0);
(416419.9, 3743807.5, 52.9, 52.9, 0.0); (416439.9, 3743807.5, 52.4, 52.4, 0.0);
(416459.9, 3743807.5, 52.0, 52.0, 0.0); (416479.9, 3743807.5, 51.1, 51.1, 0.0);
(416495.3, 3743807.5, 50.5, 50.5, 0.0); (416333.5, 3743827.3, 50.3, 50.3, 0.0);
(416343.9, 3743827.9, 51.1, 54.0, 0.0); (416359.9, 3743827.5, 52.6, 54.0, 0.0);
(416379.9, 3743827.5, 53.2, 53.2, 0.0); (416399.9, 3743827.5, 52.8, 52.8, 0.0);
(416419.9, 3743827.5, 52.6, 52.6, 0.0); (416439.9, 3743827.5, 52.2, 52.2, 0.0);
(416459.9, 3743827.5, 51.8, 51.8, 0.0); (416479.9, 3743827.5, 51.2, 51.2, 0.0);
(416327.7, 3743848.4, 49.2, 49.2, 0.0); (416339.9, 3743847.5, 50.1, 50.1, 0.0);
(416359.9, 3743847.5, 51.5, 51.5, 0.0); (416379.9, 3743847.5, 52.1, 52.1, 0.0);
(416399.9, 3743847.5, 52.1, 52.1, 0.0); (416419.9, 3743847.5, 51.5, 51.5, 0.0);

(416439.9, 3743847.5, 51.1, 51.1, 0.0); (416459.9, 3743847.5, 51.1, 51.1, 0.0);
(416479.9, 3743847.5, 51.0, 51.0, 0.0); (416323.0, 3743867.7, 48.3, 48.3, 0.0);
(416339.9, 3743867.5, 49.4, 49.4, 0.0); (416359.9, 3743867.5, 50.3, 50.3, 0.0);
(416379.9, 3743867.5, 50.6, 50.6, 0.0); (416399.9, 3743867.5, 50.2, 50.2, 0.0);
(416419.9, 3743867.5, 50.0, 50.0, 0.0); (416439.9, 3743867.5, 50.0, 50.0, 0.0);
(416459.9, 3743867.5, 50.4, 50.4, 0.0); (416479.9, 3743867.5, 50.8, 50.8, 0.0);
(416319.9, 3743887.5, 47.8, 47.8, 0.0); (416339.9, 3743887.5, 49.0, 49.0, 0.0);
(416359.9, 3743887.5, 49.5, 49.5, 0.0); (416379.9, 3743887.5, 49.5, 49.5, 0.0);
(416399.9, 3743887.5, 49.0, 49.0, 0.0); (416419.9, 3743887.5, 49.0, 49.0, 0.0);
(416439.9, 3743887.5, 49.2, 49.2, 0.0); (416459.9, 3743887.5, 49.8, 49.8, 0.0);
(416474.9, 3743886.6, 50.3, 50.3, 0.0); (416312.3, 3743907.0, 48.0, 48.0, 0.0);
(416324.4, 3743907.5, 48.4, 48.4, 0.0); (416339.9, 3743907.5, 49.0, 49.0, 0.0);
(416359.9, 3743907.5, 49.0, 49.0, 0.0); (416379.9, 3743907.5, 49.0, 49.0, 0.0);
(416399.9, 3743907.5, 49.0, 49.0, 0.0); (416419.9, 3743907.5, 49.0, 49.0, 0.0);
(416439.9, 3743907.5, 49.0, 49.0, 0.0); (416459.9, 3743907.5, 49.1, 49.1, 0.0);
(416306.6, 3743928.1, 48.6, 48.6, 0.0); (416322.2, 3743927.9, 49.0, 49.0, 0.0);
(416339.9, 3743927.5, 49.6, 49.6, 0.0); (416359.9, 3743927.5, 49.6, 49.6, 0.0);
(416379.9, 3743927.5, 49.6, 49.6, 0.0); (416399.9, 3743927.5, 49.6, 49.6, 0.0);
(416419.9, 3743927.5, 49.2, 49.2, 0.0); (416439.9, 3743927.5, 49.0, 49.0, 0.0);
(416459.9, 3743927.5, 49.0, 49.0, 0.0); (416301.9, 3743947.7, 49.1, 49.1, 0.0);
(416319.9, 3743947.5, 49.2, 49.2, 0.0); (416339.9, 3743947.5, 49.8, 49.8, 0.0);
(416359.9, 3743947.5, 49.9, 49.9, 0.0); (416379.9, 3743947.5, 50.0, 50.0, 0.0);
(416399.9, 3743947.5, 50.0, 50.0, 0.0); (416419.9, 3743947.5, 49.5, 49.5, 0.0);

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filter PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary source Impacts - PM2.5 *** 10:40:21
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416439.9, 3743947.5, 49.2, 49.2, 0.0); (416459.9, 3743947.5, 49.0, 49.0, 0.0);
(416307.1, 3743967.2, 49.2, 49.2, 0.0); (416319.9, 3743967.5, 49.0, 49.0, 0.0);
(416339.9, 3743967.5, 49.1, 49.1, 0.0); (416359.9, 3743967.5, 49.7, 49.7, 0.0);
(416379.9, 3743967.5, 50.0, 50.0, 0.0); (416399.9, 3743967.5, 50.0, 50.0, 0.0);
(416419.9, 3743967.5, 49.9, 49.9, 0.0); (416439.9, 3743967.5, 49.6, 49.6, 0.0);
(416319.9, 3743987.5, 47.2, 47.2, 0.0); (416339.9, 3743987.5, 47.2, 47.2, 0.0);
(416359.9, 3743987.5, 48.3, 48.3, 0.0); (416379.9, 3743987.5, 49.2, 49.2, 0.0);
(416399.9, 3743987.5, 50.0, 50.0, 0.0); (416419.9, 3743987.5, 50.0, 50.0, 0.0);
(416439.9, 3743987.5, 49.9, 49.9, 0.0); (416379.9, 3744007.5, 48.7, 48.7, 0.0);
(416399.9, 3744007.5, 50.0, 50.0, 0.0); (416419.9, 3744007.5, 50.0, 50.0, 0.0);
(416439.9, 3744007.5, 50.1, 50.1, 0.0); (416436.8, 3744021.3, 50.2, 50.2, 0.0);
(416510.3, 3743748.2, 50.4, 50.4, 0.0); (416297.6, 3743966.8, 49.7, 49.7, 0.0);
(416305.1, 3743986.1, 47.9, 51.0, 0.0); (416291.2, 3743985.6, 49.3, 49.3, 0.0);
(416358.9, 3744002.6, 47.3, 47.3, 0.0); (416339.0, 3743998.5, 46.1, 46.1, 0.0);
(416319.0, 3743996.1, 46.4, 46.4, 0.0);

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filter PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary source Impacts - PM2.5 *** 10:40:21
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 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 16216r *** *** East South Street Project (w/o MERV Filter PDF) *** 04/11/17
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

Surface file: ..\anah8.sfc Met Version: 14134
Profile file: ..\anah8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2006 Year: 2006

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
06	01	01	1	01	-2.9	0.060	-9.000	-9.000	-999.	35.	6.6	0.45	1.00	1.00	0.90	39.	9.1	285.4	5.5
06	01	01	1	02	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	64.	9.1	285.4	5.5
06	01	01	1	03	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	103.	9.1	284.9	5.5
06	01	01	1	04	-2.1	0.060	-9.000	-9.000	-999.	35.	9.4	0.45	1.00	1.00	0.90	76.	9.1	284.9	5.5
06	01	01	1	05	-5.9	0.087	-9.000	-9.000	-999.	61.	10.0	0.45	1.00	1.00	1.30	93.	9.1	284.9	5.5
06	01	01	1	06	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	59.	9.1	284.9	5.5
06	01	01	1	07	-6.1	0.087	-9.000	-9.000	-999.	61.	9.6	0.45	1.00	1.00	1.30	58.	9.1	284.2	5.5
06	01	01	1	08	-9.6	0.199	-9.000	-9.000	-999.	213.	73.9	0.45	1.00	0.53	1.80	39.	9.1	284.9	5.5
06	01	01	1	09	33.2	0.322	0.787	0.005	528.	438.	-90.3	0.45	1.00	0.30	2.20	61.	9.1	286.4	5.5
06	01	01	1	10	27.9	0.211	0.832	0.005	742.	239.	-30.3	0.45	1.00	0.23	1.30	187.	9.1	287.0	5.5
06	01	01	1	11	25.2	0.209	0.819	0.005	784.	230.	-32.7	0.45	1.00	0.20	1.30	221.	9.1	287.5	5.5
06	01	01	1	12	75.8	0.233	1.237	0.015	899.	270.	-15.0	0.45	1.00	0.19	1.30	126.	9.1	288.8	5.5
06	01	01	1	13	47.6	0.282	1.084	0.016	963.	359.	-42.3	0.45	1.00	0.19	1.80	77.	9.1	288.8	5.5
06	01	01	1	14	70.8	0.339	1.275	0.017	1053.	473.	-49.4	0.45	1.00	0.20	2.20	50.	9.1	289.2	5.5
06	01	01	1	15	29.3	0.212	0.960	0.017	1088.	244.	-29.3	0.45	1.00	0.24	1.30	179.	9.1	289.2	5.5
06	01	01	1	16	4.4	0.299	0.510	0.017	1091.	393.	-550.5	0.45	1.00	0.32	2.20	116.	9.1	288.1	5.5
06	01	01	1	17	-11.9	0.173	-9.000	-9.000	-999.	182.	39.1	0.45	1.00	0.59	1.80	67.	9.1	287.5	5.5
06	01	01	1	18	-10.6	0.191	-9.000	-9.000	-999.	201.	59.5	0.45	1.00	1.00	1.80	127.	9.1	287.0	5.5
06	01	01	1	19	-10.6	0.191	-9.000	-9.000	-999.	200.	59.1	0.45	1.00	1.00	1.80	145.	9.1	285.9	5.5
06	01	01	1	20	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	71.	9.1	285.4	5.5
06	01	01	1	21	-18.5	0.332	-9.000	-9.000	-999.	458.	177.5	0.45	1.00	1.00	2.70	56.	9.1	284.9	5.5
06	01	01	1	22	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	65.	9.1	285.4	5.5
06	01	01	1	23	-10.6	0.191	-9.000	-9.000	-999.	213.	59.1	0.45	1.00	1.00	1.80	70.	9.1	285.9	5.5
06	01	01	1	24	-14.2	0.257	-9.000	-9.000	-999.	313.	107.1	0.45	1.00	1.00	2.20	66.	9.1	286.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
06	01	01	01	5.5	0	-999.	-99.00	285.4	99.0	-99.00	-99.00
06	01	01	01	9.1	1	39.	0.90	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)
♀ *** AERMOD - VERSION 16216r *** *** East South Street Project (w/o MERV Filter PDF) *** 04/11/17
*** AERMET - VERSION 14134 *** *** Rail Line and Stationary source Impacts - PM2.5 *** 10:40:21
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416413.95	3743528.49	0.28170	416426.40	3743528.99	0.27263

416409.26	3743546.45	0.29816	416419.88	3743547.54	0.28999
416439.88	3743547.54	0.27603	416459.88	3743547.54	0.26307
416479.88	3743547.54	0.25100	416499.88	3743547.54	0.24026
416403.32	3743566.45	0.31772	416419.88	3743567.54	0.30553
416439.88	3743567.54	0.29161	416459.88	3743567.54	0.27707
416479.88	3743567.54	0.26420	416499.88	3743567.54	0.25308
416519.88	3743567.54	0.24355	416539.88	3743567.54	0.23546
416399.88	3743587.54	0.33731	416419.88	3743587.54	0.32280
416439.88	3743587.54	0.30883	416459.88	3743587.54	0.29292
416479.88	3743587.54	0.27868	416499.88	3743587.54	0.26654
416519.88	3743587.54	0.25636	416539.88	3743587.54	0.24729
416393.55	3743607.36	0.36070	416419.88	3743607.54	0.32690
416439.88	3743607.54	0.31324	416459.88	3743607.54	0.31096
416479.88	3743607.54	0.29463	416499.88	3743607.54	0.28045
416519.88	3743607.54	0.26841	416539.88	3743607.54	0.25944
416387.84	3743627.90	0.38422	416399.88	3743627.54	0.37464
416419.88	3743627.54	0.35958	416439.88	3743627.54	0.34097
416459.88	3743627.54	0.32922	416479.88	3743627.54	0.31233
416499.88	3743627.54	0.29677	416519.88	3743627.54	0.28263
416381.51	3743647.54	0.41120	416399.88	3743647.54	0.39614
416419.88	3743647.54	0.37992	416439.88	3743647.54	0.36387
416459.88	3743647.54	0.34790	416479.88	3743647.54	0.33082
416499.88	3743647.54	0.31404	416519.88	3743647.54	0.29757
416379.88	3743667.54	0.43952	416399.88	3743667.54	0.42265
416419.88	3743667.54	0.40241	416439.88	3743667.54	0.38375
416459.88	3743667.54	0.36624	416479.88	3743667.54	0.34957
416499.88	3743667.54	0.33176	416519.88	3743667.54	0.31264
416371.75	3743687.44	0.47761	416379.88	3743687.54	0.46662
416399.88	3743687.54	0.44337	416419.88	3743687.54	0.42126
416439.88	3743687.54	0.40230	416459.88	3743687.54	0.38578
416479.88	3743687.54	0.36674	416499.88	3743687.54	0.34777
416519.88	3743687.54	0.32887	416366.21	3743708.44	0.51912
416379.88	3743707.54	0.49556	416399.88	3743707.54	0.46527
416419.88	3743707.54	0.44142	416439.88	3743707.54	0.42189
416459.88	3743707.54	0.40571	416479.88	3743707.54	0.38451
416499.88	3743707.54	0.36422	416519.88	3743707.54	0.34471
416360.42	3743727.54	0.55920	416379.88	3743727.54	0.52582
416399.88	3743727.54	0.49282	416419.88	3743727.54	0.46665
416439.88	3743727.54	0.44433	416459.88	3743727.54	0.42504

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416479.88	3743727.54	0.40369	416499.88	3743727.54	0.38143
416516.30	3743727.54	0.36246	416355.49	3743747.36	0.61221
416364.59	3743747.90	0.59706	416379.88	3743747.54	0.56714
416399.88	3743747.54	0.53019	416419.88	3743747.54	0.49855
416439.88	3743747.54	0.47142	416459.88	3743747.54	0.44793
416479.88	3743747.54	0.42470	416499.88	3743747.54	0.40095
416349.83	3743767.90	0.67767	416363.32	3743767.90	0.65206
416379.88	3743767.54	0.61677	416399.88	3743767.54	0.57496
416419.88	3743767.54	0.53609	416439.88	3743767.54	0.50326
416459.88	3743767.54	0.47534	416479.88	3743767.54	0.44767
416499.88	3743767.54	0.42157	416344.22	3743787.36	0.74584
416359.88	3743787.54	0.71898	416379.88	3743787.54	0.67679
416399.88	3743787.54	0.62871	416419.88	3743787.54	0.58080
416439.88	3743787.54	0.54153	416459.88	3743787.54	0.50953

416479.88	3743787.54	0.47299	416499.88	3743787.54	0.44249
416340.71	3743805.95	0.80588	416359.88	3743807.54	0.77562
416379.88	3743807.54	0.72903	416399.88	3743807.54	0.67406
416419.88	3743807.54	0.62525	416439.88	3743807.54	0.58143
416459.88	3743807.54	0.54178	416479.88	3743807.54	0.50203
416495.31	3743807.54	0.47470	416333.49	3743827.31	0.89249
416343.86	3743827.90	0.86838	416359.88	3743827.54	0.83372
416379.88	3743827.54	0.78080	416399.88	3743827.54	0.71961
416419.88	3743827.54	0.66725	416439.88	3743827.54	0.61799
416459.88	3743827.54	0.57193	416479.88	3743827.54	0.53030
416327.66	3743848.44	0.98894	416339.88	3743847.54	0.94685
416359.88	3743847.54	0.89145	416379.88	3743847.54	0.83060
416399.88	3743847.54	0.76547	416419.88	3743847.54	0.70087
416439.88	3743847.54	0.64571	416459.88	3743847.54	0.59835
416479.88	3743847.54	0.55572	416322.96	3743867.72	1.08845
416339.88	3743867.54	1.02344	416359.88	3743867.54	0.94968
416379.88	3743867.54	0.87329	416399.88	3743867.54	0.79575
416419.88	3743867.54	0.72826	416439.88	3743867.54	0.67151
416459.88	3743867.54	0.62368	416479.88	3743867.54	0.58059
416319.88	3743887.54	1.20363	416339.88	3743887.54	1.10631
416359.88	3743887.54	1.01039	416379.88	3743887.54	0.91782
416399.88	3743887.54	0.83002	416419.88	3743887.54	0.75901
416439.88	3743887.54	0.69902	416459.88	3743887.54	0.64807
416474.86	3743886.63	0.61345	416312.31	3743906.99	1.37417
416324.40	3743907.54	1.29337	416339.88	3743907.54	1.19683
416359.88	3743907.54	1.07536	416379.88	3743907.54	0.96995

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416399.88	3743907.54	0.87823	416419.88	3743907.54	0.79934
416439.88	3743907.54	0.73101	416459.88	3743907.54	0.67142
416306.58	3743928.08	1.57494	416322.23	3743927.90	1.43394
416339.88	3743927.54	1.29905	416359.88	3743927.54	1.15695
416379.88	3743927.54	1.03671	416399.88	3743927.54	0.93429
416419.88	3743927.54	0.84159	416439.88	3743927.54	0.76420
416459.88	3743927.54	0.69919	416301.87	3743947.72	1.77941
416319.88	3743947.54	1.57161	416339.88	3743947.54	1.39169
416359.88	3743947.54	1.23462	416379.88	3743947.54	1.10130
416399.88	3743947.54	0.98747	416419.88	3743947.54	0.88385
416439.88	3743947.54	0.79804	416459.88	3743947.54	0.72610
416307.12	3743967.18	1.83742	416319.88	3743967.54	1.67147
416339.88	3743967.54	1.45743	416359.88	3743967.54	1.29517
416379.88	3743967.54	1.15410	416399.88	3743967.54	1.03032
416419.88	3743967.54	0.92522	416439.88	3743967.54	0.83238
416319.88	3743987.54	1.71500	416339.88	3743987.54	1.48474
416359.88	3743987.54	1.32009	416379.88	3743987.54	1.18326
416399.88	3743987.54	1.06657	416419.88	3743987.54	0.95556
416439.88	3743987.54	0.85975	416379.88	3744007.54	1.20618
416399.88	3744007.54	1.09414	416419.88	3744007.54	0.97828
416439.88	3744007.54	0.88144	416436.78	3744021.35	0.90652
416510.28	3743748.17	0.38889	416297.59	3743966.85	1.99468
416305.11	3743986.12	1.93290	416291.25	3743985.57	2.21276
416358.87	3744002.60	1.34083	416339.02	3743998.54	1.50296
416319.04	3743996.11	1.73862			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	0.88400	(09102824)	416426.40	3743528.99	0.92859	(09102824)
416409.26	3743546.45	0.99157	(09102824)	416419.88	3743547.54	1.03812	(09102824)
416439.88	3743547.54	1.06218	(09102824)	416459.88	3743547.54	1.02180	(09102824)
416479.88	3743547.54	0.95012	(09102824)	416499.88	3743547.54	0.86516	(09102824)
416403.32	3743566.45	1.11920	(09102824)	416419.88	3743567.54	1.19894	(09102824)
416439.88	3743567.54	1.19517	(09102824)	416459.88	3743567.54	1.10914	(09102824)
416479.88	3743567.54	1.00418	(09102824)	416499.88	3743567.54	0.89441	(09102824)
416519.88	3743567.54	0.78739	(09102824)	416539.88	3743567.54	0.68876	(09102824)
416399.88	3743587.54	1.28193	(09102824)	416419.88	3743587.54	1.36937	(09102824)
416439.88	3743587.54	1.33604	(09102824)	416459.88	3743587.54	1.19425	(09102824)
416479.88	3743587.54	1.04339	(09102824)	416499.88	3743587.54	0.90293	(09102824)
416519.88	3743587.54	0.77811	(09102824)	416539.88	3743587.54	0.66243	(09102824)
416393.55	3743607.36	1.42615	(09102824)	416419.88	3743607.54	1.53625	(09102824)
416439.88	3743607.54	1.45909	(09102824)	416459.88	3743607.54	1.27272	(09102824)
416479.88	3743607.54	1.06230	(09102824)	416499.88	3743607.54	0.88512	(09102824)
416519.88	3743607.54	0.73632	(09102824)	416539.88	3743607.54	0.64204	(07091024)
416387.84	3743627.90	1.54684	(09102824)	416399.88	3743627.54	1.61693	(09102824)
416419.88	3743627.54	1.62605	(09102824)	416439.88	3743627.54	1.49530	(09102824)
416459.88	3743627.54	1.29777	(09102824)	416479.88	3743627.54	1.05741	(09102824)
416499.88	3743627.54	0.85283	(09102824)	416519.88	3743627.54	0.71690	(07091024)
416381.51	3743647.54	1.67883	(09102824)	416399.88	3743647.54	1.74913	(09102824)
416419.88	3743647.54	1.67598	(09102824)	416439.88	3743647.54	1.49517	(09102824)
416459.88	3743647.54	1.26113	(09102824)	416479.88	3743647.54	1.01119	(09102824)
416499.88	3743647.54	0.83776	(07091024)	416519.88	3743647.54	0.76429	(07091024)
416379.88	3743667.54	1.86955	(09102824)	416399.88	3743667.54	1.88834	(09102824)
416419.88	3743667.54	1.67919	(09102824)	416439.88	3743667.54	1.41781	(09102824)
416459.88	3743667.54	1.15671	(09102824)	416479.88	3743667.54	0.97684	(07091024)
416499.88	3743667.54	0.89374	(07091024)	416519.88	3743667.54	0.79821	(07022824)
416371.75	3743687.44	2.02010	(09102824)	416379.88	3743687.54	1.98253	(09102824)
416399.88	3743687.54	1.80446	(09102824)	416419.88	3743687.54	1.52843	(09102824)
416439.88	3743687.54	1.25895	(09102824)	416459.88	3743687.54	1.08388	(07091024)
416479.88	3743687.54	1.00354	(07091024)	416499.88	3743687.54	0.93087	(07022824)
416519.88	3743687.54	0.91193	(07090924)	416366.21	3743708.44	2.15982	(09102824)
416379.88	3743707.54	1.99844	(09102824)	416399.88	3743707.54	1.66632	(09102824)
416419.88	3743707.54	1.35188	(09102824)	416439.88	3743707.54	1.14742	(07091024)
416459.88	3743707.54	1.10761	(07091024)	416479.88	3743707.54	1.04781	(07022824)
416499.88	3743707.54	1.06051	(07090924)	416519.88	3743707.54	1.08588	(07090924)
416360.42	3743727.54	2.21625	(09102824)	416379.88	3743727.54	1.90055	(09102824)
416399.88	3743727.54	1.50916	(09102824)	416419.88	3743727.54	1.24893	(07091024)
416439.88	3743727.54	1.17413	(07091024)	416459.88	3743727.54	1.15874	(07022824)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416479.88	3743727.54	1.22253	(07090924)	416499.88	3743727.54	1.24894	(07090924)
416516.30	3743727.54	1.22729	(07090924)	416355.49	3743747.36	2.27945	(09102824)
416364.59	3743747.90	2.10883	(09102824)	416379.88	3743747.54	1.76709	(09102824)
416399.88	3743747.54	1.41617	(07091024)	416419.88	3743747.54	1.30478	(07091024)
416439.88	3743747.54	1.28494	(07090924)	416459.88	3743747.54	1.39587	(07090924)
416479.88	3743747.54	1.44038	(07090924)	416499.88	3743747.54	1.42076	(07090924)
416349.83	3743767.90	2.28273	(09102824)	416363.32	3743767.90	1.98011	(09102824)
416379.88	3743767.54	1.66107	(07091024)	416399.88	3743767.54	1.50540	(07091024)
416419.88	3743767.54	1.52059	(07090924)	416439.88	3743767.54	1.61697	(07090924)
416459.88	3743767.54	1.65634	(07090924)	416479.88	3743767.54	1.62160	(07090924)
416499.88	3743767.54	1.53260	(07090924)	416344.22	3743787.36	2.17926	(09102824)
416359.88	3743787.54	1.91537	(07091024)	416379.88	3743787.54	1.83616	(09063024)
416399.88	3743787.54	1.91226	(07090924)	416419.88	3743787.54	1.95265	(07090924)
416439.88	3743787.54	1.94312	(07090924)	416459.88	3743787.54	1.88846	(07090924)
416479.88	3743787.54	1.71509	(07090924)	416499.88	3743787.54	1.54411	(07090924)
416340.71	3743805.95	1.99523	(07091024)	416359.88	3743807.54	1.99005	(07022824)
416379.88	3743807.54	2.28163	(07090924)	416399.88	3743807.54	2.34629	(07090924)
416419.88	3743807.54	2.29676	(07090924)	416439.88	3743807.54	2.15266	(07090924)
416459.88	3743807.54	1.95094	(07090924)	416479.88	3743807.54	1.71018	(07090924)
416495.31	3743807.54	1.54233	(07090924)	416333.49	3743827.31	2.10300	(07091024)
416343.86	3743827.90	2.25608	(07090924)	416359.88	3743827.54	2.53932	(07090924)
416379.88	3743827.54	2.71021	(07090924)	416399.88	3743827.54	2.60168	(07090924)
416419.88	3743827.54	2.40179	(07090924)	416439.88	3743827.54	2.13695	(07090924)
416459.88	3743827.54	1.87305	(06011524)	416479.88	3743827.54	1.71510	(06011524)
416327.66	3743848.44	2.65554	(07090924)	416339.88	3743847.54	2.79588	(07090924)
416359.88	3743847.54	2.94158	(07090924)	416379.88	3743847.54	2.86161	(07090924)
416399.88	3743847.54	2.58619	(07090924)	416419.88	3743847.54	2.25685	(06011524)
416439.88	3743847.54	2.07476	(06011524)	416459.88	3743847.54	1.88607	(06011524)
416479.88	3743847.54	1.69451	(06011524)	416322.96	3743867.72	3.18130	(07090924)
416339.88	3743867.54	3.19550	(07090924)	416359.88	3743867.54	3.00912	(07090924)
416379.88	3743867.54	2.71335	(06011524)	416399.88	3743867.54	2.49740	(06011524)
416419.88	3743867.54	2.25010	(06011524)	416439.88	3743867.54	2.00699	(06011524)
416459.88	3743867.54	1.78399	(06011524)	416479.88	3743867.54	1.58049	(06011524)
416319.88	3743887.54	3.44476	(07090924)	416339.88	3743887.54	3.19097	(06011524)
416359.88	3743887.54	3.00160	(06011524)	416379.88	3743887.54	2.72782	(06011524)
416399.88	3743887.54	2.40919	(06011524)	416419.88	3743887.54	2.10075	(06011524)
416439.88	3743887.54	1.82913	(06011524)	416459.88	3743887.54	1.59873	(06011524)
416474.86	3743886.63	1.46068	(06011524)	416312.31	3743906.99	3.63773	(06011524)
416324.40	3743907.54	3.49484	(06011524)	416339.88	3743907.54	3.25206	(06011524)
416359.88	3743907.54	2.87833	(06011524)	416379.88	3743907.54	2.50478	(06011524)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	2.16139	(06011524)	416419.88	3743907.54	1.85515	(06011524)
416439.88	3743907.54	1.68242	(07022824)	416459.88	3743907.54	1.57055	(07022824)
416306.58	3743928.08	3.69710	(06011524)	416322.23	3743927.90	3.34703	(06011524)
416339.88	3743927.54	2.96223	(06011524)	416359.88	3743927.54	2.53576	(06011524)
416379.88	3743927.54	2.25918	(07022824)	416399.88	3743927.54	2.08308	(07022824)
416419.88	3743927.54	1.90728	(07022824)	416439.88	3743927.54	1.75275	(07022824)
416459.88	3743927.54	1.61740	(07022824)	416301.87	3743947.72	3.99513	(08020424)
416319.88	3743947.54	3.41053	(08020324)	416339.88	3743947.54	2.99020	(08020324)
416359.88	3743947.54	2.63494	(08020324)	416379.88	3743947.54	2.39491	(07022824)
416399.88	3743947.54	2.20006	(08071324)	416419.88	3743947.54	2.00773	(08071324)
416439.88	3743947.54	1.84411	(08071324)	416459.88	3743947.54	1.71316	(09070124)

416307.12	3743967.18	4.18617 (08020324)	416319.88	3743967.54	3.77879 (08020324)
416339.88	3743967.54	3.25807 (08020324)	416359.88	3743967.54	2.86288 (08020324)
416379.88	3743967.54	2.54969 (08071324)	416399.88	3743967.54	2.34164 (09070124)
416419.88	3743967.54	2.16064 (09070124)	416439.88	3743967.54	1.98756 (09070124)
416319.88	3743987.54	3.97104 (08020324)	416339.88	3743987.54	3.40019 (08020324)
416359.88	3743987.54	2.98786 (08020324)	416379.88	3743987.54	2.64927 (08020324)
416399.88	3743987.54	2.44550 (09070124)	416419.88	3743987.54	2.24925 (09070124)
416439.88	3743987.54	2.06986 (09070124)	416379.88	3744007.54	2.70535 (08020324)
416399.88	3744007.54	2.44440 (09070124)	416419.88	3744007.54	2.25029 (09070124)
416439.88	3744007.54	2.08166 (09070124)	416436.78	3744021.35	2.06918 (09070124)
416510.28	3743748.17	1.39072 (07090924)	416297.59	3743966.85	4.56957 (08020324)
416305.11	3743986.12	4.51766 (08020324)	416291.25	3743985.57	5.23168 (08020324)
416358.87	3744002.60	3.04559 (08020324)	416339.02	3743998.54	3.44975 (08020324)
416319.04	3743996.11	4.03065 (08020324)			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	2.21276 AT (416291.25, 3743985.57, 49.34, 49.34, 0.00) DC	
	2ND HIGHEST VALUE IS	1.99468 AT (416297.59, 3743966.85, 49.74, 49.74, 0.00) DC	
	3RD HIGHEST VALUE IS	1.93290 AT (416305.11, 3743986.12, 47.89, 51.00, 0.00) DC	
	4TH HIGHEST VALUE IS	1.83742 AT (416307.12, 3743967.18, 49.17, 49.17, 0.00) DC	
	5TH HIGHEST VALUE IS	1.77941 AT (416301.87, 3743947.72, 49.14, 49.14, 0.00) DC	
	6TH HIGHEST VALUE IS	1.73862 AT (416319.04, 3743996.11, 46.39, 46.39, 0.00) DC	
	7TH HIGHEST VALUE IS	1.71500 AT (416319.88, 3743987.54, 47.25, 47.25, 0.00) DC	
	8TH HIGHEST VALUE IS	1.67147 AT (416319.88, 3743967.54, 49.03, 49.03, 0.00) DC	
	9TH HIGHEST VALUE IS	1.57494 AT (416306.58, 3743928.08, 48.56, 48.56, 0.00) DC	
	10TH HIGHEST VALUE IS	1.57161 AT (416319.88, 3743947.54, 49.25, 49.25, 0.00) DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_2.5 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	5.23168 ON 08020324:	AT (416291.25, 3743985.57, 49.34, 49.34, 0.00)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 814 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 61 Calm Hours Identified

A Total of 753 Missing Hours Identified (1.72 Percent)

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

******** WARNING MESSAGES ********
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 12010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 2 year gap

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

Appendix B:
Health Risk Impact Assessment Output

Appendix B

Health Risk Impact Assessment Output

Locomotive Operational Profile

Average Load Factor for Passenger Locomotives

Throttle Notch	% Time in Notch	% of Full Power in Notch	% Full Power x % Time
Idle	47.4%	0.4%	0.002
Dynamic Brake	6.2%	2.1%	0.001
1	7.0%	5.0%	0.004
2	5.1%	11.4%	0.006
3	5.7%	23.5%	0.013
4	4.7%	34.3%	0.016
5	4.0%	48.1%	0.019
6	2.9%	64.3%	0.019
7	1.4%	86.6%	0.012
8	15.6%	102.5%	0.160
Composite			**0.252**

Average Load Factor for Line Haul Locomotives

Throttle Notch	% Time in Notch	% of Full Power in Notch	% Full Power x % Time
Idle	38.0%	0.4%	0.002
Dynamic Brake	12.5%	2.1%	0.003
1	6.5%	5.0%	0.003
2	6.5%	11.4%	0.007
3	5.2%	23.5%	0.012
4	4.7%	34.3%	0.016
5	3.8%	48.1%	0.018
6	3.9%	64.3%	0.025
7	3.0%	86.6%	0.026
8	16.2%	102.5%	0.166
Composite			**0.279**

Table 4-6

EPA Estimated Duty-Cycles for Current In-Use Locomotive (Percent Time in Notch)

Throttle Notch	Line-haul	Passenger	Switch
Idle	38.0	47.4	59.8
Dynamic Brake	12.5	6.2	0.0
1	6.5	7.0	12.4
2	6.5	5.1	12.3
3	5.2	5.7	5.8
4	4.4	4.7	3.6
5	3.8	4.0	3.6
6	3.9	2.9	1.5
7	3.0	1.4	0.2
8	16.2	15.6	0.8

https://yosemite.epa.gov/ee/epa/ria.nsf/vwAN/TS0000510E-01.pdf/$file/TS0000510E-01.pdf

Table 6.8: Estimated Average Load Factor

Notch	% of Full Power in Notch	% of Operating Time in Notch	% Full Power x % Time
DB	2.1%	12.5%	0.003
Idle	0.4%	38.0%	0.002
1	5.0%	6.5%	0.003
2	11.4%	6.5%	0.007
3	23.5%	5.2%	0.012
4	34.3%	4.4%	0.015
5	48.1%	3.8%	0.018
6	64.3%	3.9%	0.025
7	86.6%	3.0%	0.026
8	102.5%	16.2%	0.166
Average line haul locomotive load factor:			**0.28**

https://www.portoflosangeles.org/pdf/2013_Air_Emissions_Inventory_Full_Report.pdf

Emission Parameters for Metrolink Locomotives

Assumption: total fleet consists of 52 locomotives
Assumption: 20 locomotives with Tier 4 are in service by 2018
the remaining 32 locomotives are Tier 2
Assumption: by 2023 all locomotives are Tier 4

Project Buildout Year: **2019**

USEPA Rail Locomotive Emission Factors (g/hp-hr)

Tier	NOx	CO	PM10	PM2.5	DPM	HC
Tier 2	5.5	1.5	0.1	0.1	0.1	0.3
Tier 4	1.3	1.5	0.03	0.03	0.03	0.14

Source: Dieselnet 2017, Table 3
Website: https://dieselnet.com/standards/us/loco.php

Total Locomotive Fleet 52

Fleet Tier Mix, Composite Emission Factor, and Horsepower

Horsepower	Tier	Horsepower	Model
	Tier 2	3200	EMD F40PH
	Tier 4	4700	EMD F-125

Fleet Mix				Composite Emission Factor (g/hp-hr)				Composite Horsepower
Year	Tier 2	Tier 4	Total	PM10,PM2.5	NOx	CO	HC	
2019	26	26	52	**0.065**	**3.400**	**1.5**	**0.220**	3950
2020	20	32	52	0.057				4123
2021	14	38	52	0.049				4296
2022	8	44	52	0.041				4469
2023	0	52	52	0.030				4700
2024	0	52	52	0.030				4700
2025	0	52	52	0.030				4700
2026 to 2048	0	52	52	0.030				4700

Emission Parameters for Amtrak Locomotives

Assumption: total fleet consists of 20 locomotives for Pacific Surfliner
Assumption: 20 locomotives with Tier 4 are in service by 2020

Assumption: Project Operational Year: 2019

USEPA Rail Locomotive Emission Factors (g/hp-hr)

Tier	NOx	CO	PM10	PM2.5	DPM	HC
Tier 0	8	5	0.22	0.22	0.22	1
Tier 4	1.3	1.5	0.03	0.03	0.03	0.14

Source: Dieselnet 2017, Table 3
Website: https://dieselnet.com/standards/us/loco.php

Total Locomotive Fleet 20

Fleet Tier Mix, Composite Emission Factor, and Horsepower

Horsepower	Tier	Horsepower	Model
	Tier 0+	3200	EMD F40PH
	Tier 4	4400	Siemens Charger

Fleet Mix

				Composite Emission Factor (g/hp-hr)				
Year	Tier 0+	Tier 4	Total	PM10,PM2.5	NOx	CO	HC	Composite Horsepower
2019	10	10	20	**0.125**	**4.650**	**3.3**	**0.570**	3800
2020	0	20	20	0.030				4400
2021	0	20	20	0.030				4400
2022	0	20	20	0.030				4400
2023	0	20	20	0.030				4400
2024	0	20	20	0.030				4400
2025	0	20	20	0.030				4400
2026 to 2048	0	20	20	0.030				4400

BNSF DPM Emissions

Schedules	**BNSF**		
Number of Weekday Diesel Trains (In/Outbound)	1		Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	1		Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	260		
Annual Number of Diesel Trains - Weekend	104		
	364		
Engine Horsepower	3800		Note 3 and Note 4
Number of Locomotives/train	2		
Average Load Factor	0.25		Note 5
Run Speed along rail line segment (mph)	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile	
Run Time Along Rail Line Segment (hour/train)	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	5.255057		
DPM Emission Factor (g/hp-hr)	0.032		Note 7
Total Emissions along Rail Line Segment (grams/year)	318.1908		
Total Emissions along Rail Line Segment (tons/year)	0.00035		
Average Emissions along Rail Line Segment (grams/sec)	1.01E-05		

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Emission Parameters for BNSF' Locomotives

USEPA Rail Locomotive Emission Factors (g/hp-hr)

Tier	NOx	CO	PM10	PM2.5	DPM	HC
Tier 2	5.5	1.5	0.1	0.1	0.1	0.3
Tier 4	1.3	1.5	0.03	0.03	0.03	0.14

Source: Dieselnet 2017, Table 3
Website: https://dieselnet.com/standards/us/loco.php

USEPA Emission Standards for Locomotives
EPA-420-F-09-025 Website: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100500B.pdf

Emission Factors (g/gal)

	PM10,PM2.5 (g/gal)	PM10.PM2.5 (g/hp-hr)	NOx (g/gal)	NOx (g/hp-hr)	CO (g/gal)	CO (g/hp-hr)	HC (g/gal)	HC (g/hp-hr)
2019	2.5	0.1202	103	4.952	31	1.4904	3.900	0.188
2020	2.3	0.1106						
2021	2.2	0.1058						
2022	2.0	0.0962						
2023	1.9	0.0913						
2024	1.7	0.0817						
2025	1.6	0.0769						
2026	1.5	0.0721						
2027	1.4	0.0673						
2028	1.3	0.0625						
2029	1.1	0.0529						
2030	1.0	0.0481						
2031	1.0	0.0481						
2032	0.9	0.0433						
2033	0.8	0.0385						
2034	0.7	0.0337						
2035	0.7	0.0337						
2036	0.6	0.0288						
2037	0.6	0.0288						
2038	0.5	0.0240						
2039	0.5	0.0240						
2040 ro 2048	0.4	0.0192						
Average (g/gal)	0.6629							

Conversion from Grams/gallon to grams/BHP-hr: 20.8

Average (g/hp-hr) 0.0319

Amtrak + Metrolink + BNSF Annual PM10/DPM Emissions 2019

Schedules	Metrolink	Amtrak	BNSF	Total	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	3950	3800	3800		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
PM10 Emission Factor (g/hp-hr)	0.065	0.125	0.120		Note 7
Total Emissions along Rail Line Segment (grams/year)	7758.1	14976.9	1200.1	23935.1	
Total Emissions along Rail Line Segment (tons/year)	0.00854	0.01649	0.00132	0.02636	
Average Emissions along Rail Line Segment (grams/sec)	2.460E-04	4.749E-04	3.805E-05	7.209E-04	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF Annual PM10/DPM Emissions 2020

Schedules	Metrolink	Amtrak	BNSF	Total	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	4123	4400	3800		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
PM10 Emission Factor (g/hp-hr)	0.057	0.030	0.111		Note 7
Total Emissions along Rail Line Segment (grams/year)	7091.8	4162.0	1104.1	12357.8	
Total Emissions along Rail Line Segment (tons/year)	0.00781	0.00458	0.00122	0.01361	
Average Emissions along Rail Line Segment (grams/sec)	2.249E-04	1.320E-04	3.501E-05	3.569E-04	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF Annual PM10/DPM Emissions 2025

Schedules	Metrolink	Amtrak	BNSF	Total	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	4700	4400	3800		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
PM10 Emission Factor (g/hp-hr)	0.030	0.030	0.077		Note 7
Total Emissions along Rail Line Segment (grams/year)	4260.5	4162.0	768.0	9190.6	
Total Emissions along Rail Line Segment (tons/year)	0.00469	0.00458	0.00085	0.01012	
Average Emissions along Rail Line Segment (grams/sec)	1.351E-04	1.320E-04	2.435E-05	2.671E-04	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF Annual PM10/DPM Emissions 2030

Schedules	Metrolink	Amtrak	BNSF	Total	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	4700	4400	3800		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
PM10 Emission Factor (g/hp-hr)	0.030	0.030	0.048		Note 7
Total Emissions along Rail Line Segment (grams/year)	4260.5	4162.0	480.0	8902.6	
Total Emissions along Rail Line Segment (tons/year)	0.00469	0.00458	0.00053	0.00980	
Average Emissions along Rail Line Segment (grams/sec)	1.351E-04	1.320E-04	1.522E-05	2.671E-04	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF Annual PM10/DPM Emissions 2035

Schedules	Metrolink	Amtrak	BNSF	Total	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	4700	4400	3800		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
PM10 Emission Factor (g/hp-hr)	0.030	0.030	0.034		Note 7
Total Emissions along Rail Line Segment (grams/year)	4260.5	4162.0	336.0	8758.6	
Total Emissions along Rail Line Segment (tons/year)	0.00469	0.00458	0.00037	0.00965	
Average Emissions along Rail Line Segment (grams/sec)	1.351E-04	1.320E-04	1.066E-05	2.671E-04	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Amtrak + Metrolink + BNSF Annual PM10/DPM Emissions 2040 and Later

Schedules	Metrolink	Amtrak	BNSF	Total	
Number of Weekday Diesel Trains (In/Outbound)	29	24	1	54	Note 1and Note 2
Number of Weekend Diesel Trains (In/Outbound)	8	24	1	33	Note 1 and Note 2
Annual Number of Diesel Trains - Weekday	7540	6240	260	14040	
Annual Number of Diesel Trains - Weekend	832	2496	104	3432	
Total	8372	8736	364	17472	
Locomotive Engine Parameters					
Average Engine Horsepower	4700	4400	4400		Note 3 and Note 4
Number of Locomotives/train	1	1	2		
Average Load Factor	0.25	0.25	0.25		Note 5
Run Speed along rail line segment (mph)	50	50	50		Note 6
Length of Rail Line Segment in the Air Dispersion Model	0.72	mile			
Run Time Along Rail Line Segment (hour/train)	0.014437	0.014437	0.014437		
Total Run Time Along Rail Line Segment (hours/year)	120.9	126.1	5.3	252.2	
PM10 Emission Factor (g/hp-hr)	0.030	0.030	0.019		Note 7
Total Emissions along Rail Line Segment (grams/year)	4260.5	4162.0	222.3	8644.9	
Total Emissions along Rail Line Segment (tons/year)	0.00469	0.00458	0.00024	0.00952	
Average Emissions along Rail Line Segment (grams/sec)	1.351E-04	1.320E-04	7.050E-06	2.671E-04	

Notes:

Note 1: Metrolink Schedule for Anaheim ARTIC Station - February 2017
Note 2: Amtrak Schedule for Anaheim ARTIC Station - March 2017
Note 3: see Metrolink Emission Assumptions Spreadsheet tab
Note 4: Engine Model Siemens SC-44 Charger
Note 5: see Locomotive Duty Cycle Spreadsheet Tab
Note 6: derived as low end of the typical speed range from the Federal Railways Administration Crossing Database
Note 7: see Emission Factor Spreadsheet Tab

Metrolink and Amtrak Schedule - Weekday

Hour	Metrolink North	Metrolink South	Total ML Metrolink	Amtrak North	Amtrak South	Total-A Amtrak	Grand Total
0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	1	0	1	0	0	0	1
5	1	0	1	0	0	0	1
6	2	0	2	1	1	2	4
7	2	1	3	0	0	0	3
8	1	1	2	1	1	2	4
9	2	0	2	1	1	2	4
10	0	1	1	1	1	2	3
11	0	0	0	1	1	2	2
12	1	0	1	1	0	1	2
13	0	1	1	1	1	2	3
14	0	1	1	0	0	0	1
15	0	1	1	1	1	2	3
16	2	2	4	0	1	1	5
17	1	2	3	1	0	1	4
18	1	1	2	1	1	2	4
19	0	2	2	0	0	0	2
20	0	0	0	1	1	2	2
21	1	0	1	0	1	1	2
22	0	1	1	0	1	1	2
23	0	0	0	1	0	1	1
Total	15	14	29	12	12	24	53

Metrolink and Amtrak Schedule - Weekend

Hour	Metrolink North	Metrolink South	Total ML Metrolink	Amtrak North	Amtrak South	Total-A Amtrak	Grand Total
0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0
6	0	0	0	1	1	2	2
7	0	0	0	0	0	0	0
8	0	0	0	1	2	3	3
9	1	1	2	1	1	2	4
10	0	0	0	1	0	1	1
11	0	1	1	1	1	2	3
12	1	0	1	1	0	1	2
13	0	0	0	1	1	2	2
14	1	1	2	0	0	0	2
15	0	0	0	1	1	2	2
16	0	0	0	0	1	1	1
17	0	1	1	1	1	2	3
18	1	0	1	1	0	1	2
19	0	0	0	0	0	0	0
20	0	0	0	1	1	2	2
21	0	0	0	0	1	1	1
22	0	0	0	0	1	1	1
23	0	0	0	1	0	1	1
	4	4	8	12	12	24	32

Train Schedules as of April 2017

SCAQMD Facility Information Detail Permitted Stationary Source Database

SCAQMD Permit Facility ID#: **2825** **MCP Foods Inc**
424-425 South Atchison Street
Anaheim, CA 92805

Emission Assumption: the facility operates on a 24/7 basis

Emission Inventory - Toxic Air Contaminants

		Emissions (pounds/year)					Max	Hourly Ave	Hourly Ave
CAS#	Pollutant	2012	2013	2014	2015	2016	(lbs/year)	(lbs/hr)	(g/sec)
7664417	ammonia	322.52	290.85	232.67	231.40	207.39	322.52	3.68E-02	4.64E-03
71432	Benzene	0.65	0.58	0.51	0.52	0.44	0.65	7.39E-05	9.31E-06
50000	Formadehyde	1.37	1.24	1.04	1.06	0.93	1.37	1.57E-04	1.98E-05
91203	Naphthalene	0.03	0.03	0.02	0.02	0.02	0.03	3.42E-06	4.32E-07
1151	PAH, total	0.01	0.01	0.01	0.01	0.01	0.01	1.14E-06	1.44E-07
95636	1,2,4 TriMebebzene			0.01			0.01	1.48E-06	1.87E-07
106990	1,3-butadiene			0.01	0.01	0.01	0.01	1.60E-06	2.02E-07
75070	Acetaldehyde			45.67			45.67	5.21E-03	6.57E-04
107028	Acrolein			0.20			0.20	2.26E-05	2.85E-06
7664417	Arsenic			0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
7440439	Cadmium			0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
7782505	Chlorine			0.00			0.00	4.57E-07	5.76E-08
18540299	Chromium VI			0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
744-5-8	Copper			0.00			0.00	0.00E+00	0.00E+00
100414	Ethylbenzene			0.57			0.57	6.53E-05	8.23E-06
110543	hexane			0.38			0.38	4.38E-05	5.53E-06
7647010	Hydrochloric Acid			0.00			0.00	1.14E-07	1.44E-08
7439921	Lead (inorganic)			0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
108383	M-Xylene			0.05			0.05	5.59E-06	7.05E-07
1634044	MTBE			0.02			0.02	2.28E-06	2.88E-07
7439965	Manganese			0.00			0.00	0.00E+00	0.00E+00
7439976	Mercury			0.00			0.00	0.00E+00	0.00E+00
67561	Methanol			0.01			0.01	7.99E-07	1.01E-07
78933	MEK			0.00			0.00	0.00E+00	0.00E+00
7440020	Nickel			0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
7782492	Selenium			0.00			0.00	0.00E+00	0.00E+00
100425	Styrene			0.00			0.00	1.14E-07	1.44E-08
108883	Toluene			2.21			2.21	2.52E-04	3.18E-05
1330207	Xylenes			1.59			1.59	1.81E-04	2.28E-05
95476	o-Xylene			0.02			0.02	1.94E-06	2.45E-07

East South Street Project

DPM Emission Factors for SoCAB

Vehicle Class	Fuel	Speed (mph)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
LDA	DSL	5	0.0641	0.0559	0.0487	0.0423	0.036	0.0282	0.0234	0.0183	0.0135	0.0096	0.007	0.005	0.0043	0.0033	0.003	0.0027	0.0025	0.00229	0.0021	0.002	0.001895	0.0018	0.0017	0.001689	0.00165	0.00162	0.0016	0.00157	0.0016	0.0015	0.00153	0.00152
LDT1	DSL	5	0.484	0.4522	0.4273	0.3996	0.3662	0.3278	0.2991	0.2563	0.1698	0.121	0.0845	0.0603	0.0472	0.037	0.0327	0.0285	0.0236	0.01997	0.0181	0.01721	0.01647	0.01571	0.0147	0.013987	0.01323	0.01256	0.0121	0.011754	0.0112	0.0108	0.01074	0.01067
LDT2	DSL	5	0.0154	0.0143	0.0135	0.0129	0.0123	0.0117	0.0112	0.0106	0.0098	0.0096	0.0095	0.0093	0.0092	0.0092	0.0092	0.0091	0.0091	0.0091	0.0091	0.00909	0.009093	0.0091	0.0091	0.009106	0.00911	0.00912	0.0091	0.009125	0.0091	0.0091	0.00914	0.00914
LHD1	DSL	5	0.078	0.072	0.0669	0.0615	0.0565	0.0527	0.0484	0.0444	0.0407	0.0374	0.0344	0.0316	0.0287	0.0266	0.0248	0.0232	0.0218	0.02053	0.0194	0.01838	0.017472	0.0167	0.016	0.015464	0.015	0.01454	0.0141	0.013757	0.0134	0.0131	0.01276	0.01248
LHD2	DSL	5	0.0575	0.0519	0.0474	0.043	0.039	0.036	0.0329	0.0302	0.0278	0.0258	0.0241	0.0226	0.0213	0.0203	0.0195	0.0187	0.018	0.01747	0.017	0.0166	0.016252	0.01597	0.0157	0.015571	0.01544	0.01534	0.0153	0.015193	0.0151	0.0151	0.01508	0.01505
MDV	DSL	5	0.0221	0.0206	0.0187	0.0171	0.015	0.0122	0.0107	0.0096	0.0077	0.0064	0.0054	0.0048	0.0043	0.004	0.0037	0.0034	0.0032	0.00293	0.0027	0.00257	0.002427	0.0023	0.0022	0.002113	0.00205	0.00199	0.0019	0.001913	0.0019	0.0019	0.00184	0.00183
T6	DSL	5	0.1659	0.0619	0.013	0.0119	0.0064	0.0064	0.0064	0.0063	0.0063	0.0062	0.0062	0.0062	0.0061	0.0061	0.006	0.006	0.006	0.00592	0.0059	0.00586	0.005832	0.00581	0.0058	0.005783	0.00577	0.00577	0.0058	0.005761	0.0058	0.0058	0.00576	0.00576
T7	DSL	5	0.0482	0.0439	0.0411	0.0387	0.0133	0.0133	0.0132	0.013	0.0128	0.0126	0.0124	0.0121	0.0119	0.0117	0.0116	0.0114	0.0113	0.0112	0.0111	0.0111	0.011074	0.01106	0.011	0.011041	0.01104	0.01103	0.011	0.011019	0.011	0.011	0.01102	0.01103
LDA	DSL	25	0.0226	0.02	0.0173	0.0152	0.013	0.0105	0.0088	0.0071	0.0055	0.0042	0.0033	0.0026	0.0023	0.0019	0.0017	0.0016	0.0014	0.00133	0.0012	0.00117	0.00111	0.00106	0.001	0.000996	0.00097	0.00096	0.0009	0.000935	0.0009	0.0009	0.00092	0.00091
LDT1	DSL	25	0.1513	0.142	0.1343	0.1262	0.1161	0.105	0.0964	0.0832	0.0563	0.0413	0.0299	0.0222	0.0176	0.0143	0.0129	0.0117	0.0101	0.00891	0.0084	0.00808	0.007851	0.00762	0.0073	0.007086	0.00686	0.00666	0.0065	0.006414	0.0062	0.0061	0.00611	0.00609
LDT2	DSL	25	0.0072	0.0068	0.0066	0.0064	0.0063	0.0062	0.006	0.0058	0.0056	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0054	0.0054	0.00545	0.0054	0.00545	0.005454	0.00546	0.0055	0.005465	0.00547	0.00547	0.0055	0.005479	0.0055	0.0055	0.00549	0.00549
LHD1	DSL	25	0.0271	0.0255	0.024	0.0225	0.0211	0.0198	0.0186	0.0175	0.0165	0.0155	0.0146	0.0138	0.013	0.0124	0.0118	0.0112	0.0107	0.0103	0.0099	0.00953	0.009198	0.00891	0.0087	0.00845	0.00827	0.00811	0.008	0.007822	0.0077	0.0076	0.00748	0.00739
LHD2	DSL	25	0.0216	0.0202	0.0189	0.0177	0.0167	0.0158	0.0149	0.0142	0.0135	0.0129	0.0124	0.012	0.0116	0.0112	0.0109	0.0106	0.0104	0.01014	0.0099	0.00976	0.009597	0.00947	0.0094	0.009275	0.00921	0.00916	0.0091	0.00909	0.0091	0.009	0.00904	0.00903
MDV	DSL	25	0.0093	0.0088	0.008	0.0074	0.0066	0.0056	0.0051	0.0046	0.0039	0.0034	0.003	0.0027	0.0025	0.0023	0.0021	0.002	0.0019	0.00173	0.0016	0.00153	0.001444	0.00137	0.0013	0.001264	0.00122	0.00119	0.0012	0.001145	0.0011	0.0011	0.0011	0.0011
T6	DSL	25	0.0728	0.0423	0.0076	0.007	0.0038	0.0038	0.0039	0.0039	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0037	0.0037	0.0037	0.00369	0.0037	0.00366	0.003647	0.00364	0.0036	0.003622	0.00362	0.00361	0.0036	0.003612	0.0036	0.0036	0.00361	0.00361
T7	DSL	25	0.0278	0.023	0.0206	0.0182	0.0078	0.0078	0.0077	0.0076	0.0075	0.0074	0.0073	0.0072	0.0071	0.007	0.0069	0.0068	0.0068	0.00674	0.0067	0.0067	0.006691	0.00669	0.0067	0.006681	0.00668	0.00668	0.0067	0.006674	0.0067	0.0067	0.00667	0.00667
LDA	DSL	35	0.0154	0.0137	0.0119	0.0104	0.009	0.0073	0.0062	0.005	0.004	0.0031	0.0025	0.002	0.0017	0.0015	0.0014	0.0012	0.0011	0.00105	0.001	0.00093	0.00088	0.00084	0.0008	0.000793	0.00078	0.00076	0.0008	0.000746	0.0007	0.0007	0.00073	0.00073
LDT1	DSL	35	0.1088	0.1017	0.0955	0.0893	0.0819	0.0736	0.0671	0.0579	0.0387	0.028	0.0201	0.0148	0.0119	0.0097	0.0088	0.008	0.0071	0.00646	0.0061	0.00594	0.005795	0.00565	0.0055	0.005345	0.00521	0.00509	0.005	0.004936	0.0048	0.0048	0.00477	0.00476
LDT2	DSL	35	0.0055	0.0052	0.0051	0.005	0.0049	0.0048	0.0047	0.0046	0.0044	0.0044	0.0044	0.0044	0.0043	0.0043	0.0043	0.0043	0.0043	0.00435	0.0043	0.00435	0.004353	0.00436	0.0044	0.004362	0.00436	0.00437	0.0044	0.004373	0.0044	0.0044	0.00438	0.00438
LHD1	DSL	35	0.021	0.0199	0.0187	0.0176	0.0166	0.0157	0.0148	0.0139	0.0131	0.0124	0.0117	0.011	0.0105	0.0099	0.0095	0.009	0.0086	0.00827	0.0079	0.00764	0.007378	0.00715	0.0069	0.006773	0.00663	0.00649	0.0064	0.006262	0.0062	0.0061	0.00598	0.00591
LHD2	DSL	35	0.0169	0.0158	0.0148	0.014	0.0132	0.0125	0.0119	0.0113	0.0108	0.0103	0.0099	0.0096	0.0093	0.009	0.0088	0.0085	0.0083	0.00812	0.008	0.00781	0.007679	0.00757	0.0075	0.00742	0.00737	0.00733	0.0073	0.007271	0.0073	0.0072	0.00723	0.00722
MDV	DSL	35	0.007	0.0067	0.0061	0.0056	0.005	0.0043	0.0039	0.0036	0.0031	0.0027	0.0024	0.0022	0.002	0.0018	0.0017	0.0016	0.0015	0.00137	0.0013	0.00121	0.001148	0.00109	0.001	0.001006	0.00097	0.00095	0.0009	0.000912	0.0009	0.0009	0.00088	0.00087
T6	DSL	35	0.0657	0.042	0.0065	0.0059	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.00316	0.0031	0.00313	0.003118	0.00311	0.0031	0.003097	0.00309	0.00309	0.0031	0.003089	0.0031	0.0031	0.00309	0.00309
T7	DSL	35	0.023	0.0193	0.0174	0.0154	0.0066	0.0065	0.0065	0.0064	0.0063	0.0062	0.0061	0.006	0.006	0.0059	0.0058	0.0058	0.0057	0.00568	0.0057	0.00565	0.005639	0.00564	0.0056	0.005633	0.00563	0.00563	0.0056	0.005632	0.0056	0.0056	0.00563	0.00563

Idling Emissions

EMFAC20014 Diesel PM10 Idling Emissions (Orange County)

	LHDT1 (g/hr)	LHDT2 (g/hr)	MHDT (g/hr)	HHDT (g/hr)
2019	0.786	0.772	0.265	0.029
2020	0.777	0.762	0.152	0.016
2021	0.765	0.749	0.019	0.014
2022	0.749	0.731	0.016	0.013
2023	0.732	0.713	0.007	0.008
2024	0.714	0.694	0.006	0.007
2025	0.695	0.675	0.005	0.007
2026	0.675	0.655	0.005	0.006
2027	0.653	0.636	0.004	0.006
2028	0.631	0.617	0.004	0.005
2029	0.608	0.599	0.003	0.005
2030	0.585	0.581	0.003	0.004
2031	0.561	0.564	0.003	0.004
2032	0.541	0.549	0.002	0.003
2033	0.522	0.535	0.002	0.003
2034	0.504	0.522	0.002	0.003
2035	0.486	0.509	0.002	0.002
2036	0.47	0.499	0.002	0.002
2037	0.455	0.489	0.002	0.002
2038	0.441	0.481	0.002	0.002
2039	0.428	0.473	0.002	0.002
2040	0.416	0.467	0.002	0.002
2041	0.406	0.462	0.002	0.002
2042	0.396	0.458	0.002	0.002
2043	0.388	0.454	0.001	0.002
2044	0.38	0.451	0.001	0.002
2045	0.373	0.449	0.001	0.002
2046	0.366	0.447	0.001	0.002
2047	0.36	0.446	0.001	0.002
2048	0.353	0.445	0.001	0.002
2049	0.348	0.444	0.001	0.002
2050	0.342	0.443	0.001	0.002

Dalton Recycle (Anaheim, CA) **2019**
Emission Assumptions **DPM** Emissions

Emission Factors

1) Vehicle Emissions

a) Truck and Auto Traffic
(1) EMFAC2014
(a) Calculations for SoCAB
(b) Truck Mix
Traffic Impact Study used to derive fleet mix
EMFAC2014 to derive the % of diesel truck vehicles
(d) Vehicle Travel Speed
Onsite Travel 5 mph
Offsite Travel 25 mph for heavy duty trucks
Offsite Travel 35 mph for cars and light trucks
(e) Truck Idle time: 15 minutes (truck idling only applies to LHDT1, LHDT2, MHDT, and HHDT diesel vehicles)
(f) Emission factors for DPM emissions
(g) Emissions calculated for 2019

Traffic Allocation

1) Trip generation from the ITE Trip Generation Manual 9th Edition for General Light Industrial
2) Onsite travel emssions generated from diesel vehicles to loading dock areas according to the number of loading docks in each loading dock area
3) Onsite idling emissions generated only for diesel trucks and allocated accoRding to the number of loading docks in each loading dock area

Emission Source Configuration

1) Offsite and onsite Vehicle traffic represented by a line source
2) Onsite idling represented as a point source

Onsite Travel Links

Diesel Vehicles	**AERMOD ID**	**Travel Distance (m)**
Entrance to Offloading Area	ONSITEN	200

Off site Travel Links

Diesel Vehicles		**Travel Distance (m)**
Facility Entrance, east on East South Street	OFFSITE1	145
Facility Entrance, west on East South Street	OFFSITE2	569

Other Input Parameters

Facility Operations for Warehouses (hr): 12

Dalton Recycle (Anaheim, CA) 2019
Emissions Summary for DPM
Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	6.68E-06

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	2.18E-05

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	1.14E-06
OFFSITE2	4.46E-06

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	6.36E-04
Onsite DSL Idling	2.07E-03
OFFSITE	5.59E-06
Total	2.71E-03

Dalton Recycle (Anaheim, CA) **2019**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2019**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.078	5	200	0.12	4.652E-02	1.02E-04	1.08E-06	
DALTONON	**LHDT2**	5	0.057	2	200	0.12	1.521E-02	3.35E-05	3.52E-07	
	MHDT	5	0.166	6	200	0.12	1.259E-01	2.77E-04	2.92E-06	
	HHDT	5	0.048	17	200	0.12	1.009E-01	2.22E-04	2.34E-06	**6.68E-06**
								6.36E-04		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.786	15	2	4.71E-01	1.04E-03	1.09E-05	
Idalton	**LHDT2**	0.772	15	1	2.06E-01	4.53E-04	4.76E-06	
	MHDT	0.265	15	3	2.03E-01	4.46E-04	4.69E-06	
	HHDT	0.029	15	8	6.09E-02	1.34E-04	1.41E-06	**2.18E-05**
						2.07E-03		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA) DPM

Offsite DSL Vehicle Travel Emissions 2019

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.027
LHDT2-DSL	0.022
MHDT-DSL	0.073
HHDT-DSL	0.028

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	1.35E-07	5.31E-07	
LHDT2-DSL	4.80E-08	1.88E-07	
MHDT-DSL	4.63E-07	1.82E-06	
HHDT-DSL	4.89E-07	1.92E-06	
Total (g/sec)	1.14E-06	4.46E-06	5.59E-06

Dalton Recycle (Anaheim, CA) **2020**
Emission Assumptions **DPM** Emissions

Emission Factors

1) Vehicle Emissions

a) Truck and Auto Traffic
(1) EMFAC2014
(a) Calculations for SoCAB
(b) Truck Mix
Traffic Impact Study used to derive fleet mix
EMFAC2014 to derive the % of diesel truck vehicles
(d) Vehicle Travel Speed
Onsite Travel 5 mph
Offsite Travel 25 mph for heavy duty trucks
Offsite Travel 35 mph for cars and light trucks
(e) Truck Idle time: 15 minutes (truck idling only applies to LHDT1, LHDT2, MHDT, and HHDT diesel vehicles)
(f) Emission factors for DPM emissions
(g) Emissions calculated for 2020

Traffic Allocation

1) Trip generation from the ITE Trip Generation Manual 9th Edition for General Light Industrial
2) Onsite travel emssions generated from diesel vehicles to loading dock areas according to the number of loading docks in each loading dock area
3) Onsite idling emissions generated only for diesel trucks and allocated accoRding to the number of loading docks in each loading dock area

Emission Source Configuration

1) Offsite and onsite Vehicle traffic represented by a line source
2) Onsite idling represented as a point source

Onsite Travel Links

Diesel Vehicles	**AERMOD ID**	**Travel Distance (m)**
Entrance to Offloading Area	ONSITEN	200

Off site Travel Links

Diesel Vehicles		**Travel Distance (m)**
Facility Entrance, east on East South Street	OFFSITE1	145
Facility Entrance, west on East South Street	OFFSITE2	569

Other Input Parameters

Facility Operations for Warehouses (hr): 12

Dalton Recycle (Anaheim, CA) 2020
Emissions Summary for DPM
Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	4.52E-06

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	1.90E-05

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	8.48E-07
OFFSITE2	3.33E-06

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	4.30E-04
Onsite DSL Idling	1.81E-03
OFFSITE	4.17E-06
Total	2.24E-03

Dalton Recycle (Anaheim, CA) **2020**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2020**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.072	5	200	0.12	4.290E-02	9.45E-05	9.93E-07	
DALTONON	**LHDT2**	5	0.052	2	200	0.12	1.373E-02	3.02E-05	3.18E-07	
	MHDT	5	0.062	6	200	0.12	4.699E-02	1.03E-04	1.09E-06	
	HHDT	5	0.044	17	200	0.12	9.176E-02	2.02E-04	2.12E-06	**4.52E-06**
								4.30E-04		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.777	15	2	4.66E-01	1.03E-03	1.08E-05	
Idalton	**LHDT2**	0.762	15	1	2.03E-01	4.47E-04	4.70E-06	
	MHDT	0.152	15	3	1.16E-01	2.56E-04	2.69E-06	
	HHDT	0.016	15	8	3.43E-02	7.56E-05	7.95E-07	**1.90E-05**
						1.81E-03		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA) DPM

Offsite DSL Vehicle Travel Emissions 2020

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.025
LHDT2-DSL	0.022
MHDT-DSL	0.042
HHDT-DSL	0.023

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	1.27E-07	5.00E-07	
LHDT2-DSL	4.80E-08	1.88E-07	
MHDT-DSL	2.69E-07	1.06E-06	
HHDT-DSL	4.03E-07	1.58E-06	
Total (g/sec)	8.48E-07	3.33E-06	4.17E-06

Dalton Recycle (Anaheim, CA) **2025**
Emission Assumptions **DPM** Emissions

Emission Factors

1) Vehicle Emissions

a) Truck and Auto Traffic
(1) EMFAC2014
(a) Calculations for SoCAB
(b) Truck Mix
Traffic Impact Study used to derive fleet mix
EMFAC2014 to derive the % of diesel truck vehicles
(d) Vehicle Travel Speed
Onsite Travel 5 mph
Offsite Travel 25 mph for heavy duty trucks
Offsite Travel 35 mph for cars and light trucks
(e) Truck Idle time: 15 minutes (truck idling only applies to LHDT1, LHDT2, MHDT, and HHDT diesel vehicles)
(f) Emission factors for DPM emissions
(g) Emissions calculated for 2025

Traffic Allocation

1) Trip generation from the ITE Trip Generation Manual 9th Edition for General Light Industrial
2) Onsite travel emssions generated from diesel vehicles to loading dock areas according to the number of loading docks in each loading dock area
3) Onsite idling emissions generated only for diesel trucks and allocated accoRding to the number of loading docks in each loading dock area

Emission Source Configuration

1) Offsite and onsite Vehicle traffic represented by a line source
2) Onsite idling represented as a point source

Onsite Travel Links

Diesel Vehicles	**AERMOD ID**	**Travel Distance (m)**
Entrance to Offloading Area	ONSITEN	200

Off site Travel Links

Diesel Vehicles		**Travel Distance (m)**
Facility Entrance, east on East South Street	OFFSITE1	145
Facility Entrance, west on East South Street	OFFSITE2	569

Other Input Parameters

Facility Operations for Warehouses (hr): 12

Dalton Recycle (Anaheim, CA)

2025

Emissions Summary for DPM

Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	1.62E-06

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	1.42E-05

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	2.86E-07
OFFSITE2	1.12E-06

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	1.54E-04
Onsite DSL Idling	1.35E-03
OFFSITE	1.41E-06
Total	1.51E-03

Dalton Recycle (Anaheim, CA) **2025**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2025**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.048	5	200	0.12	2.882E-02	6.35E-05	6.67E-07	
DALTONON	**LHDT2**	5	0.033	2	200	0.12	8.706E-03	1.92E-05	2.02E-07	
	MHDT	5	0.006	6	200	0.12	4.838E-03	1.07E-05	1.12E-07	
	HHDT	5	0.013	17	200	0.12	2.754E-02	6.07E-05	6.38E-07	**1.62E-06**
								1.54E-04		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.695	15	2	4.17E-01	9.18E-04	9.65E-06	
Idalton	**LHDT2**	0.675	15	1	1.80E-01	3.96E-04	4.16E-06	
	MHDT	0.005	15	3	4.02E-03	8.86E-06	9.31E-08	
	HHDT	0.007	15	8	1.39E-02	3.07E-05	3.23E-07	**1.42E-05**
						1.35E-03		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA) DPM

Offsite DSL Vehicle Travel Emissions 2025

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.019
LHDT2-DSL	0.015
MHDT-DSL	0.004
HHDT-DSL	0.008

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	9.32E-08	3.66E-07	
LHDT2-DSL	3.32E-08	1.30E-07	
MHDT-DSL	2.46E-08	9.64E-08	
HHDT-DSL	1.35E-07	5.29E-07	
Total (g/sec)	2.86E-07	1.12E-06	1.41E-06

Dalton Recycle (Anaheim, CA) **2030**
Emission Assumptions **DPM** Emissions

Emission Factors

1) Vehicle Emissions

a) Truck and Auto Traffic
(1) EMFAC2014
(a) Calculations for SoCAB
(b) Truck Mix
Traffic Impact Study used to derive fleet mix
EMFAC2014 to derive the % of diesel truck vehicles
(d) Vehicle Travel Speed
Onsite Travel 5 mph
Offsite Travel 25 mph for heavy duty trucks
Offsite Travel 35 mph for cars and light trucks
(e) Truck Idle time: 15 minutes (truck idling only applies to LHDT1, LHDT2, MHDT, and HHDT diesel vehicles)
(f) Emission factors for DPM emissions
(g) Emissions calculated for 2030

Traffic Allocation

1) Trip generation from the ITE Trip Generation Manual 9th Edition for General Light Industrial
2) Onsite travel emssions generated from diesel vehicles to loading dock areas according to the number of loading docks in each loading dock area
3) Onsite idling emissions generated only for diesel trucks and allocated accoRding to the number of loading docks in each loading dock area

Emission Source Configuration

1) Offsite and onsite Vehicle traffic represented by a line source
2) Onsite idling represented as a point source

Onsite Travel Links

Diesel Vehicles	**AERMOD ID**	**Travel Distance (m)**
Entrance to Offloading Area	ONSITEN	200

Off site Travel Links

Diesel Vehicles		**Travel Distance (m)**
Facility Entrance, east on East South Street	OFFSITE1	145
Facility Entrance, west on East South Street	OFFSITE2	569

Other Input Parameters

Facility Operations for Warehouses (hr): 12

Dalton Recycle (Anaheim, CA)

2030

Emissions Summary for

DPM

Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	1.27E-06

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	1.19E-05

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	2.87E-07
OFFSITE2	1.13E-06

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	1.21E-04
Onsite DSL Idling	1.14E-03
OFFSITE	1.42E-06
Total	1.26E-03

Dalton Recycle (Anaheim, CA) **2030**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2030**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.032	5	200	0.12	1.885E-02	4.15E-05	4.36E-07	
DALTONON	**LHDT2**	5	0.023	2	200	0.12	5.998E-03	1.32E-05	1.39E-07	
	MHDT	5	0.006	6	200	0.12	4.675E-03	1.03E-05	1.08E-07	
	HHDT	5	0.012	17	200	0.12	2.535E-02	5.58E-05	5.87E-07	**1.27E-06**
								1.21E-04		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.585	15	2	3.51E-01	7.72E-04	8.11E-06	
Idalton	**LHDT2**	0.581	15	1	1.55E-01	3.41E-04	3.58E-06	
	MHDT	0.003	15	3	2.18E-03	4.81E-06	5.05E-08	
	HHDT	0.004	15	8	8.54E-03	1.88E-05	1.98E-07	**1.19E-05**
						1.14E-03		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA)

DPM

Offsite DSL Vehicle Travel Emissions

2030

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.022
LHDT2-DSL	0.012
MHDT-DSL	0.004
HHDT-DSL	0.007

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	1.11E-07	4.35E-07	
LHDT2-DSL	2.66E-08	1.05E-07	
MHDT-DSL	2.42E-08	9.49E-08	
HHDT-DSL	1.26E-07	4.93E-07	
Total (g/sec)	2.87E-07	1.13E-06	1.42E-06

Dalton Recycle (Anaheim, CA) **2035**
Emission Assumptions **DPM** Emissions

Emission Factors

1) Vehicle Emissions

a) Truck and Auto Traffic
(1) EMFAC2014
(a) Calculations for SoCAB
(b) Truck Mix
Traffic Impact Study used to derive fleet mix
EMFAC2014 to derive the % of diesel truck vehicles
(d) Vehicle Travel Speed
Onsite Travel 5 mph
Offsite Travel 25 mph for heavy duty trucks
Offsite Travel 35 mph for cars and light trucks
(e) Truck Idle time: 15 minutes (truck idling only applies to LHDT1, LHDT2, MHDT, and HHDT diesel vehicles)
(f) Emission factors for DPM emissions
(g) Emissions calculated for 2035

Traffic Allocation

1) Trip generation from the ITE Trip Generation Manual 9th Edition for General Light Industrial
2) Onsite travel emssions generated from diesel vehicles to loading dock areas according to the number of loading docks in each loading dock area
3) Onsite idling emissions generated only for diesel trucks and allocated accoRding to the number of loading docks in each loading dock area

Emission Source Configuration

1) Offsite and onsite Vehicle traffic represented by a line source
2) Onsite idling represented as a point source

Onsite Travel Links

Diesel Vehicles	**AERMOD ID**	**Travel Distance (m)**
Entrance to Offloading Area	ONSITEN	200

Off site Travel Links

Diesel Vehicles		**Travel Distance (m)**
Facility Entrance, east on East South Street	OFFSITE1	145
Facility Entrance, west on East South Street	OFFSITE2	569

Other Input Parameters

Facility Operations for Warehouses (hr): 12

Dalton Recycle (Anaheim, CA)

2035

Emissions Summary for

DPM

Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	1.06E-06

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	1.19E-05

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	2.87E-07
OFFSITE2	1.13E-06

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	1.01E-04
Onsite DSL Idling	1.14E-03
OFFSITE	1.42E-06
Total	1.24E-03

Dalton Recycle (Anaheim, CA) **2035**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2035**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.022	5	200	0.12	1.298E-02	2.86E-05	3.01E-07	
DALTONON	**LHDT2**	5	0.018	2	200	0.12	4.771E-03	1.05E-05	1.10E-07	
	MHDT	5	0.006	6	200	0.12	4.523E-03	9.96E-06	1.05E-07	
	HHDT	5	0.011	17	200	0.12	2.359E-02	5.20E-05	5.46E-07	**1.06E-06**
								1.01E-04		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.585	15	2	3.51E-01	7.72E-04	8.11E-06	
Idalton	**LHDT2**	0.581	15	1	1.55E-01	3.41E-04	3.58E-06	
	MHDT	0.003	15	3	2.18E-03	4.81E-06	5.05E-08	
	HHDT	0.004	15	8	8.54E-03	1.88E-05	1.98E-07	**1.19E-05**
						1.14E-03		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA)

DPM

Offsite DSL Vehicle Travel Emissions

2035

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.022
LHDT2-DSL	0.012
MHDT-DSL	0.004
HHDT-DSL	0.007

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	1.11E-07	4.35E-07	
LHDT2-DSL	2.66E-08	1.05E-07	
MHDT-DSL	2.42E-08	9.49E-08	
HHDT-DSL	1.26E-07	4.93E-07	
Total (g/sec)	2.87E-07	1.13E-06	1.42E-06

Emission Factors

1) Vehicle Emissions

a) Truck and Auto Traffic
(1) EMFAC2014
(a) Calculations for SoCAB
(b) Truck Mix
Traffic Impact Study used to derive fleet mix
EMFAC2014 to derive the % of diesel truck vehicles
(d) Vehicle Travel Speed
Onsite Travel 5 mph
Offsite Travel 25 mph for heavy duty trucks
Offsite Travel 35 mph for cars and light trucks
(e) Truck Idle time: 15 minutes (truck idling only applies to LHDT1, LHDT2, MHDT, and HHDT diesel vehicles)
(f) Emission factors for DPM emissions
(g) Emissions calculated for 2040

Traffic Allocation

1) Trip generation from the ITE Trip Generation Manual 9th Edition for General Light Industrial
2) Onsite travel emssions generated from diesel vehicles to loading dock areas according to the number of loading docks in each loading dock area
3) Onsite idling emissions generated only for diesel trucks and allocated accoRding to the number of loading docks in each loading dock area

Emission Source Configuration

1) Offsite and onsite Vehicle traffic represented by a line source
2) Onsite idling represented as a point source

Onsite Travel Links

Diesel Vehicles	**AERMOD ID**	**Travel Distance (m)**
Entrance to Offloading Area	ONSITEN	200

Off site Travel Links

Diesel Vehicles		**Travel Distance (m)**
Facility Entrance, east on East South Street	OFFSITE1	145
Facility Entrance, west on East South Street	OFFSITE2	569

Other Input Parameters

Facility Operations for Warehouses (hr): 12

Dalton Recycle (Anaheim, CA)

2040

Emissions Summary for

DPM

Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	9.66E-07

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	8.78E-06

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	2.06E-07
OFFSITE2	8.09E-07

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	9.19E-05
Onsite DSL Idling	8.35E-04
OFFSITE	1.01E-06
Total	9.28E-04

Dalton Recycle (Anaheim, CA) **2040**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2040**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.017	5	200	0.12	9.953E-03	2.19E-05	2.30E-07	
DALTONON	**LHDT2**	5	0.016	2	200	0.12	4.229E-03	9.31E-06	9.79E-08	
	MHDT	5	0.006	6	200	0.12	4.411E-03	9.72E-06	1.02E-07	
	HHDT	5	0.011	17	200	0.12	2.312E-02	5.09E-05	5.35E-07	**9.66E-07**
								9.19E-05		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.416	15	2	2.50E-01	5.50E-04	5.78E-06	
Idalton	**LHDT2**	0.467	15	1	1.24E-01	2.74E-04	2.88E-06	
	MHDT	0.002	15	3	1.20E-03	2.64E-06	2.78E-08	
	HHDT	0.002	15	8	4.12E-03	9.07E-06	9.53E-08	**8.78E-06**
						8.35E-04		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA) DPM

Offsite DSL Vehicle Travel Emissions 2040

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.009
LHDT2-DSL	0.009
MHDT-DSL	0.004
HHDT-DSL	0.007

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	4.46E-08	1.75E-07	
LHDT2-DSL	2.10E-08	8.25E-08	
MHDT-DSL	2.32E-08	9.09E-08	
HHDT-DSL	1.17E-07	4.60E-07	
Total (g/sec)	2.06E-07	8.09E-07	1.01E-06

Dalton Recycle (Anaheim, CA) **2045**
Emission Assumptions **DPM** Emissions

Emission Factors

1) Vehicle Emissions

a) Truck and Auto Traffic
(1) EMFAC2014
(a) Calculations for SoCAB
(b) Truck Mix
Traffic Impact Study used to derive fleet mix
EMFAC2014 to derive the % of diesel truck vehicles
(d) Vehicle Travel Speed
Onsite Travel 5 mph
Offsite Travel 25 mph for heavy duty trucks
Offsite Travel 35 mph for cars and light trucks
(e) Truck Idle time: 15 minutes (truck idling only applies to LHDT1, LHDT2, MHDT, and HHDT diesel vehicles)
(f) Emission factors for DPM emissions
(g) Emissions calculated for 2045

Traffic Allocation

1) Trip generation from the ITE Trip Generation Manual 9th Edition for General Light Industrial
2) Onsite travel emssions generated from diesel vehicles to loading dock areas according to the number of loading docks in each loading dock area
3) Onsite idling emissions generated only for diesel trucks and allocated accoRding to the number of loading docks in each loading dock area

Emission Source Configuration

1) Offsite and onsite Vehicle traffic represented by a line source
2) Onsite idling represented as a point source

Onsite Travel Links

Diesel Vehicles	**AERMOD ID**	**Travel Distance (m)**
Entrance to Offloading Area	ONSITEN	200

Off site Travel Links

Diesel Vehicles		**Travel Distance (m)**
Facility Entrance, east on East South Street	OFFSITE1	145
Facility Entrance, west on East South Street	OFFSITE2	569

Other Input Parameters

Facility Operations for Warehouses (hr): 12

Dalton Recycle (Anaheim, CA)

2045

Emissions Summary for

DPM

Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	9.24E-07

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	8.06E-06

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	2.06E-07
OFFSITE2	8.09E-07

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	8.79E-05
Onsite DSL Idling	7.66E-04
OFFSITE	1.01E-06
Total	8.55E-04

Dalton Recycle (Anaheim, CA) **2045**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2045**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.014	5	200	0.12	8.430E-03	1.86E-05	1.95E-07	
DALTONON	**LHDT2**	5	0.015	2	200	0.12	4.041E-03	8.90E-06	9.35E-08	
	MHDT	5	0.006	6	200	0.12	4.374E-03	9.63E-06	1.01E-07	
	HHDT	5	0.011	17	200	0.12	2.305E-02	5.08E-05	5.34E-07	**9.24E-07**
								8.79E-05		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.373	15	2	2.24E-01	4.93E-04	5.18E-06	
Idalton	**LHDT2**	0.449	15	1	1.20E-01	2.64E-04	2.77E-06	
	MHDT	0.001	15	3	1.09E-03	2.40E-06	2.52E-08	
	HHDT	0.002	15	8	3.58E-03	7.89E-06	8.29E-08	**8.06E-06**
						7.66E-04		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA)

DPM

Offsite DSL Vehicle Travel Emissions **2045**

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.009
LHDT2-DSL	0.009
MHDT-DSL	0.004
HHDT-DSL	0.007

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	4.46E-08	1.75E-07	
LHDT2-DSL	2.10E-08	8.25E-08	
MHDT-DSL	2.32E-08	9.09E-08	
HHDT-DSL	1.17E-07	4.60E-07	
Total (g/sec)	2.06E-07	8.09E-07	1.01E-06

Dalton Recycle (Anaheim, CA)

2050

Emissions Summary for

DPM

Travel and Idling

Onsite DSL Running Emissions

Location / AERMOD Source ID	Diesel Emissions (g/sec)
RDONSITE	9.35E-07

Onsite Truck Idling - Diesel Only

Location	Diesel Emissions (g/sec)
IRECYCLE	7.58E-06

Offsite DSL Emissions / AERMOD Source ID	Diesel Emissions (g/sec)
OFFSITE1	2.06E-07
OFFSITE2	8.09E-07

Emission Source	Total Emissions (pounds/day)
Onsite-DSL Travel	8.90E-05
Onsite DSL Idling	7.21E-04
OFFSITE	1.01E-06
Total	8.11E-04

Dalton Recycle (Anaheim, CA) **2050**
Vehicle Trip Allocation to Buildings

Building	Facility Size (acres)
Facility	3.45
Total	3.45

Trip Generation

Trip Generation Rate 51.8 trips/acre ITE 9th Edition for General Light Indistry

Facility	trips/day (Non-PCE)
Facility	179
Total	179

Diesel Vehicle Allocation for Warehouse Building

	City of Fontana Vehicle Distribution	EMFAC2014 Vehicle Default	EMFAC2014 % Diesel	EMFAC2014 % GAS	Number of Daily Diesel Trips	Number of Daily GAS Trips	Total Number of Diesel+GAS Trips	% Total
LDA (Passenger Car)	78.60%	59.3%	0.9%	99.1%	1	83	83	46.6%
LDT1		4.9%	0.1%	99.9%	0	7	7	3.9%
LDT2		21.9%	0.2%	99.8%	0	31	31	17.2%
MDT		13.9%	1.5%	98.5%	0	19	20	11.0%
Subtotal		100.0%			1	139	140	
LHDT1 (2 axle truck)	8.00%	75.7%	44.3%	55.7%	5	6	11	6.1%
LHDT2		24.3%	61.3%	38.7%	2	1	3	1.9%
Subtotal		100.0%			7	7	14	
MHDT (3 axle truck)	3.90%		87.6%	12.4%	6	1	7	3.9%
HHDT (4+ axle truck)	9.50%		99.1%	0.9%	17	0	17	9.5%
	100.00%							
			Total		31	148	179	100.0%

Vehicle Distribution taken City of Fontana Truck Trip Generation Study for Light Industrial
Vehicle Default taken from EMFAC2014 for the SoCAB
% Diesel taken from EMFAC2014 for SoCAB

Dalton Recycle (Anaheim, CA) **2050**
Diesel Vehicle Emissions **DPM**

Processes Modeled
Diesel truck exhaust
Diesel truck idling

Facility Operations:
Brodiaea (warehouse) 12 **hrs/day, 52weeks/year**

Onsite Roadway Links **DPM Emissions**

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per day (in and out)	Link Length (m)	Link Length (mi)	Emissions Over Link (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Emissions for Each Link (g/sec)
Entrance to Offload Area	**LHDT1**	5	0.015	5	200	0.12	8.972E-03	1.98E-05	2.08E-07	
DALTONON	**LHDT2**	5	0.015	2	200	0.12	3.986E-03	8.78E-06	9.23E-08	
	MHDT	5	0.006	6	200	0.12	4.374E-03	9.63E-06	1.01E-07	
	HHDT	5	0.011	17	200	0.12	2.307E-02	5.08E-05	5.34E-07	**9.35E-07**
								8.90E-05		

Diesel truck Idling Emissions **DPM Emissions** Idle Time (minutes) 15

Building/Location	Truck Type	Emission Factor (g/idle-hour)	Idling Time (min)	# Vehicles	Emissions (g/day)	Daily Emissions (lbs/day)	Average Emissions (g/sec)	Total Idling Emissions by Unloading Area (g/sec)
Idle at Offload Area	**LHDT1**	0.342	15	2	2.05E-01	4.52E-04	4.75E-06	
Idalton	**LHDT2**	0.443	15	1	1.18E-01	2.60E-04	2.73E-06	
	MHDT	0.001	15	3	1.04E-03	2.30E-06	2.42E-08	
	HHDT	0.002	15	8	3.23E-03	7.11E-06	7.47E-08	**7.58E-06**
						7.21E-04		

NOTES:
Onsite diesel truck travel emissions as per CARB EMFAC2014 for SoCAB
Onsite diesel truck Idle emissions as per CARB EMFAC2014 for Orange County

Dalton Recycle (Anaheim, CA) DPM

Offsite DSL Vehicle Travel Emissions **2050**

Daily Operations 12 hours/day

Total Number of Daily DSL Truck Trips (OFFSITE1: 50% of trips; OFFSITE2: 50% of trip)

Vehicle Class	Daily DSL Trips	Daily DSL Trips OFFSITE1	Daily DSL Trips OFFSITE2
LHDT1-DSL	5	2	2
LHDT2-DSL	2	1	1
MHDT-DSL	6	3	3
HHDT-DSL	17	8	8
Total	30	15	15

Offsite Travel Link DSL Vehicle Trips (from East South Street to facility entrance)

Travel Link	Link Length (m)
OFFSITE1 (east of Entrance)	145
OFFSITE2 (west of entrance)	569

Emission Factors

Vehicle Class	Emission Factor @ 25 mph (g/mi)
LHDT1-DSL	0.009
LHDT2-DSL	0.009
MHDT-DSL	0.004
HHDT-DSL	0.007

Travel Link DSL Emissions

Vehicle Class	OFFSITE1 (g/sec)	OFFSITE2 (g/sec)	
LHDT1-DSL	4.46E-08	1.75E-07	
LHDT2-DSL	2.10E-08	8.25E-08	
MHDT-DSL	2.32E-08	9.09E-08	
HHDT-DSL	1.17E-07	4.60E-07	
Total (g/sec)	2.06E-07	8.09E-07	1.01E-06

NOTE; THE AERMOD MODEL OUTPUT FOR DPM FROM RAIL LINE AND RECYCLE FACILITY FOR THE YEARS 2020, 2025, 2030, 2035, 2040, AND 2045 ARE THE SAME AS THE OUTPUT FOR 2019 EXCEPT FOR THE YEAR-SPECIFIC EMISSION RATES
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♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 08/23/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM *** 20:39:19
PAGE 1

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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 199 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 8000000.0 ; 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:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: DPM

**Model Calculates PERIOD Averages Only

**This Run Includes: 199 Source(s); 3 Source Group(s); and 209 Receptor(s)

with: 1 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 198 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

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

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

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 50.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.9 MB of RAM.

**Detailed Error/Message File: RAIL_S_RECYCLE_DPM_2019.ERR
**File for Summary of Results: RAIL_S_RECYCLE_DPM_2019.SUM

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
IRECYCLE	0	0.21800E-04	416550.5	3743771.7	50.0	3.66	366.00	51.70	0.10	NO	YES	NO	HROFDY

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0003788	0	0.50420E-05	416203.0	3744218.8	50.3	3.89	3.78	1.81	YES	
L0003789	0	0.50420E-05	416205.1	3744210.9	50.0	3.89	3.78	1.81	YES	
L0003790	0	0.50420E-05	416207.2	3744203.1	49.8	3.89	3.78	1.81	YES	
L0003791	0	0.50420E-05	416209.3	3744195.2	49.5	3.89	3.78	1.81	YES	
L0003792	0	0.50420E-05	416211.4	3744187.4	49.4	3.89	3.78	1.81	YES	
L0003793	0	0.50420E-05	416213.5	3744179.5	49.2	3.89	3.78	1.81	YES	
L0003794	0	0.50420E-05	416215.6	3744171.6	48.9	3.89	3.78	1.81	YES	
L0003795	0	0.50420E-05	416217.8	3744163.8	48.6	3.89	3.78	1.81	YES	
L0003796	0	0.50420E-05	416219.9	3744155.9	48.2	3.89	3.78	1.81	YES	
L0003797	0	0.50420E-05	416222.0	3744148.1	48.1	3.89	3.78	1.81	YES	
L0003798	0	0.50420E-05	416224.1	3744140.2	48.3	3.89	3.78	1.81	YES	
L0003799	0	0.50420E-05	416226.2	3744132.4	48.5	3.89	3.78	1.81	YES	
L0003800	0	0.50420E-05	416228.3	3744124.5	48.6	3.89	3.78	1.81	YES	
L0003801	0	0.50420E-05	416230.4	3744116.7	48.8	3.89	3.78	1.81	YES	
L0003802	0	0.50420E-05	416232.5	3744108.8	49.0	3.89	3.78	1.81	YES	
L0003803	0	0.50420E-05	416234.6	3744101.0	49.1	3.89	3.78	1.81	YES	
L0003804	0	0.50420E-05	416236.8	3744093.1	49.3	3.89	3.78	1.81	YES	
L0003805	0	0.50420E-05	416238.9	3744085.2	49.5	3.89	3.78	1.81	YES	
L0003806	0	0.50420E-05	416241.0	3744077.4	49.5	3.89	3.78	1.81	YES	
L0003807	0	0.50420E-05	416243.1	3744069.5	49.5	3.89	3.78	1.81	YES	
L0003808	0	0.50420E-05	416245.2	3744061.7	49.5	3.89	3.78	1.81	YES	
L0003809	0	0.50420E-05	416247.3	3744053.8	49.5	3.89	3.78	1.81	YES	
L0003810	0	0.50420E-05	416249.4	3744046.0	49.5	3.89	3.78	1.81	YES	
L0003811	0	0.50420E-05	416251.5	3744038.1	49.7	3.89	3.78	1.81	YES	
L0003812	0	0.50420E-05	416253.6	3744030.3	49.9	3.89	3.78	1.81	YES	
L0003813	0	0.50420E-05	416255.7	3744022.4	50.1	3.89	3.78	1.81	YES	
L0003814	0	0.50420E-05	416257.9	3744014.5	50.2	3.89	3.78	1.81	YES	
L0003815	0	0.50420E-05	416260.0	3744006.7	50.4	3.89	3.78	1.81	YES	
L0003816	0	0.50420E-05	416262.1	3743998.8	50.6	3.89	3.78	1.81	YES	
L0003817	0	0.50420E-05	416264.2	3743991.0	50.7	3.89	3.78	1.81	YES	
L0003818	0	0.50420E-05	416266.3	3743983.1	50.8	3.89	3.78	1.81	YES	
L0003819	0	0.50420E-05	416268.4	3743975.3	50.9	3.89	3.78	1.81	YES	
L0003820	0	0.50420E-05	416270.5	3743967.4	50.8	3.89	3.78	1.81	YES	
L0003821	0	0.50420E-05	416272.6	3743959.6	50.3	3.89	3.78	1.81	YES	
L0003822	0	0.50420E-05	416274.7	3743951.7	49.8	3.89	3.78	1.81	YES	
L0003823	0	0.50420E-05	416276.8	3743943.8	49.3	3.89	3.78	1.81	YES	
L0003824	0	0.50420E-05	416279.0	3743936.0	48.7	3.89	3.78	1.81	YES	
L0003825	0	0.50420E-05	416281.1	3743928.1	48.2	3.89	3.78	1.81	YES	

L0003826	0	0.50420E-05	416283.2	3743920.3	47.8	3.89	3.78	1.81	YES
L0003827	0	0.50420E-05	416285.3	3743912.4	47.3	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0003828	0	0.50420E-05	416287.4	3743904.6	47.1	3.89	3.78	1.81	YES	
L0003829	0	0.50420E-05	416289.5	3743896.7	46.9	3.89	3.78	1.81	YES	
L0003830	0	0.50420E-05	416291.6	3743888.9	46.7	3.89	3.78	1.81	YES	
L0003831	0	0.50420E-05	416293.7	3743881.0	46.5	3.89	3.78	1.81	YES	
L0003832	0	0.50420E-05	416295.8	3743873.2	46.9	3.89	3.78	1.81	YES	
L0003833	0	0.50420E-05	416298.0	3743865.3	47.3	3.89	3.78	1.81	YES	
L0003834	0	0.50420E-05	416300.1	3743857.4	47.7	3.89	3.78	1.81	YES	
L0003835	0	0.50420E-05	416302.2	3743849.6	48.0	3.89	3.78	1.81	YES	
L0003836	0	0.50420E-05	416304.3	3743841.7	48.3	3.89	3.78	1.81	YES	
L0003837	0	0.50420E-05	416306.4	3743833.9	48.5	3.89	3.78	1.81	YES	
L0003838	0	0.50420E-05	416308.5	3743826.0	48.8	3.89	3.78	1.81	YES	
L0003839	0	0.50420E-05	416310.6	3743818.2	49.1	3.89	3.78	1.81	YES	
L0003840	0	0.50420E-05	416312.7	3743810.3	49.5	3.89	3.78	1.81	YES	
L0003841	0	0.50420E-05	416314.8	3743802.5	49.9	3.89	3.78	1.81	YES	
L0003842	0	0.50420E-05	416316.9	3743794.6	50.3	3.89	3.78	1.81	YES	
L0003843	0	0.50420E-05	416319.1	3743786.7	50.6	3.89	3.78	1.81	YES	
L0003844	0	0.50420E-05	416321.2	3743778.9	50.7	3.89	3.78	1.81	YES	
L0003845	0	0.50420E-05	416323.3	3743771.0	50.9	3.89	3.78	1.81	YES	
L0003846	0	0.50420E-05	416325.4	3743763.2	51.0	3.89	3.78	1.81	YES	
L0003847	0	0.50420E-05	416327.5	3743755.3	51.1	3.89	3.78	1.81	YES	
L0003848	0	0.50420E-05	416329.6	3743747.5	51.0	3.89	3.78	1.81	YES	
L0003849	0	0.50420E-05	416331.7	3743739.6	51.0	3.89	3.78	1.81	YES	
L0003850	0	0.50420E-05	416333.8	3743731.8	50.8	3.89	3.78	1.81	YES	
L0003851	0	0.50420E-05	416335.9	3743723.9	50.8	3.89	3.78	1.81	YES	
L0003852	0	0.50420E-05	416338.0	3743716.1	50.9	3.89	3.78	1.81	YES	
L0003853	0	0.50420E-05	416340.2	3743708.2	51.0	3.89	3.78	1.81	YES	
L0003854	0	0.50420E-05	416342.3	3743700.3	51.1	3.89	3.78	1.81	YES	
L0003855	0	0.50420E-05	416344.4	3743692.5	51.0	3.89	3.78	1.81	YES	
L0003856	0	0.50420E-05	416346.5	3743684.6	50.9	3.89	3.78	1.81	YES	
L0003857	0	0.50420E-05	416348.6	3743676.8	50.8	3.89	3.78	1.81	YES	
L0003858	0	0.50420E-05	416350.7	3743668.9	50.7	3.89	3.78	1.81	YES	
L0003859	0	0.50420E-05	416352.8	3743661.1	50.6	3.89	3.78	1.81	YES	
L0003860	0	0.50420E-05	416354.9	3743653.2	50.4	3.89	3.78	1.81	YES	
L0003861	0	0.50420E-05	416357.0	3743645.4	50.3	3.89	3.78	1.81	YES	
L0003862	0	0.50420E-05	416359.2	3743637.5	50.3	3.89	3.78	1.81	YES	
L0003863	0	0.50420E-05	416361.3	3743629.6	50.5	3.89	3.78	1.81	YES	
L0003864	0	0.50420E-05	416363.4	3743621.8	50.7	3.89	3.78	1.81	YES	
L0003865	0	0.50420E-05	416365.5	3743613.9	50.8	3.89	3.78	1.81	YES	
L0003866	0	0.50420E-05	416367.6	3743606.1	50.9	3.89	3.78	1.81	YES	
L0003867	0	0.50420E-05	416369.7	3743598.2	51.0	3.89	3.78	1.81	YES	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0003868	0	0.50420E-05	416371.8	3743590.4	51.2	3.89	3.78	1.81	YES	
L0003869	0	0.50420E-05	416373.9	3743582.5	51.4	3.89	3.78	1.81	YES	

L0003870	0	0.50420E-05	416376.0	3743574.7	51.9	3.89	3.78	1.81	YES
L0003871	0	0.50420E-05	416378.1	3743566.8	52.5	3.89	3.78	1.81	YES
L0003872	0	0.50420E-05	416380.3	3743559.0	52.9	3.89	3.78	1.81	YES
L0003873	0	0.50420E-05	416382.4	3743551.1	53.4	3.89	3.78	1.81	YES
L0003874	0	0.50420E-05	416384.5	3743543.2	53.1	3.89	3.78	1.81	YES
L0003875	0	0.50420E-05	416386.6	3743535.4	52.8	3.89	3.78	1.81	YES
L0003876	0	0.50420E-05	416388.7	3743527.5	52.4	3.89	3.78	1.81	YES
L0003877	0	0.50420E-05	416390.8	3743519.7	52.0	3.89	3.78	1.81	YES
L0003878	0	0.50420E-05	416392.9	3743511.8	51.7	3.89	3.78	1.81	YES
L0003879	0	0.50420E-05	416395.0	3743504.0	51.5	3.89	3.78	1.81	YES
L0003880	0	0.50420E-05	416397.1	3743496.1	51.2	3.89	3.78	1.81	YES
L0003881	0	0.50420E-05	416399.2	3743488.3	51.0	3.89	3.78	1.81	YES
L0003882	0	0.50420E-05	416401.4	3743480.4	51.1	3.89	3.78	1.81	YES
L0003883	0	0.50420E-05	416403.5	3743472.5	51.2	3.89	3.78	1.81	YES
L0003884	0	0.50420E-05	416405.6	3743464.7	51.2	3.89	3.78	1.81	YES
L0003885	0	0.50420E-05	416407.7	3743456.8	51.1	3.89	3.78	1.81	YES
L0003886	0	0.50420E-05	416409.8	3743449.0	50.8	3.89	3.78	1.81	YES
L0003887	0	0.50420E-05	416411.9	3743441.1	50.5	3.89	3.78	1.81	YES
L0003888	0	0.50420E-05	416414.0	3743433.3	50.2	3.89	3.78	1.81	YES
L0003889	0	0.50420E-05	416416.1	3743425.4	49.9	3.89	3.78	1.81	YES
L0003890	0	0.50420E-05	416418.2	3743417.6	49.8	3.89	3.78	1.81	YES
L0003891	0	0.50420E-05	416420.3	3743409.7	49.8	3.89	3.78	1.81	YES
L0003892	0	0.50420E-05	416422.5	3743401.9	49.8	3.89	3.78	1.81	YES
L0003893	0	0.50420E-05	416424.6	3743394.0	49.7	3.89	3.78	1.81	YES
L0003894	0	0.50420E-05	416426.7	3743386.1	49.5	3.89	3.78	1.81	YES
L0003895	0	0.50420E-05	416428.8	3743378.3	49.3	3.89	3.78	1.81	YES
L0003896	0	0.50420E-05	416430.9	3743370.4	49.0	3.89	3.78	1.81	YES
L0003897	0	0.50420E-05	416433.0	3743362.6	48.8	3.89	3.78	1.81	YES
L0003898	0	0.50420E-05	416435.1	3743354.7	48.5	3.89	3.78	1.81	YES
L0003899	0	0.50420E-05	416437.2	3743346.9	48.2	3.89	3.78	1.81	YES
L0003900	0	0.50420E-05	416439.3	3743339.0	48.0	3.89	3.78	1.81	YES
L0003901	0	0.50420E-05	416441.5	3743331.2	48.2	3.89	3.78	1.81	YES
L0003902	0	0.50420E-05	416443.6	3743323.3	48.3	3.89	3.78	1.81	YES
L0003903	0	0.50420E-05	416445.7	3743315.4	48.4	3.89	3.78	1.81	YES
L0003904	0	0.50420E-05	416447.8	3743307.6	48.5	3.89	3.78	1.81	YES
L0003905	0	0.50420E-05	416449.9	3743299.7	48.7	3.89	3.78	1.81	YES
L0003906	0	0.50420E-05	416452.0	3743291.9	48.9	3.89	3.78	1.81	YES
L0003907	0	0.50420E-05	416454.1	3743284.0	49.1	3.89	3.78	1.81	YES

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0003908	0	0.50420E-05	416456.2	3743276.2	49.1	3.89	3.78	1.81	YES	
L0003909	0	0.50420E-05	416458.3	3743268.3	49.1	3.89	3.78	1.81	YES	
L0003910	0	0.50420E-05	416460.4	3743260.5	49.0	3.89	3.78	1.81	YES	
L0003911	0	0.50420E-05	416462.6	3743252.6	49.0	3.89	3.78	1.81	YES	
L0003912	0	0.50420E-05	416464.7	3743244.8	49.1	3.89	3.78	1.81	YES	
L0003913	0	0.50420E-05	416466.8	3743236.9	49.3	3.89	3.78	1.81	YES	
L0003914	0	0.50420E-05	416468.9	3743229.0	49.5	3.89	3.78	1.81	YES	
L0003915	0	0.50420E-05	416471.0	3743221.2	49.6	3.89	3.78	1.81	YES	
L0003916	0	0.50420E-05	416473.1	3743213.3	49.8	3.89	3.78	1.81	YES	
L0003917	0	0.50420E-05	416475.2	3743205.5	50.0	3.89	3.78	1.81	YES	
L0003918	0	0.50420E-05	416477.3	3743197.6	50.2	3.89	3.78	1.81	YES	
L0003919	0	0.50420E-05	416479.4	3743189.8	50.4	3.89	3.78	1.81	YES	
L0003920	0	0.50420E-05	416481.5	3743181.9	50.5	3.89	3.78	1.81	YES	
L0003921	0	0.50420E-05	416483.7	3743174.1	50.6	3.89	3.78	1.81	YES	
L0003922	0	0.50420E-05	416485.8	3743166.2	50.8	3.89	3.78	1.81	YES	
L0003923	0	0.50420E-05	416487.9	3743158.3	51.0	3.89	3.78	1.81	YES	
L0003924	0	0.50420E-05	416490.0	3743150.5	51.0	3.89	3.78	1.81	YES	
L0003925	0	0.50420E-05	416492.1	3743142.6	51.0	3.89	3.78	1.81	YES	
L0003926	0	0.50420E-05	416494.2	3743134.8	51.0	3.89	3.78	1.81	YES	

L0003927	0	0.50420E-05	416496.3	3743126.9	51.0	3.89	3.78	1.81	YES	
L0003928	0	0.50420E-05	416498.4	3743119.1	51.1	3.89	3.78	1.81	YES	
L0003929	0	0.50420E-05	416500.5	3743111.2	51.2	3.89	3.78	1.81	YES	
L0003930	0	0.50420E-05	416502.7	3743103.4	51.4	3.89	3.78	1.81	YES	
L0003712	0	0.16290E-06	416616.3	3743564.3	52.2	3.11	9.77	1.45	YES	HROFDY
L0003713	0	0.16290E-06	416636.5	3743569.9	52.9	3.11	9.77	1.45	YES	HROFDY
L0003714	0	0.16290E-06	416656.8	3743575.5	53.6	3.11	9.77	1.45	YES	HROFDY
L0003715	0	0.16290E-06	416677.0	3743581.0	53.7	3.11	9.77	1.45	YES	HROFDY
L0003716	0	0.16290E-06	416697.3	3743586.6	52.6	3.11	9.77	1.45	YES	HROFDY
L0003717	0	0.16290E-06	416717.5	3743592.2	51.8	3.11	9.77	1.45	YES	HROFDY
L0003718	0	0.16290E-06	416737.7	3743597.8	51.7	3.11	9.77	1.45	YES	HROFDY
L0003719	0	0.16520E-06	416591.3	3743558.0	51.5	3.11	9.77	1.45	YES	HROFDY
L0003720	0	0.16520E-06	416571.1	3743552.4	50.8	3.11	9.77	1.45	YES	HROFDY
L0003721	0	0.16520E-06	416550.8	3743546.8	49.9	3.11	9.77	1.45	YES	HROFDY
L0003722	0	0.16520E-06	416530.6	3743541.2	48.9	3.11	9.77	1.45	YES	HROFDY
L0003723	0	0.16520E-06	416510.4	3743535.6	48.5	3.11	9.77	1.45	YES	HROFDY
L0003724	0	0.16520E-06	416490.1	3743530.0	49.3	3.11	9.77	1.45	YES	HROFDY
L0003725	0	0.16520E-06	416469.9	3743524.5	51.1	3.11	9.77	1.45	YES	HROFDY
L0003726	0	0.16520E-06	416449.6	3743518.9	52.4	3.11	9.77	1.45	YES	HROFDY
L0003727	0	0.16520E-06	416429.4	3743513.3	53.0	3.11	9.77	1.45	YES	HROFDY
L0003728	0	0.16520E-06	416409.1	3743507.7	52.0	3.11	9.77	1.45	YES	HROFDY

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
L0003729	0	0.16520E-06	416388.9	3743502.1	51.4	3.11	9.77	1.45	YES	HROFDY
L0003730	0	0.16520E-06	416368.7	3743496.5	51.3	3.11	9.77	1.45	YES	HROFDY
L0003731	0	0.16520E-06	416348.4	3743490.9	52.4	3.11	9.77	1.45	YES	HROFDY
L0003732	0	0.16520E-06	416328.2	3743485.3	52.5	3.11	9.77	1.45	YES	HROFDY
L0003733	0	0.16520E-06	416307.9	3743479.8	51.5	3.11	9.77	1.45	YES	HROFDY
L0003734	0	0.16520E-06	416287.7	3743474.2	50.4	3.11	9.77	1.45	YES	HROFDY
L0003735	0	0.16520E-06	416267.4	3743468.6	49.6	3.11	9.77	1.45	YES	HROFDY
L0003736	0	0.16520E-06	416247.2	3743463.0	48.9	3.11	9.77	1.45	YES	HROFDY
L0003737	0	0.16520E-06	416227.0	3743457.4	48.4	3.11	9.77	1.45	YES	HROFDY
L0003738	0	0.16520E-06	416206.7	3743451.8	48.9	3.11	9.77	1.45	YES	HROFDY
L0003739	0	0.16520E-06	416186.5	3743446.2	49.5	3.11	9.77	1.45	YES	HROFDY
L0003740	0	0.16520E-06	416166.2	3743440.6	50.2	3.11	9.77	1.45	YES	HROFDY
L0003741	0	0.16520E-06	416146.0	3743435.1	50.7	3.11	9.77	1.45	YES	HROFDY
L0003742	0	0.16520E-06	416125.7	3743429.5	50.9	3.11	9.77	1.45	YES	HROFDY
L0003743	0	0.16520E-06	416105.5	3743423.9	50.0	3.11	9.77	1.45	YES	HROFDY
L0003744	0	0.16520E-06	416085.3	3743418.3	48.1	3.11	9.77	1.45	YES	HROFDY
L0003745	0	0.16520E-06	416065.0	3743412.7	46.1	3.11	9.77	1.45	YES	HROFDY
L0003746	0	0.31810E-06	416602.9	3743574.1	51.9	3.11	4.49	1.45	YES	HROFDY
L0003747	0	0.31810E-06	416600.5	3743583.4	51.9	3.11	4.49	1.45	YES	HROFDY
L0003748	0	0.31810E-06	416598.0	3743592.7	51.8	3.11	4.49	1.45	YES	HROFDY
L0003749	0	0.31810E-06	416595.5	3743602.1	51.6	3.11	4.49	1.45	YES	HROFDY
L0003750	0	0.31810E-06	416593.0	3743611.4	51.6	3.11	4.49	1.45	YES	HROFDY
L0003751	0	0.31810E-06	416590.6	3743620.7	51.6	3.11	4.49	1.45	YES	HROFDY
L0003752	0	0.31810E-06	416588.1	3743630.1	51.7	3.11	4.49	1.45	YES	HROFDY
L0003753	0	0.31810E-06	416585.6	3743639.4	51.8	3.11	4.49	1.45	YES	HROFDY
L0003754	0	0.31810E-06	416583.1	3743648.7	51.6	3.11	4.49	1.45	YES	HROFDY
L0003755	0	0.31810E-06	416580.7	3743658.1	51.4	3.11	4.49	1.45	YES	HROFDY
L0003756	0	0.31810E-06	416578.2	3743667.4	51.1	3.11	4.49	1.45	YES	HROFDY
L0003757	0	0.31810E-06	416575.7	3743676.7	50.8	3.11	4.49	1.45	YES	HROFDY
L0003758	0	0.31810E-06	416573.2	3743686.1	50.6	3.11	4.49	1.45	YES	HROFDY
L0003759	0	0.31810E-06	416570.7	3743695.4	50.4	3.11	4.49	1.45	YES	HROFDY
L0003760	0	0.31810E-06	416568.3	3743704.7	50.3	3.11	4.49	1.45	YES	HROFDY
L0003761	0	0.31810E-06	416565.8	3743714.1	50.2	3.11	4.49	1.45	YES	HROFDY
L0003762	0	0.31810E-06	416563.3	3743723.4	50.1	3.11	4.49	1.45	YES	HROFDY
L0003763	0	0.31810E-06	416560.8	3743732.7	50.0	3.11	4.49	1.45	YES	HROFDY
L0003764	0	0.31810E-06	416558.4	3743742.1	49.9	3.11	4.49	1.45	YES	HROFDY

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L0003765       0  0.31810E-06  416555.9 3743751.4    49.9     3.11      4.49      1.45     YES   HROFDY
L0003766       0  0.31810E-06  416553.4 3743760.7    49.9     3.11      4.49      1.45     YES   HROFDY
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*** SOURCE IDs DEFINING SOURCE GROUPS ***

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*** SOURCE IDs DEFINING SOURCE GROUPS ***

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SRCGROUP ID                               SOURCE IDs
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♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 08/23/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM *** 20:39:19
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

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♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 08/23/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM *** 20:39:19
PAGE 11

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

URBAN ID URBAN POP SOURCE IDs
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L0003860 , L0003861 , L0003862 , L0003863 , L0003864 , L0003865 , L0003866 , L0003867 ,

L0003868 , L0003869 , L0003870 , L0003871 , L0003872 , L0003873 , L0003874 , L0003875 ,

L0003876 , L0003877 , L0003878 , L0003879 , L0003880 , L0003881 , L0003882 , L0003883 ,

L0003884 , L0003885 , L0003886 , L0003887 , L0003888 , L0003889 , L0003890 , L0003891 ,

L0003892 , L0003893 , L0003894 , L0003895 , L0003896 , L0003897 , L0003898 , L0003899 ,

L0003900 , L0003901 , L0003902 , L0003903 , L0003904 , L0003905 , L0003906 , L0003907 ,

L0003908 , L0003909 , L0003910 , L0003911 , L0003912 , L0003913 , L0003914 , L0003915 ,

L0003916 , L0003917 , L0003918 , L0003919 , L0003920 , L0003921 , L0003922 , L0003923 ,

L0003924 , L0003925 , L0003926 , L0003927 , L0003928 , L0003929 , L0003930 , L0003712 ,

L0003713 , L0003714 , L0003715 , L0003716 , L0003717 , L0003718 , L0003719 , L0003720 ,

L0003721 , L0003722 , L0003723 , L0003724 , L0003725 , L0003726 , L0003727 , L0003728 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

URBAN ID URBAN POP SOURCE IDs
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L0003729 , L0003730 , L0003731 , L0003732 , L0003733 , L0003734 , L0003735 , L0003736 ,

L0003737 , L0003738 , L0003739 , L0003740 , L0003741 , L0003742 , L0003743 , L0003744 ,

L0003745 , L0003746 , L0003747 , L0003748 , L0003749 , L0003750 , L0003751 , L0003752 ,

L0003753 , L0003754 , L0003755 , L0003756 , L0003757 , L0003758 , L0003759 , L0003760 ,

L0003761 , L0003762 , L0003763 , L0003764 , L0003765 , L0003766 , IRECYCLE ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003712 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003713 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003714 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003715 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003716 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 08/23/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM *** 20:39:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003717 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003718 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003719 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01

7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003720 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003721 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0003722 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003723 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003724 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003725 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003726 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003727 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003728 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003729 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003730 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003731 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003732 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003733 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003734 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003735 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003736 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003737 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003738 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003739 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003740 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003741 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003742 ; SOURCE TYPE = VOLUME :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003743 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003744 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003745 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003746 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0003747 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003748 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003749 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003750 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0003751 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003752 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003753 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003754 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003755 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003756 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003757 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003758 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003759 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003760 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003761 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 08/23/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM *** 20:39:19
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = L0003762 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003763 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003764 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003765 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.10000E+01	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = L0003766 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.10000E+01
7	.10000E+01	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = IRECYCLE ; SOURCE TYPE = POINT :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .10000E+01
7 .10000E+01 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01 17 .10000E+01 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416414.0, 3743528.5,	52.9,	52.9,	0.0);	(416426.4, 3743529.0,	53.2,	53.2,	0.0);
(416409.3, 3743546.4,	53.8,	53.8,	0.0);	(416419.9, 3743547.5,	53.9,	53.9,	0.0);
(416439.9, 3743547.5,	53.3,	53.3,	0.0);	(416459.9, 3743547.5,	52.0,	52.0,	0.0);
(416479.9, 3743547.5,	50.6,	50.6,	0.0);	(416499.9, 3743547.5,	49.6,	49.6,	0.0);
(416403.3, 3743566.4,	54.1,	54.1,	0.0);	(416419.9, 3743567.5,	54.8,	54.8,	0.0);
(416439.9, 3743567.5,	54.3,	56.0,	0.0);	(416459.9, 3743567.5,	52.6,	58.0,	0.0);
(416479.9, 3743567.5,	51.3,	58.0,	0.0);	(416499.9, 3743567.5,	50.4,	50.4,	0.0);
(416519.9, 3743567.5,	50.2,	50.2,	0.0);	(416539.9, 3743567.5,	50.4,	50.4,	0.0);
(416399.9, 3743587.5,	54.2,	58.0,	0.0);	(416419.9, 3743587.5,	55.7,	55.7,	0.0);
(416439.9, 3743587.5,	55.5,	58.0,	0.0);	(416459.9, 3743587.5,	53.5,	58.0,	0.0);
(416479.9, 3743587.5,	52.0,	58.0,	0.0);	(416499.9, 3743587.5,	51.2,	51.2,	0.0);
(416519.9, 3743587.5,	51.0,	51.0,	0.0);	(416539.9, 3743587.5,	51.2,	51.2,	0.0);
(416393.5, 3743607.4,	54.1,	58.0,	0.0);	(416419.9, 3743607.5,	56.8,	58.0,	0.0);
(416439.9, 3743607.5,	56.8,	58.0,	0.0);	(416459.9, 3743607.5,	54.8,	58.0,	0.0);
(416479.9, 3743607.5,	52.9,	58.0,	0.0);	(416499.9, 3743607.5,	51.6,	51.6,	0.0);
(416519.9, 3743607.5,	51.0,	51.0,	0.0);	(416539.9, 3743607.5,	51.6,	51.6,	0.0);
(416387.8, 3743627.9,	53.0,	58.0,	0.0);	(416399.9, 3743627.5,	54.4,	58.0,	0.0);
(416419.9, 3743627.5,	56.0,	56.0,	0.0);	(416439.9, 3743627.5,	56.4,	56.4,	0.0);
(416459.9, 3743627.5,	55.6,	55.6,	0.0);	(416479.9, 3743627.5,	54.0,	54.0,	0.0);
(416499.9, 3743627.5,	52.6,	52.6,	0.0);	(416519.9, 3743627.5,	51.6,	51.6,	0.0);
(416381.5, 3743647.5,	52.4,	52.4,	0.0);	(416399.9, 3743647.5,	54.2,	54.2,	0.0);
(416419.9, 3743647.5,	55.2,	55.2,	0.0);	(416439.9, 3743647.5,	55.8,	55.8,	0.0);
(416459.9, 3743647.5,	55.8,	55.8,	0.0);	(416479.9, 3743647.5,	54.8,	54.8,	0.0);
(416499.9, 3743647.5,	53.5,	53.5,	0.0);	(416519.9, 3743647.5,	52.0,	52.0,	0.0);
(416379.9, 3743667.5,	52.9,	55.0,	0.0);	(416399.9, 3743667.5,	54.9,	54.9,	0.0);
(416419.9, 3743667.5,	55.0,	55.0,	0.0);	(416439.9, 3743667.5,	55.1,	55.1,	0.0);
(416459.9, 3743667.5,	55.1,	55.1,	0.0);	(416479.9, 3743667.5,	55.0,	55.0,	0.0);
(416499.9, 3743667.5,	54.0,	55.0,	0.0);	(416519.9, 3743667.5,	52.0,	52.0,	0.0);
(416371.8, 3743687.4,	52.6,	52.6,	0.0);	(416379.9, 3743687.5,	52.8,	52.8,	0.0);
(416399.9, 3743687.5,	53.2,	55.0,	0.0);	(416419.9, 3743687.5,	53.2,	53.2,	0.0);
(416439.9, 3743687.5,	53.6,	53.6,	0.0);	(416459.9, 3743687.5,	54.4,	54.4,	0.0);
(416479.9, 3743687.5,	54.0,	54.0,	0.0);	(416499.9, 3743687.5,	53.2,	53.2,	0.0);
(416519.9, 3743687.5,	52.0,	52.0,	0.0);	(416366.2, 3743708.4,	52.5,	52.5,	0.0);
(416379.9, 3743707.5,	52.4,	52.4,	0.0);	(416399.9, 3743707.5,	51.8,	51.8,	0.0);
(416419.9, 3743707.5,	51.8,	51.8,	0.0);	(416439.9, 3743707.5,	52.3,	52.3,	0.0);
(416459.9, 3743707.5,	53.5,	53.5,	0.0);	(416479.9, 3743707.5,	53.0,	53.0,	0.0);
(416499.9, 3743707.5,	52.3,	52.3,	0.0);	(416519.9, 3743707.5,	51.5,	51.5,	0.0);
(416360.4, 3743727.5,	51.7,	51.7,	0.0);	(416379.9, 3743727.5,	51.8,	51.8,	0.0);
(416399.9, 3743727.5,	51.1,	51.1,	0.0);	(416419.9, 3743727.5,	51.1,	51.1,	0.0);
(416439.9, 3743727.5,	51.4,	51.4,	0.0);	(416459.9, 3743727.5,	52.2,	52.2,	0.0);
(416479.9, 3743727.5,	52.1,	52.1,	0.0);	(416499.9, 3743727.5,	51.4,	51.4,	0.0);

(416516.3, 3743727.5, 50.4, 50.4, 0.0); (416355.5, 3743747.4, 52.1, 52.1, 0.0);
(416364.6, 3743747.9, 52.4, 52.4, 0.0); (416379.9, 3743747.5, 52.3, 52.3, 0.0);
(416399.9, 3743747.5, 51.6, 51.6, 0.0); (416419.9, 3743747.5, 51.2, 51.2, 0.0);
(416439.9, 3743747.5, 51.1, 51.1, 0.0); (416459.9, 3743747.5, 51.4, 51.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416479.9, 3743747.5, 51.4, 51.4, 0.0); (416499.9, 3743747.5, 50.9, 50.9, 0.0);
(416349.8, 3743767.9, 52.5, 52.5, 0.0); (416363.3, 3743767.9, 53.2, 53.2, 0.0);
(416379.9, 3743767.5, 53.2, 53.2, 0.0); (416399.9, 3743767.5, 52.5, 52.5, 0.0);
(416419.9, 3743767.5, 51.7, 51.7, 0.0); (416439.9, 3743767.5, 51.2, 51.2, 0.0);
(416459.9, 3743767.5, 51.2, 51.2, 0.0); (416479.9, 3743767.5, 50.9, 50.9, 0.0);
(416499.9, 3743767.5, 50.5, 50.5, 0.0); (416344.2, 3743787.4, 52.4, 55.0, 0.0);
(416359.9, 3743787.5, 53.9, 55.0, 0.0); (416379.9, 3743787.5, 54.5, 54.5, 0.0);
(416399.9, 3743787.5, 53.8, 53.8, 0.0); (416419.9, 3743787.5, 52.6, 52.6, 0.0);
(416439.9, 3743787.5, 51.9, 51.9, 0.0); (416459.9, 3743787.5, 51.9, 51.9, 0.0);
(416479.9, 3743787.5, 50.7, 50.7, 0.0); (416499.9, 3743787.5, 50.0, 50.0, 0.0);
(416340.7, 3743805.9, 51.5, 55.0, 0.0); (416359.9, 3743807.5, 53.4, 53.4, 0.0);
(416379.9, 3743807.5, 54.1, 54.1, 0.0); (416399.9, 3743807.5, 53.4, 53.4, 0.0);
(416419.9, 3743807.5, 52.9, 52.9, 0.0); (416439.9, 3743807.5, 52.4, 52.4, 0.0);
(416459.9, 3743807.5, 52.0, 52.0, 0.0); (416479.9, 3743807.5, 51.1, 51.1, 0.0);
(416495.3, 3743807.5, 50.5, 50.5, 0.0); (416333.5, 3743827.3, 50.3, 50.3, 0.0);
(416343.9, 3743827.9, 51.1, 54.0, 0.0); (416359.9, 3743827.5, 52.6, 54.0, 0.0);
(416379.9, 3743827.5, 53.2, 53.2, 0.0); (416399.9, 3743827.5, 52.8, 52.8, 0.0);
(416419.9, 3743827.5, 52.6, 52.6, 0.0); (416439.9, 3743827.5, 52.2, 52.2, 0.0);
(416459.9, 3743827.5, 51.8, 51.8, 0.0); (416479.9, 3743827.5, 51.2, 51.2, 0.0);
(416327.7, 3743848.4, 49.2, 49.2, 0.0); (416339.9, 3743847.5, 50.1, 50.1, 0.0);
(416359.9, 3743847.5, 51.5, 51.5, 0.0); (416379.9, 3743847.5, 52.1, 52.1, 0.0);
(416399.9, 3743847.5, 52.1, 52.1, 0.0); (416419.9, 3743847.5, 51.5, 51.5, 0.0);
(416439.9, 3743847.5, 51.1, 51.1, 0.0); (416459.9, 3743847.5, 51.1, 51.1, 0.0);
(416479.9, 3743847.5, 51.0, 51.0, 0.0); (416323.0, 3743867.7, 48.3, 48.3, 0.0);
(416339.9, 3743867.5, 49.4, 49.4, 0.0); (416359.9, 3743867.5, 50.3, 50.3, 0.0);
(416379.9, 3743867.5, 50.6, 50.6, 0.0); (416399.9, 3743867.5, 50.2, 50.2, 0.0);
(416419.9, 3743867.5, 50.0, 50.0, 0.0); (416439.9, 3743867.5, 50.0, 50.0, 0.0);
(416459.9, 3743867.5, 50.4, 50.4, 0.0); (416479.9, 3743867.5, 50.8, 50.8, 0.0);
(416319.9, 3743887.5, 47.8, 47.8, 0.0); (416339.9, 3743887.5, 49.0, 49.0, 0.0);
(416359.9, 3743887.5, 49.5, 49.5, 0.0); (416379.9, 3743887.5, 49.5, 49.5, 0.0);
(416399.9, 3743887.5, 49.0, 49.0, 0.0); (416419.9, 3743887.5, 49.0, 49.0, 0.0);
(416439.9, 3743887.5, 49.2, 49.2, 0.0); (416459.9, 3743887.5, 49.8, 49.8, 0.0);
(416474.9, 3743886.6, 50.3, 50.3, 0.0); (416312.3, 3743907.0, 48.0, 48.0, 0.0);
(416324.4, 3743907.5, 48.4, 48.4, 0.0); (416339.9, 3743907.5, 49.0, 49.0, 0.0);
(416359.9, 3743907.5, 49.0, 49.0, 0.0); (416379.9, 3743907.5, 49.0, 49.0, 0.0);
(416399.9, 3743907.5, 49.0, 49.0, 0.0); (416419.9, 3743907.5, 49.0, 49.0, 0.0);
(416439.9, 3743907.5, 49.0, 49.0, 0.0); (416459.9, 3743907.5, 49.1, 49.1, 0.0);
(416306.6, 3743928.1, 48.6, 48.6, 0.0); (416322.2, 3743927.9, 49.0, 49.0, 0.0);
(416339.9, 3743927.5, 49.6, 49.6, 0.0); (416359.9, 3743927.5, 49.6, 49.6, 0.0);
(416379.9, 3743927.5, 49.6, 49.6, 0.0); (416399.9, 3743927.5, 49.6, 49.6, 0.0);
(416419.9, 3743927.5, 49.2, 49.2, 0.0); (416439.9, 3743927.5, 49.0, 49.0, 0.0);
(416459.9, 3743927.5, 49.0, 49.0, 0.0); (416301.9, 3743947.7, 49.1, 49.1, 0.0);
(416319.9, 3743947.5, 49.2, 49.2, 0.0); (416339.9, 3743947.5, 49.8, 49.8, 0.0);
(416359.9, 3743947.5, 49.9, 49.9, 0.0); (416379.9, 3743947.5, 50.0, 50.0, 0.0);
(416399.9, 3743947.5, 50.0, 50.0, 0.0); (416419.9, 3743947.5, 49.5, 49.5, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416439.9, 3743947.5, 49.2, 49.2, 0.0); (416459.9, 3743947.5, 49.0, 49.0, 0.0);
(416307.1, 3743967.2, 49.2, 49.2, 0.0); (416319.9, 3743967.5, 49.0, 49.0, 0.0);
(416339.9, 3743967.5, 49.1, 49.1, 0.0); (416359.9, 3743967.5, 49.7, 49.7, 0.0);

```
( 416379.9, 3743967.5,    50.0,    50.0,     0.0);      ( 416399.9, 3743967.5,    50.0,    50.0,     0.0);
( 416419.9, 3743967.5,    49.9,    49.9,     0.0);      ( 416439.9, 3743967.5,    49.6,    49.6,     0.0);
( 416319.9, 3743987.5,    47.2,    47.2,     0.0);      ( 416339.9, 3743987.5,    47.2,    47.2,     0.0);
( 416359.9, 3743987.5,    48.3,    48.3,     0.0);      ( 416379.9, 3743987.5,    49.2,    49.2,     0.0);
( 416399.9, 3743987.5,    50.0,    50.0,     0.0);      ( 416419.9, 3743987.5,    50.0,    50.0,     0.0);
( 416439.9, 3743987.5,    49.9,    49.9,     0.0);      ( 416379.9, 3744007.5,    48.7,    48.7,     0.0);
( 416399.9, 3744007.5,    50.0,    50.0,     0.0);      ( 416419.9, 3744007.5,    50.0,    50.0,     0.0);
( 416439.9, 3744007.5,    50.1,    50.1,     0.0);      ( 416436.8, 3744021.3,    50.2,    50.2,     0.0);
( 416510.3, 3743748.2,    50.4,    50.4,     0.0);      ( 416297.6, 3743966.8,    49.7,    49.7,     0.0);
( 416305.1, 3743986.1,    47.9,    51.0,     0.0);      ( 416291.2, 3743985.6,    49.3,    49.3,     0.0);
( 416358.9, 3744002.6,    47.3,    47.3,     0.0);      ( 416339.0, 3743998.5,    46.1,    46.1,     0.0);
( 416319.0, 3743996.1,    46.4,    46.4,     0.0);
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♀ *** AERMOD - VERSION 16216r ***   *** EAST SOUTH STREET PROJECT                          ***      08/23/17
*** AERMET - VERSION  14134 ***   *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM            ***      20:39:19
                                                                   PAGE  28
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

         * 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)
            - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

            L0003723         416499.9    3743547.5         -5.15
            L0003724         416479.9    3743547.5         -0.74
            L0003724         416499.9    3743547.5         -0.97
            L0003727         416414.0    3743528.5          0.66
            L0003727         416426.4    3743529.0         -5.02
            L0003728         416414.0    3743528.5          0.34
♀ *** AERMOD - VERSION 16216r ***   *** EAST SOUTH STREET PROJECT                          ***      08/23/17
*** AERMET - VERSION  14134 ***   *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM            ***      20:39:19
                                                                   PAGE  29
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

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

     1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 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 16216r ***   *** EAST SOUTH STREET PROJECT                          ***      08/23/17
*** AERMET - VERSION  14134 ***   *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM            ***      20:39:19
                                                                   PAGE  30
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

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

 Surface file:   ..\ANAH8.SFC                                    Met Version:  14134
 Profile file:   ..\ANAH8.PFL
 Surface format: FREE
 Profile format: FREE
 Surface station no.:        0            Upper air station no.:     3190
           Name: UNKNOWN                              Name: UNKNOWN
           Year:   2006                             Year:   2006
```

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
06	01	01	1	01	-2.9	0.060	-9.000	-9.000	-999.	35.	6.6	0.45	1.00	1.00	0.90	39.	9.1	285.4	5.5
06	01	01	1	02	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	64.	9.1	285.4	5.5
06	01	01	1	03	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	103.	9.1	284.9	5.5
06	01	01	1	04	-2.1	0.060	-9.000	-9.000	-999.	35.	9.4	0.45	1.00	1.00	0.90	76.	9.1	284.9	5.5
06	01	01	1	05	-5.9	0.087	-9.000	-9.000	-999.	61.	10.0	0.45	1.00	1.00	1.30	93.	9.1	284.9	5.5
06	01	01	1	06	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	59.	9.1	284.9	5.5
06	01	01	1	07	-6.1	0.087	-9.000	-9.000	-999.	61.	9.6	0.45	1.00	1.00	1.30	58.	9.1	284.2	5.5
06	01	01	1	08	-9.6	0.199	-9.000	-9.000	-999.	213.	73.9	0.45	1.00	0.53	1.80	39.	9.1	284.9	5.5
06	01	01	1	09	33.2	0.322	0.787	0.005	528.	438.	-90.3	0.45	1.00	0.30	2.20	61.	9.1	286.4	5.5
06	01	01	1	10	27.9	0.211	0.832	0.005	742.	239.	-30.3	0.45	1.00	0.23	1.30	187.	9.1	287.0	5.5
06	01	01	1	11	25.2	0.209	0.819	0.005	784.	230.	-32.7	0.45	1.00	0.20	1.30	221.	9.1	287.5	5.5
06	01	01	1	12	75.8	0.233	1.237	0.015	899.	270.	-15.0	0.45	1.00	0.19	1.30	126.	9.1	288.8	5.5
06	01	01	1	13	47.6	0.282	1.084	0.016	963.	359.	-42.3	0.45	1.00	0.19	1.80	77.	9.1	288.8	5.5
06	01	01	1	14	70.8	0.339	1.275	0.017	1053.	473.	-49.4	0.45	1.00	0.20	2.20	50.	9.1	289.2	5.5
06	01	01	1	15	29.3	0.212	0.960	0.017	1088.	244.	-29.3	0.45	1.00	0.24	1.30	179.	9.1	289.2	5.5
06	01	01	1	16	4.4	0.299	0.510	0.017	1091.	393.	-550.5	0.45	1.00	0.32	2.20	116.	9.1	288.1	5.5
06	01	01	1	17	-11.9	0.173	-9.000	-9.000	-999.	182.	39.1	0.45	1.00	0.59	1.80	67.	9.1	287.5	5.5
06	01	01	1	18	-10.6	0.191	-9.000	-9.000	-999.	201.	59.5	0.45	1.00	1.00	1.80	127.	9.1	287.0	5.5
06	01	01	1	19	-10.6	0.191	-9.000	-9.000	-999.	200.	59.1	0.45	1.00	1.00	1.80	145.	9.1	285.9	5.5
06	01	01	1	20	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	71.	9.1	285.4	5.5
06	01	01	1	21	-18.5	0.332	-9.000	-9.000	-999.	458.	177.5	0.45	1.00	1.00	2.70	56.	9.1	284.9	5.5
06	01	01	1	22	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	65.	9.1	285.4	5.5
06	01	01	1	23	-10.6	0.191	-9.000	-9.000	-999.	213.	59.1	0.45	1.00	1.00	1.80	70.	9.1	285.9	5.5
06	01	01	1	24	-14.2	0.257	-9.000	-9.000	-999.	313.	107.1	0.45	1.00	1.00	2.20	66.	9.1	286.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
06	01	01	01	5.5	0	-999.	-99.00	285.4	99.0	-99.00	-99.00
06	01	01	01	9.1	1	39.	0.90	-999.0	99.0	-99.00	-99.00

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

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 08/23/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM *** 20:39:19
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SRCGP1 ***
INCLUDING SOURCE(S): L0003788 , L0003789 , L0003790 , L0003791 , L0003792 ,
L0003793 , L0003794 , L0003795 , L0003796 , L0003797 , L0003798 , L0003799 , L0003800 ,
L0003801 , L0003802 , L0003803 , L0003804 , L0003805 , L0003806 , L0003807 , L0003808 ,
L0003809 , L0003810 , L0003811 , L0003812 , L0003813 , L0003814 , L0003815 , . . . ,

*** 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
416413.95	3743528.49	0.05347	416426.40	3743528.99	0.03968
416409.26	3743546.45	0.05309	416419.88	3743547.54	0.04084
416439.88	3743547.54	0.02886	416459.88	3743547.54	0.02232
416479.88	3743547.54	0.01818	416499.88	3743547.54	0.01528
416403.32	3743566.45	0.05351	416419.88	3743567.54	0.03650
416439.88	3743567.54	0.02675	416459.88	3743567.54	0.02108
416479.88	3743567.54	0.01739	416499.88	3743567.54	0.01475
416519.88	3743567.54	0.01278	416539.88	3743567.54	0.01126
416399.88	3743587.54	0.05018	416419.88	3743587.54	0.03242
416439.88	3743587.54	0.02475	416459.88	3743587.54	0.01996
416479.88	3743587.54	0.01663	416499.88	3743587.54	0.01423
416519.88	3743587.54	0.01239	416539.88	3743587.54	0.01095
416393.55	3743607.36	0.05155	416419.88	3743607.54	0.02827
416439.88	3743607.54	0.02236	416459.88	3743607.54	0.01896
416479.88	3743607.54	0.01589	416499.88	3743607.54	0.01372
416519.88	3743607.54	0.01200	416539.88	3743607.54	0.01064
416387.84	3743627.90	0.05231	416399.88	3743627.54	0.03919

416419.88	3743627.54	0.02676	416439.88	3743627.54	0.02118
416459.88	3743627.54	0.01790	416479.88	3743627.54	0.01523
416499.88	3743627.54	0.01319	416519.88	3743627.54	0.01163
416381.51	3743647.54	0.05415	416399.88	3743647.54	0.03544
416419.88	3743647.54	0.02594	416439.88	3743647.54	0.02037
416459.88	3743647.54	0.01699	416479.88	3743647.54	0.01461
416499.88	3743647.54	0.01273	416519.88	3743647.54	0.01126
416379.88	3743667.54	0.04894	416399.88	3743667.54	0.03205
416419.88	3743667.54	0.02422	416439.88	3743667.54	0.01950
416459.88	3743667.54	0.01633	416479.88	3743667.54	0.01404
416499.88	3743667.54	0.01227	416519.88	3743667.54	0.01092
416371.75	3743687.44	0.05276	416379.88	3743687.54	0.04316
416399.88	3743687.54	0.02995	416419.88	3743687.54	0.02302
416439.88	3743687.54	0.01865	416459.88	3743687.54	0.01565
416479.88	3743687.54	0.01352	416499.88	3743687.54	0.01187
416519.88	3743687.54	0.01060	416366.21	3743708.44	0.05254
416379.88	3743707.54	0.03859	416399.88	3743707.54	0.02781
416419.88	3743707.54	0.02178	416439.88	3743707.54	0.01786
416459.88	3743707.54	0.01505	416479.88	3743707.54	0.01306
416499.88	3743707.54	0.01152	416519.88	3743707.54	0.01030
416360.42	3743727.54	0.05358	416379.88	3743727.54	0.03488
416399.88	3743727.54	0.02584	416419.88	3743727.54	0.02056
416439.88	3743727.54	0.01707	416459.88	3743727.54	0.01453

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SRCGP1 ***
INCLUDING SOURCE(S): L0003788 , L0003789 , L0003790 , L0003791 , L0003792 ,
L0003793 , L0003794 , L0003795 , L0003796 , L0003797 , L0003798 , L0003799 , L0003800 ,
L0003801 , L0003802 , L0003803 , L0003804 , L0003805 , L0003806 , L0003807 , L0003808 ,
L0003809 , L0003810 , L0003811 , L0003812 , L0003813 , L0003814 , L0003815 , . . . ,

*** 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
416479.88	3743727.54	0.01265	416499.88	3743727.54	0.01120
416516.30	3743727.54	0.01020	416355.49	3743747.36	0.05288
416364.59	3743747.90	0.04212	416379.88	3743747.54	0.03178
416399.88	3743747.54	0.02413	416419.88	3743747.54	0.01947
416439.88	3743747.54	0.01630	416459.88	3743747.54	0.01400
416479.88	3743747.54	0.01224	416499.88	3743747.54	0.01085
416349.83	3743767.90	0.05273	416363.32	3743767.90	0.03828
416379.88	3743767.54	0.02895	416399.88	3743767.54	0.02251
416419.88	3743767.54	0.01846	416439.88	3743767.54	0.01559
416459.88	3743767.54	0.01346	416479.88	3743767.54	0.01182
416499.88	3743767.54	0.01051	416344.22	3743787.36	0.05297
416359.88	3743787.54	0.03602	416379.88	3743787.54	0.02590
416399.88	3743787.54	0.02078	416419.88	3743787.54	0.01744
416439.88	3743787.54	0.01488	416459.88	3743787.54	0.01292
416479.88	3743787.54	0.01142	416499.88	3743787.54	0.01018
416340.71	3743805.95	0.05101	416359.88	3743807.54	0.03272
416379.88	3743807.54	0.02422	416399.88	3743807.54	0.01970
416419.88	3743807.54	0.01655	416439.88	3743807.54	0.01422
416459.88	3743807.54	0.01244	416479.88	3743807.54	0.01103
416495.31	3743807.54	0.01011	416333.49	3743827.31	0.05319
416343.86	3743827.90	0.04114	416359.88	3743827.54	0.03027
416379.88	3743827.54	0.02293	416399.88	3743827.54	0.01879
416419.88	3743827.54	0.01584	416439.88	3743827.54	0.01367
416459.88	3743827.54	0.01200	416479.88	3743827.54	0.01066
416327.66	3743848.44	0.05337	416339.88	3743847.54	0.04003
416359.88	3743847.54	0.02838	416379.88	3743847.54	0.02186
416399.88	3743847.54	0.01793	416419.88	3743847.54	0.01525
416439.88	3743847.54	0.01318	416459.88	3743847.54	0.01158
416479.88	3743847.54	0.01031	416322.96	3743867.72	0.05263
416339.88	3743867.54	0.03601	416359.88	3743867.54	0.02634

416379.88	3743867.54	0.02079	416399.88	3743867.54	0.01716
416419.88	3743867.54	0.01459	416439.88	3743867.54	0.01267
416459.88	3743867.54	0.01117	416479.88	3743867.54	0.00997
416319.88	3743887.54	0.04959	416339.88	3743887.54	0.03276
416359.88	3743887.54	0.02454	416379.88	3743887.54	0.01962
416399.88	3743887.54	0.01632	416419.88	3743887.54	0.01396
416439.88	3743887.54	0.01217	416459.88	3743887.54	0.01077
416474.86	3743886.63	0.00992	416312.31	3743906.99	0.05292
416324.40	3743907.54	0.03955	416339.88	3743907.54	0.03006
416359.88	3743907.54	0.02294	416379.88	3743907.54	0.01855

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SRCGP1 ***
INCLUDING SOURCE(S): L0003788 , L0003789 , L0003790 , L0003791 , L0003792 ,
L0003793 , L0003794 , L0003795 , L0003796 , L0003797 , L0003798 , L0003799 , L0003800 ,
L0003801 , L0003802 , L0003803 , L0003804 , L0003805 , L0003806 , L0003807 , L0003808 ,
L0003809 , L0003810 , L0003811 , L0003812 , L0003813 , L0003814 , L0003815 , . . . ,

*** 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
416399.88	3743907.54	0.01555	416419.88	3743907.54	0.01337
416439.88	3743907.54	0.01170	416459.88	3743907.54	0.01038
416306.58	3743928.08	0.05287	416322.23	3743927.90	0.03702
416339.88	3743927.54	0.02775	416359.88	3743927.54	0.02155
416379.88	3743927.54	0.01760	416399.88	3743927.54	0.01486
416419.88	3743927.54	0.01282	416439.88	3743927.54	0.01125
416459.88	3743927.54	0.01001	416301.87	3743947.72	0.05167
416319.88	3743947.54	0.03483	416339.88	3743947.54	0.02565
416359.88	3743947.54	0.02026	416379.88	3743947.54	0.01671
416399.88	3743947.54	0.01418	416419.88	3743947.54	0.01229
416439.88	3743947.54	0.01082	416459.88	3743947.54	0.00965
416307.12	3743967.18	0.03972	416319.88	3743967.54	0.03134
416339.88	3743967.54	0.02366	416359.88	3743967.54	0.01902
416379.88	3743967.54	0.01584	416399.88	3743967.54	0.01353
416419.88	3743967.54	0.01178	416439.88	3743967.54	0.01040
416319.88	3743987.54	0.02793	416339.88	3743987.54	0.02165
416359.88	3743987.54	0.01776	416379.88	3743987.54	0.01498
416399.88	3743987.54	0.01290	416419.88	3743987.54	0.01127
416439.88	3743987.54	0.00999	416379.88	3744007.54	0.01417
416399.88	3744007.54	0.01228	416419.88	3744007.54	0.01078
416439.88	3744007.54	0.00959	416436.78	3744021.35	0.00947
416510.28	3743748.17	0.01022	416297.59	3743966.85	0.05017
416305.11	3743986.12	0.03618	416291.25	3743985.57	0.05093
416358.87	3744002.60	0.01701	416339.02	3743998.54	0.02080
416319.04	3743996.11	0.02690			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SRCGP2 ***
INCLUDING SOURCE(S): L0003712 , L0003713 , L0003714 , L0003715 , L0003716 ,
L0003717 , L0003718 , L0003719 , L0003720 , L0003721 , L0003722 , L0003723 , L0003724 ,
L0003725 , L0003726 , L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 ,
L0003733 , L0003734 , L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , . . . ,

*** 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
416413.95	3743528.49	0.00020	416426.40	3743528.99	0.00027

416409.26	3743546.45	0.00023	416419.88	3743547.54	0.00024
416439.88	3743547.54	0.00026	416459.88	3743547.54	0.00030
416479.88	3743547.54	0.00028	416499.88	3743547.54	0.00026
416403.32	3743566.45	0.00019	416419.88	3743567.54	0.00020
416439.88	3743567.54	0.00021	416459.88	3743567.54	0.00023
416479.88	3743567.54	0.00026	416499.88	3743567.54	0.00030
416519.88	3743567.54	0.00036	416539.88	3743567.54	0.00043
416399.88	3743587.54	0.00017	416419.88	3743587.54	0.00019
416439.88	3743587.54	0.00020	416459.88	3743587.54	0.00022
416479.88	3743587.54	0.00024	416499.88	3743587.54	0.00028
416519.88	3743587.54	0.00032	416539.88	3743587.54	0.00040
416393.55	3743607.36	0.00017	416419.88	3743607.54	0.00018
416439.88	3743607.54	0.00020	416459.88	3743607.54	0.00021
416479.88	3743607.54	0.00024	416499.88	3743607.54	0.00028
416519.88	3743607.54	0.00033	416539.88	3743607.54	0.00042
416387.84	3743627.90	0.00016	416399.88	3743627.54	0.00017
416419.88	3743627.54	0.00019	416439.88	3743627.54	0.00021
416459.88	3743627.54	0.00022	416479.88	3743627.54	0.00025
416499.88	3743627.54	0.00029	416519.88	3743627.54	0.00036
416381.51	3743647.54	0.00016	416399.88	3743647.54	0.00018
416419.88	3743647.54	0.00020	416439.88	3743647.54	0.00022
416459.88	3743647.54	0.00024	416479.88	3743647.54	0.00027
416499.88	3743647.54	0.00031	416519.88	3743647.54	0.00040
416379.88	3743667.54	0.00016	416399.88	3743667.54	0.00018
416419.88	3743667.54	0.00020	416439.88	3743667.54	0.00023
416459.88	3743667.54	0.00026	416479.88	3743667.54	0.00030
416499.88	3743667.54	0.00035	416519.88	3743667.54	0.00045
416371.75	3743687.44	0.00015	416379.88	3743687.54	0.00016
416399.88	3743687.54	0.00018	416419.88	3743687.54	0.00021
416439.88	3743687.54	0.00025	416459.88	3743687.54	0.00029
416479.88	3743687.54	0.00034	416499.88	3743687.54	0.00041
416519.88	3743687.54	0.00052	416366.21	3743708.44	0.00014
416379.88	3743707.54	0.00016	416399.88	3743707.54	0.00019
416419.88	3743707.54	0.00022	416439.88	3743707.54	0.00026
416459.88	3743707.54	0.00031	416479.88	3743707.54	0.00039
416499.88	3743707.54	0.00048	416519.88	3743707.54	0.00063
416360.42	3743727.54	0.00013	416379.88	3743727.54	0.00015
416399.88	3743727.54	0.00018	416419.88	3743727.54	0.00022
416439.88	3743727.54	0.00027	416459.88	3743727.54	0.00033

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SRCGP2 ***
INCLUDING SOURCE(S): L0003712 , L0003713 , L0003714 , L0003715 , L0003716 ,
L0003717 , L0003718 , L0003719 , L0003720 , L0003721 , L0003722 , L0003723 , L0003724 ,
L0003725 , L0003726 , L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 ,
L0003733 , L0003734 , L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , . . . ,

*** 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
416479.88	3743727.54	0.00043	416499.88	3743727.54	0.00057
416516.30	3743727.54	0.00077	416355.49	3743747.36	0.00012
416364.59	3743747.90	0.00013	416379.88	3743747.54	0.00015
416399.88	3743747.54	0.00018	416419.88	3743747.54	0.00022
416439.88	3743747.54	0.00027	416459.88	3743747.54	0.00034
416479.88	3743747.54	0.00045	416499.88	3743747.54	0.00065
416349.83	3743767.90	0.00011	416363.32	3743767.90	0.00012
416379.88	3743767.54	0.00013	416399.88	3743767.54	0.00016
416419.88	3743767.54	0.00020	416439.88	3743767.54	0.00025
416459.88	3743767.54	0.00032	416479.88	3743767.54	0.00045
416499.88	3743767.54	0.00067	416344.22	3743787.36	0.00010
416359.88	3743787.54	0.00011	416379.88	3743787.54	0.00012
416399.88	3743787.54	0.00014	416419.88	3743787.54	0.00018
416439.88	3743787.54	0.00023	416459.88	3743787.54	0.00028

416479.88	3743787.54	0.00041	416499.88	3743787.54	0.00059
416340.71	3743805.95	0.00009	416359.88	3743807.54	0.00010
416379.88	3743807.54	0.00011	416399.88	3743807.54	0.00013
416419.88	3743807.54	0.00016	416439.88	3743807.54	0.00020
416459.88	3743807.54	0.00025	416479.88	3743807.54	0.00034
416495.31	3743807.54	0.00044	416333.49	3743827.31	0.00009
416343.86	3743827.90	0.00009	416359.88	3743827.54	0.00010
416379.88	3743827.54	0.00011	416399.88	3743827.54	0.00012
416419.88	3743827.54	0.00015	416439.88	3743827.54	0.00018
416459.88	3743827.54	0.00022	416479.88	3743827.54	0.00028
416327.66	3743848.44	0.00008	416339.88	3743847.54	0.00009
416359.88	3743847.54	0.00009	416379.88	3743847.54	0.00010
416399.88	3743847.54	0.00012	416419.88	3743847.54	0.00014
416439.88	3743847.54	0.00017	416459.88	3743847.54	0.00020
416479.88	3743847.54	0.00024	416322.96	3743867.72	0.00007
416339.88	3743867.54	0.00008	416359.88	3743867.54	0.00009
416379.88	3743867.54	0.00010	416399.88	3743867.54	0.00012
416419.88	3743867.54	0.00013	416439.88	3743867.54	0.00015
416459.88	3743867.54	0.00018	416479.88	3743867.54	0.00020
416319.88	3743887.54	0.00007	416339.88	3743887.54	0.00007
416359.88	3743887.54	0.00008	416379.88	3743887.54	0.00009
416399.88	3743887.54	0.00010	416419.88	3743887.54	0.00012
416439.88	3743887.54	0.00013	416459.88	3743887.54	0.00015
416474.86	3743886.63	0.00017	416312.31	3743906.99	0.00006
416324.40	3743907.54	0.00006	416339.88	3743907.54	0.00007
416359.88	3743907.54	0.00008	416379.88	3743907.54	0.00008

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SRCGP2 ***
INCLUDING SOURCE(S): L0003712 , L0003713 , L0003714 , L0003715 , L0003716 ,
L0003717 , L0003718 , L0003719 , L0003720 , L0003721 , L0003722 , L0003723 , L0003724 ,
L0003725 , L0003726 , L0003727 , L0003728 , L0003729 , L0003730 , L0003731 , L0003732 ,
L0003733 , L0003734 , L0003735 , L0003736 , L0003737 , L0003738 , L0003739 , . . . ,

*** 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
416399.88	3743907.54	0.00009	416419.88	3743907.54	0.00010
416439.88	3743907.54	0.00012	416459.88	3743907.54	0.00013
416306.58	3743928.08	0.00005	416322.23	3743927.90	0.00006
416339.88	3743927.54	0.00006	416359.88	3743927.54	0.00007
416379.88	3743927.54	0.00008	416399.88	3743927.54	0.00008
416419.88	3743927.54	0.00009	416439.88	3743927.54	0.00010
416459.88	3743927.54	0.00011	416301.87	3743947.72	0.00005
416319.88	3743947.54	0.00005	416339.88	3743947.54	0.00006
416359.88	3743947.54	0.00006	416379.88	3743947.54	0.00007
416399.88	3743947.54	0.00008	416419.88	3743947.54	0.00008
416439.88	3743947.54	0.00009	416459.88	3743947.54	0.00010
416307.12	3743967.18	0.00005	416319.88	3743967.54	0.00005
416339.88	3743967.54	0.00005	416359.88	3743967.54	0.00006
416379.88	3743967.54	0.00006	416399.88	3743967.54	0.00007
416419.88	3743967.54	0.00008	416439.88	3743967.54	0.00008
416319.88	3743987.54	0.00005	416339.88	3743987.54	0.00005
416359.88	3743987.54	0.00005	416379.88	3743987.54	0.00006
416399.88	3743987.54	0.00006	416419.88	3743987.54	0.00007
416439.88	3743987.54	0.00007	416379.88	3744007.54	0.00005
416399.88	3744007.54	0.00006	416419.88	3744007.54	0.00006
416439.88	3744007.54	0.00007	416436.78	3744021.35	0.00006
416510.28	3743748.17	0.00082	416297.59	3743966.85	0.00005
416305.11	3743986.12	0.00004	416291.25	3743985.57	0.00004
416358.87	3744002.60	0.00005	416339.02	3743998.54	0.00005
416319.04	3743996.11	0.00004			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0003788 , L0003789 , L0003790 , L0003791 , L0003792 ,
L0003793 , L0003794 , L0003795 , L0003796 , L0003797 , L0003798 , L0003799 , L0003800 ,
L0003801 , L0003802 , L0003803 , L0003804 , L0003805 , L0003806 , L0003807 , L0003808 ,
L0003809 , L0003810 , L0003811 , L0003812 , L0003813 , L0003814 , L0003815 , . . . ,

*** 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
416413.95	3743528.49	0.05367	416426.40	3743528.99	0.03995
416409.26	3743546.45	0.05332	416419.88	3743547.54	0.04108
416439.88	3743547.54	0.02912	416459.88	3743547.54	0.02262
416479.88	3743547.54	0.01846	416499.88	3743547.54	0.01554
416403.32	3743566.45	0.05369	416419.88	3743567.54	0.03670
416439.88	3743567.54	0.02696	416459.88	3743567.54	0.02131
416479.88	3743567.54	0.01765	416499.88	3743567.54	0.01505
416519.88	3743567.54	0.01314	416539.88	3743567.54	0.01169
416399.88	3743587.54	0.05036	416419.88	3743587.54	0.03261
416439.88	3743587.54	0.02494	416459.88	3743587.54	0.02017
416479.88	3743587.54	0.01687	416499.88	3743587.54	0.01451
416519.88	3743587.54	0.01272	416539.88	3743587.54	0.01135
416393.55	3743607.36	0.05171	416419.88	3743607.54	0.02845
416439.88	3743607.54	0.02256	416459.88	3743607.54	0.01918
416479.88	3743607.54	0.01613	416499.88	3743607.54	0.01399
416519.88	3743607.54	0.01234	416539.88	3743607.54	0.01106
416387.84	3743627.90	0.05248	416399.88	3743627.54	0.03936
416419.88	3743627.54	0.02695	416439.88	3743627.54	0.02138
416459.88	3743627.54	0.01812	416479.88	3743627.54	0.01548
416499.88	3743627.54	0.01349	416519.88	3743627.54	0.01199
416381.51	3743647.54	0.05431	416399.88	3743647.54	0.03562
416419.88	3743647.54	0.02613	416439.88	3743647.54	0.02059
416459.88	3743647.54	0.01723	416479.88	3743647.54	0.01488
416499.88	3743647.54	0.01304	416519.88	3743647.54	0.01165
416379.88	3743667.54	0.04910	416399.88	3743667.54	0.03223
416419.88	3743667.54	0.02443	416439.88	3743667.54	0.01973
416459.88	3743667.54	0.01659	416479.88	3743667.54	0.01434
416499.88	3743667.54	0.01262	416519.88	3743667.54	0.01137
416371.75	3743687.44	0.05291	416379.88	3743687.54	0.04332
416399.88	3743687.54	0.03013	416419.88	3743687.54	0.02323
416439.88	3743687.54	0.01890	416459.88	3743687.54	0.01593
416479.88	3743687.54	0.01386	416499.88	3743687.54	0.01228
416519.88	3743687.54	0.01112	416366.21	3743708.44	0.05269
416379.88	3743707.54	0.03874	416399.88	3743707.54	0.02800
416419.88	3743707.54	0.02200	416439.88	3743707.54	0.01812
416459.88	3743707.54	0.01536	416479.88	3743707.54	0.01345
416499.88	3743707.54	0.01200	416519.88	3743707.54	0.01094
416360.42	3743727.54	0.05371	416379.88	3743727.54	0.03504
416399.88	3743727.54	0.02602	416419.88	3743727.54	0.02078
416439.88	3743727.54	0.01735	416459.88	3743727.54	0.01486

♀ *** AERMOD - VERSION 16216r *** *** EAST SOUTH STREET PROJECT *** 08/23/17
*** AERMET - VERSION 14134 *** *** RAIL LINE AND RECYCLE IMPACTS - 2019 ANNUAL DPM *** 20:39:19

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0003788 , L0003789 , L0003790 , L0003791 , L0003792 ,
L0003793 , L0003794 , L0003795 , L0003796 , L0003797 , L0003798 , L0003799 , L0003800 ,
L0003801 , L0003802 , L0003803 , L0003804 , L0003805 , L0003806 , L0003807 , L0003808 ,
L0003809 , L0003810 , L0003811 , L0003812 , L0003813 , L0003814 , L0003815 , . . . ,

*** 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
416479.88	3743727.54	0.01307	416499.88	3743727.54	0.01177
416516.30	3743727.54	0.01098	416355.49	3743747.36	0.05300
416364.59	3743747.90	0.04225	416379.88	3743747.54	0.03192
416399.88	3743747.54	0.02430	416419.88	3743747.54	0.01968
416439.88	3743747.54	0.01657	416459.88	3743747.54	0.01434
416479.88	3743747.54	0.01269	416499.88	3743747.54	0.01150
416349.83	3743767.90	0.05284	416363.32	3743767.90	0.03840
416379.88	3743767.54	0.02908	416399.88	3743767.54	0.02267
416419.88	3743767.54	0.01866	416439.88	3743767.54	0.01584
416459.88	3743767.54	0.01379	416479.88	3743767.54	0.01226
416499.88	3743767.54	0.01118	416344.22	3743787.36	0.05307
416359.88	3743787.54	0.03613	416379.88	3743787.54	0.02602
416399.88	3743787.54	0.02092	416419.88	3743787.54	0.01762
416439.88	3743787.54	0.01511	416459.88	3743787.54	0.01320
416479.88	3743787.54	0.01182	416499.88	3743787.54	0.01077
416340.71	3743805.95	0.05110	416359.88	3743807.54	0.03282
416379.88	3743807.54	0.02433	416399.88	3743807.54	0.01984
416419.88	3743807.54	0.01671	416439.88	3743807.54	0.01442
416459.88	3743807.54	0.01269	416479.88	3743807.54	0.01137
416495.31	3743807.54	0.01056	416333.49	3743827.31	0.05328
416343.86	3743827.90	0.04123	416359.88	3743827.54	0.03036
416379.88	3743827.54	0.02304	416399.88	3743827.54	0.01891
416419.88	3743827.54	0.01598	416439.88	3743827.54	0.01385
416459.88	3743827.54	0.01222	416479.88	3743827.54	0.01094
416327.66	3743848.44	0.05345	416339.88	3743847.54	0.04012
416359.88	3743847.54	0.02847	416379.88	3743847.54	0.02196
416399.88	3743847.54	0.01805	416419.88	3743847.54	0.01539
416439.88	3743847.54	0.01335	416459.88	3743847.54	0.01178
416479.88	3743847.54	0.01054	416322.96	3743867.72	0.05270
416339.88	3743867.54	0.03609	416359.88	3743867.54	0.02643
416379.88	3743867.54	0.02089	416399.88	3743867.54	0.01728
416419.88	3743867.54	0.01472	416439.88	3743867.54	0.01282
416459.88	3743867.54	0.01135	416479.88	3743867.54	0.01017
416319.88	3743887.54	0.04966	416339.88	3743887.54	0.03284
416359.88	3743887.54	0.02462	416379.88	3743887.54	0.01971
416399.88	3743887.54	0.01642	416419.88	3743887.54	0.01407
416439.88	3743887.54	0.01230	416459.88	3743887.54	0.01092
416474.86	3743886.63	0.01009	416312.31	3743906.99	0.05298
416324.40	3743907.54	0.03962	416339.88	3743907.54	0.03013
416359.88	3743907.54	0.02302	416379.88	3743907.54	0.01863

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0003788 , L0003789 , L0003790 , L0003791 , L0003792 ,
L0003793 , L0003794 , L0003795 , L0003796 , L0003797 , L0003798 , L0003799 , L0003800 ,
L0003801 , L0003802 , L0003803 , L0003804 , L0003805 , L0003806 , L0003807 , L0003808 ,
L0003809 , L0003810 , L0003811 , L0003812 , L0003813 , L0003814 , L0003815 , . . . ,

*** 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
416399.88	3743907.54	0.01565	416419.88	3743907.54	0.01347
416439.88	3743907.54	0.01182	416459.88	3743907.54	0.01051
416306.58	3743928.08	0.05292	416322.23	3743927.90	0.03708
416339.88	3743927.54	0.02781	416359.88	3743927.54	0.02162
416379.88	3743927.54	0.01768	416399.88	3743927.54	0.01494
416419.88	3743927.54	0.01291	416439.88	3743927.54	0.01135
416459.88	3743927.54	0.01012	416301.87	3743947.72	0.05172
416319.88	3743947.54	0.03488	416339.88	3743947.54	0.02571
416359.88	3743947.54	0.02032	416379.88	3743947.54	0.01678
416399.88	3743947.54	0.01426	416419.88	3743947.54	0.01237
416439.88	3743947.54	0.01091	416459.88	3743947.54	0.00975

416307.12	3743967.18	0.03977	416319.88	3743967.54	0.03139
416339.88	3743967.54	0.02372	416359.88	3743967.54	0.01908
416379.88	3743967.54	0.01591	416399.88	3743967.54	0.01360
416419.88	3743967.54	0.01185	416439.88	3743967.54	0.01049
416319.88	3743987.54	0.02798	416339.88	3743987.54	0.02170
416359.88	3743987.54	0.01781	416379.88	3743987.54	0.01504
416399.88	3743987.54	0.01296	416419.88	3743987.54	0.01134
416439.88	3743987.54	0.01007	416379.88	3744007.54	0.01422
416399.88	3744007.54	0.01234	416419.88	3744007.54	0.01084
416439.88	3744007.54	0.00965	416436.78	3744021.35	0.00953
416510.28	3743748.17	0.01104	416297.59	3743966.85	0.05022
416305.11	3743986.12	0.03622	416291.25	3743985.57	0.05097
416358.87	3744002.60	0.01706	416339.02	3743998.54	0.02085
416319.04	3743996.11	0.02695			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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

GROUP ID	AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
SRCGP1	1ST HIGHEST VALUE IS	0.05415 AT (416381.51, 3743647.54, 52.40, 52.40, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.05358 AT (416360.42, 3743727.54, 51.74, 51.74, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.05351 AT (416403.32, 3743566.45, 54.12, 54.12, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.05347 AT (416413.95, 3743528.49, 52.90, 52.90, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.05337 AT (416327.66, 3743848.44, 49.23, 49.23, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.05319 AT (416333.49, 3743827.31, 50.32, 50.32, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.05309 AT (416409.26, 3743546.45, 53.80, 53.80, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.05297 AT (416344.22, 3743787.36, 52.40, 55.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.05292 AT (416312.31, 3743906.99, 47.98, 47.98, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.05288 AT (416355.49, 3743747.36, 52.09, 52.09, 0.00)	DC	
SRCGP2	1ST HIGHEST VALUE IS	0.00082 AT (416510.28, 3743748.17, 50.45, 50.45, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.00077 AT (416516.30, 3743727.54, 50.40, 50.40, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.00067 AT (416499.88, 3743767.54, 50.50, 50.50, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.00065 AT (416499.88, 3743747.54, 50.95, 50.95, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.00063 AT (416519.88, 3743707.54, 51.50, 51.50, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.00059 AT (416499.88, 3743787.54, 50.05, 50.05, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.00057 AT (416499.88, 3743727.54, 51.45, 51.45, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.00052 AT (416519.88, 3743687.54, 52.01, 52.01, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.00048 AT (416499.88, 3743707.54, 52.34, 52.34, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.00045 AT (416519.88, 3743667.54, 52.01, 52.01, 0.00)	DC	
ALL	1ST HIGHEST VALUE IS	0.05431 AT (416381.51, 3743647.54, 52.40, 52.40, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.05371 AT (416360.42, 3743727.54, 51.74, 51.74, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.05369 AT (416403.32, 3743566.45, 54.12, 54.12, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.05367 AT (416413.95, 3743528.49, 52.90, 52.90, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.05345 AT (416327.66, 3743848.44, 49.23, 49.23, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.05332 AT (416409.26, 3743546.45, 53.80, 53.80, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.05328 AT (416333.49, 3743827.31, 50.32, 50.32, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.05307 AT (416344.22, 3743787.36, 52.40, 55.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.05300 AT (416355.49, 3743747.36, 52.09, 52.09, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.05298 AT (416312.31, 3743906.99, 47.98, 47.98, 0.00)	DC	

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 3 Warning Message(s)
A Total of 814 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 61 Calm Hours Identified

A Total of 753 Missing Hours Identified (1.72 Percent)

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

******** WARNING MESSAGES ********
SO W320 508 PPARM: Input Parameter May Be Out-of-Range for Parameter VS
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 12010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 2 year gap

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

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project *** 04/20/17
*** AERMET - VERSION 14134 *** *** Stationary Source Unit Emissions *** 22:03:06
PAGE 1
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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 1 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 8000000.0 ; 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:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: UNITEMIS

**Model Calculates 3 Short Term Average(s) of: 1-HR 8-HR 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 1 Source(s); 1 Source Group(s); and 209 Receptor(s)

with: 1 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

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

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of Concurrent Values for Postprocessing (POSTFILE 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) = 50.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Detailed Error/Message File: 2825_MCP_REV2.err
**File for Summary of Results: 2825_MCP_REV2.sum

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** 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
2825	0	0.10000E+01	416173.7	3744006.1	55.6	27.43	-0.00	1.00	1.50	YES	YES	NO	

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project *** 04/20/17
*** AERMET - VERSION 14134 *** *** Stationary Source Unit Emissions *** 22:03:06
PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	2825 ,

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project *** 04/20/17
*** AERMET - VERSION 14134 *** *** Stationary Source Unit Emissions *** 22:03:06
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
8000000.	2825 ,	

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project *** 04/20/17
*** AERMET - VERSION 14134 *** *** Stationary Source Unit Emissions *** 22:03:06
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 2825

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	10.0,	13.1,	-6.7,	-0.7,	2	18.3,	11.4,	13.0,	-6.5,	-0.8,
3	18.3,	12.3,	12.6,	-6.2,	-0.7,	4	18.3,	12.9,	11.8,	-5.7,	-0.7,
5	18.3,	13.1,	10.6,	-5.0,	-0.7,	6	18.3,	12.9,	9.1,	-4.1,	-0.6,
7	18.3,	12.3,	7.3,	-3.1,	-0.5,	8	18.3,	12.0,	6.6,	-2.6,	-0.4,
9	18.3,	12.7,	8.4,	-3.5,	-0.3,	10	18.3,	13.1,	10.0,	-4.3,	-0.2,
11	18.3,	13.0,	11.4,	-4.9,	-0.0,	12	18.3,	12.6,	12.3,	-5.4,	0.1,
13	18.3,	11.8,	12.9,	-5.7,	0.2,	14	18.3,	10.6,	13.1,	-5.9,	0.4,
15	18.3,	9.1,	12.9,	-5.9,	0.5,	16	18.3,	7.3,	12.3,	-5.7,	0.6,
17	18.3,	6.6,	12.0,	-5.6,	0.6,	18	18.3,	8.4,	12.7,	-6.1,	0.7,
19	18.3,	10.0,	13.1,	-6.4,	0.7,	20	18.3,	11.4,	13.0,	-6.5,	0.8,
21	18.3,	12.3,	12.6,	-6.4,	0.7,	22	18.3,	12.9,	11.8,	-6.1,	0.7,
23	18.3,	13.1,	10.6,	-5.7,	0.7,	24	18.3,	12.9,	9.1,	-5.0,	0.6,
25	18.3,	12.3,	7.3,	-4.2,	0.5,	26	18.3,	12.0,	6.6,	-3.9,	0.4,

27 18.3, 12.7, 8.4, -4.9, 0.3, 28 18.3, 13.1, 10.0, -5.8, 0.2,
29 18.3, 13.0, 11.4, -6.4, 0.0, 30 18.3, 12.6, 12.3, -6.9, -0.1,
31 18.3, 11.8, 12.9, -7.2, -0.2, 32 18.3, 10.6, 13.1, -7.2, -0.4,
33 18.3, 9.1, 12.9, -7.0, -0.5, 34 18.3, 7.3, 12.3, -6.6, -0.6,
35 18.3, 6.6, 12.0, -6.4, -0.6, 36 18.3, 8.4, 12.7, -6.6, -0.7,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416414.0, 3743528.5,	52.9,	52.9,	0.0);	(416426.4, 3743529.0,	53.2,	53.2,	0.0);
(416409.3, 3743546.4,	53.8,	53.8,	0.0);	(416419.9, 3743547.5,	53.9,	53.9,	0.0);
(416439.9, 3743547.5,	53.3,	53.3,	0.0);	(416459.9, 3743547.5,	52.0,	52.0,	0.0);
(416479.9, 3743547.5,	50.6,	50.6,	0.0);	(416499.9, 3743547.5,	49.6,	49.6,	0.0);
(416403.3, 3743566.4,	54.1,	54.1,	0.0);	(416419.9, 3743567.5,	54.8,	54.8,	0.0);
(416439.9, 3743567.5,	54.3,	56.0,	0.0);	(416459.9, 3743567.5,	52.6,	58.0,	0.0);
(416479.9, 3743567.5,	51.3,	58.0,	0.0);	(416499.9, 3743567.5,	50.4,	50.4,	0.0);
(416519.9, 3743567.5,	50.2,	50.2,	0.0);	(416539.9, 3743567.5,	50.4,	50.4,	0.0);
(416399.9, 3743587.5,	54.2,	58.0,	0.0);	(416419.9, 3743587.5,	55.7,	55.7,	0.0);
(416439.9, 3743587.5,	55.5,	58.0,	0.0);	(416459.9, 3743587.5,	53.5,	58.0,	0.0);
(416479.9, 3743587.5,	52.0,	58.0,	0.0);	(416499.9, 3743587.5,	51.2,	51.2,	0.0);
(416519.9, 3743587.5,	51.0,	51.0,	0.0);	(416539.9, 3743587.5,	51.2,	51.2,	0.0);
(416393.5, 3743607.4,	54.1,	58.0,	0.0);	(416419.9, 3743607.5,	56.8,	58.0,	0.0);
(416439.9, 3743607.5,	56.8,	58.0,	0.0);	(416459.9, 3743607.5,	54.8,	58.0,	0.0);
(416479.9, 3743607.5,	52.9,	58.0,	0.0);	(416499.9, 3743607.5,	51.6,	51.6,	0.0);
(416519.9, 3743607.5,	51.0,	51.0,	0.0);	(416539.9, 3743607.5,	51.6,	51.6,	0.0);
(416387.8, 3743627.9,	53.0,	58.0,	0.0);	(416399.9, 3743627.5,	54.4,	58.0,	0.0);
(416419.9, 3743627.5,	56.0,	56.0,	0.0);	(416439.9, 3743627.5,	56.4,	56.4,	0.0);
(416459.9, 3743627.5,	55.6,	55.6,	0.0);	(416479.9, 3743627.5,	54.0,	54.0,	0.0);
(416499.9, 3743627.5,	52.6,	52.6,	0.0);	(416519.9, 3743627.5,	51.6,	51.6,	0.0);
(416381.5, 3743647.5,	52.4,	52.4,	0.0);	(416399.9, 3743647.5,	54.2,	54.2,	0.0);
(416419.9, 3743647.5,	55.2,	55.2,	0.0);	(416439.9, 3743647.5,	55.8,	55.8,	0.0);
(416459.9, 3743647.5,	55.8,	55.8,	0.0);	(416479.9, 3743647.5,	54.8,	54.8,	0.0);
(416499.9, 3743647.5,	53.5,	53.5,	0.0);	(416519.9, 3743647.5,	52.0,	52.0,	0.0);
(416379.9, 3743667.5,	52.9,	55.0,	0.0);	(416399.9, 3743667.5,	54.9,	54.9,	0.0);
(416419.9, 3743667.5,	55.0,	55.0,	0.0);	(416439.9, 3743667.5,	55.1,	55.1,	0.0);
(416459.9, 3743667.5,	55.1,	55.1,	0.0);	(416479.9, 3743667.5,	55.0,	55.0,	0.0);
(416499.9, 3743667.5,	54.0,	55.0,	0.0);	(416519.9, 3743667.5,	52.0,	52.0,	0.0);
(416371.8, 3743687.4,	52.6,	52.6,	0.0);	(416379.9, 3743687.5,	52.8,	52.8,	0.0);
(416399.9, 3743687.5,	53.2,	55.0,	0.0);	(416419.9, 3743687.5,	53.2,	53.2,	0.0);
(416439.9, 3743687.5,	53.6,	53.6,	0.0);	(416459.9, 3743687.5,	54.4,	54.4,	0.0);
(416479.9, 3743687.5,	54.0,	54.0,	0.0);	(416499.9, 3743687.5,	53.2,	53.2,	0.0);
(416519.9, 3743687.5,	52.0,	52.0,	0.0);	(416366.2, 3743708.4,	52.5,	52.5,	0.0);
(416379.9, 3743707.5,	52.4,	52.4,	0.0);	(416399.9, 3743707.5,	51.8,	51.8,	0.0);
(416419.9, 3743707.5,	51.8,	51.8,	0.0);	(416439.9, 3743707.5,	52.3,	52.3,	0.0);
(416459.9, 3743707.5,	53.5,	53.5,	0.0);	(416479.9, 3743707.5,	53.0,	53.0,	0.0);
(416499.9, 3743707.5,	52.3,	52.3,	0.0);	(416519.9, 3743707.5,	51.5,	51.5,	0.0);
(416360.4, 3743727.5,	51.7,	51.7,	0.0);	(416379.9, 3743727.5,	51.8,	51.8,	0.0);
(416399.9, 3743727.5,	51.1,	51.1,	0.0);	(416419.9, 3743727.5,	51.1,	51.1,	0.0);
(416439.9, 3743727.5,	51.4,	51.4,	0.0);	(416459.9, 3743727.5,	52.2,	52.2,	0.0);
(416479.9, 3743727.5,	52.1,	52.1,	0.0);	(416499.9, 3743727.5,	51.4,	51.4,	0.0);
(416516.3, 3743727.5,	50.4,	50.4,	0.0);	(416355.5, 3743747.4,	52.1,	52.1,	0.0);
(416364.6, 3743747.9,	52.4,	52.4,	0.0);	(416379.9, 3743747.5,	52.3,	52.3,	0.0);
(416399.9, 3743747.5,	51.6,	51.6,	0.0);	(416419.9, 3743747.5,	51.2,	51.2,	0.0);
(416439.9, 3743747.5,	51.1,	51.1,	0.0);	(416459.9, 3743747.5,	51.4,	51.4,	0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416479.9, 3743747.5,	51.4,	51.4,	0.0);	(416499.9, 3743747.5,	50.9,	50.9,	0.0);

(416349.8, 3743767.9,	52.5,	52.5,	0.0);	(416363.3, 3743767.9,	53.2,	53.2,	0.0);
(416379.9, 3743767.5,	53.2,	53.2,	0.0);	(416399.9, 3743767.5,	52.5,	52.5,	0.0);
(416419.9, 3743767.5,	51.7,	51.7,	0.0);	(416439.9, 3743767.5,	51.2,	51.2,	0.0);
(416459.9, 3743767.5,	51.2,	51.2,	0.0);	(416479.9, 3743767.5,	50.9,	50.9,	0.0);
(416499.9, 3743767.5,	50.5,	50.5,	0.0);	(416344.2, 3743787.4,	52.4,	55.0,	0.0);
(416359.9, 3743787.5,	53.9,	55.0,	0.0);	(416379.9, 3743787.5,	54.5,	54.5,	0.0);
(416399.9, 3743787.5,	53.8,	53.8,	0.0);	(416419.9, 3743787.5,	52.6,	52.6,	0.0);
(416439.9, 3743787.5,	51.9,	51.9,	0.0);	(416459.9, 3743787.5,	51.9,	51.9,	0.0);
(416479.9, 3743787.5,	50.7,	50.7,	0.0);	(416499.9, 3743787.5,	50.0,	50.0,	0.0);
(416340.7, 3743805.9,	51.5,	55.0,	0.0);	(416359.9, 3743807.5,	53.4,	53.4,	0.0);
(416379.9, 3743807.5,	54.1,	54.1,	0.0);	(416399.9, 3743807.5,	53.4,	53.4,	0.0);
(416419.9, 3743807.5,	52.9,	52.9,	0.0);	(416439.9, 3743807.5,	52.4,	52.4,	0.0);
(416459.9, 3743807.5,	52.0,	52.0,	0.0);	(416479.9, 3743807.5,	51.1,	51.1,	0.0);
(416495.3, 3743807.5,	50.5,	50.5,	0.0);	(416333.5, 3743827.3,	50.3,	50.3,	0.0);
(416343.9, 3743827.9,	51.1,	54.0,	0.0);	(416359.9, 3743827.5,	52.6,	54.0,	0.0);
(416379.9, 3743827.5,	53.2,	53.2,	0.0);	(416399.9, 3743827.5,	52.8,	52.8,	0.0);
(416419.9, 3743827.5,	52.6,	52.6,	0.0);	(416439.9, 3743827.5,	52.2,	52.2,	0.0);
(416459.9, 3743827.5,	51.8,	51.8,	0.0);	(416479.9, 3743827.5,	51.2,	51.2,	0.0);
(416327.7, 3743848.4,	49.2,	49.2,	0.0);	(416339.9, 3743847.5,	50.1,	50.1,	0.0);
(416359.9, 3743847.5,	51.5,	51.5,	0.0);	(416379.9, 3743847.5,	52.1,	52.1,	0.0);
(416399.9, 3743847.5,	52.1,	52.1,	0.0);	(416419.9, 3743847.5,	51.5,	51.5,	0.0);
(416439.9, 3743847.5,	51.1,	51.1,	0.0);	(416459.9, 3743847.5,	51.1,	51.1,	0.0);
(416479.9, 3743847.5,	51.0,	51.0,	0.0);	(416323.0, 3743867.7,	48.3,	48.3,	0.0);
(416339.9, 3743867.5,	49.4,	49.4,	0.0);	(416359.9, 3743867.5,	50.3,	50.3,	0.0);
(416379.9, 3743867.5,	50.6,	50.6,	0.0);	(416399.9, 3743867.5,	50.2,	50.2,	0.0);
(416419.9, 3743867.5,	50.0,	50.0,	0.0);	(416439.9, 3743867.5,	50.0,	50.0,	0.0);
(416459.9, 3743867.5,	50.4,	50.4,	0.0);	(416479.9, 3743867.5,	50.8,	50.8,	0.0);
(416319.9, 3743887.5,	47.8,	47.8,	0.0);	(416339.9, 3743887.5,	49.0,	49.0,	0.0);
(416359.9, 3743887.5,	49.5,	49.5,	0.0);	(416379.9, 3743887.5,	49.5,	49.5,	0.0);
(416399.9, 3743887.5,	49.0,	49.0,	0.0);	(416419.9, 3743887.5,	49.0,	49.0,	0.0);
(416439.9, 3743887.5,	49.2,	49.2,	0.0);	(416459.9, 3743887.5,	49.8,	49.8,	0.0);
(416474.9, 3743886.6,	50.3,	50.3,	0.0);	(416312.3, 3743907.0,	48.0,	48.0,	0.0);
(416324.4, 3743907.5,	48.4,	48.4,	0.0);	(416339.9, 3743907.5,	49.0,	49.0,	0.0);
(416359.9, 3743907.5,	49.0,	49.0,	0.0);	(416379.9, 3743907.5,	49.0,	49.0,	0.0);
(416399.9, 3743907.5,	49.0,	49.0,	0.0);	(416419.9, 3743907.5,	49.0,	49.0,	0.0);
(416439.9, 3743907.5,	49.0,	49.0,	0.0);	(416459.9, 3743907.5,	49.1,	49.1,	0.0);
(416306.6, 3743928.1,	48.6,	48.6,	0.0);	(416322.2, 3743927.9,	49.0,	49.0,	0.0);
(416339.9, 3743927.5,	49.6,	49.6,	0.0);	(416359.9, 3743927.5,	49.6,	49.6,	0.0);
(416379.9, 3743927.5,	49.6,	49.6,	0.0);	(416399.9, 3743927.5,	49.6,	49.6,	0.0);
(416419.9, 3743927.5,	49.2,	49.2,	0.0);	(416439.9, 3743927.5,	49.0,	49.0,	0.0);
(416459.9, 3743927.5,	49.0,	49.0,	0.0);	(416301.9, 3743947.7,	49.1,	49.1,	0.0);
(416319.9, 3743947.5,	49.2,	49.2,	0.0);	(416339.9, 3743947.5,	49.8,	49.8,	0.0);
(416359.9, 3743947.5,	49.9,	49.9,	0.0);	(416379.9, 3743947.5,	50.0,	50.0,	0.0);
(416399.9, 3743947.5,	50.0,	50.0,	0.0);	(416419.9, 3743947.5,	49.5,	49.5,	0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

(416439.9, 3743947.5,	49.2,	49.2,	0.0);	(416459.9, 3743947.5,	49.0,	49.0,	0.0);
(416307.1, 3743967.2,	49.2,	49.2,	0.0);	(416319.9, 3743967.5,	49.0,	49.0,	0.0);
(416339.9, 3743967.5,	49.1,	49.1,	0.0);	(416359.9, 3743967.5,	49.7,	49.7,	0.0);
(416379.9, 3743967.5,	50.0,	50.0,	0.0);	(416399.9, 3743967.5,	50.0,	50.0,	0.0);
(416419.9, 3743967.5,	49.9,	49.9,	0.0);	(416439.9, 3743967.5,	49.6,	49.6,	0.0);
(416319.9, 3743987.5,	47.2,	47.2,	0.0);	(416339.9, 3743987.5,	47.2,	47.2,	0.0);
(416359.9, 3743987.5,	48.3,	48.3,	0.0);	(416379.9, 3743987.5,	49.2,	49.2,	0.0);
(416399.9, 3743987.5,	50.0,	50.0,	0.0);	(416419.9, 3743987.5,	50.0,	50.0,	0.0);
(416439.9, 3743987.5,	49.9,	49.9,	0.0);	(416379.9, 3744007.5,	48.7,	48.7,	0.0);
(416399.9, 3744007.5,	50.0,	50.0,	0.0);	(416419.9, 3744007.5,	50.0,	50.0,	0.0);
(416439.9, 3744007.5,	50.1,	50.1,	0.0);	(416436.8, 3744021.3,	50.2,	50.2,	0.0);
(416510.3, 3743748.2,	50.4,	50.4,	0.0);	(416297.6, 3743966.8,	49.7,	49.7,	0.0);
(416305.1, 3743986.1,	47.9,	51.0,	0.0);	(416291.2, 3743985.6,	49.3,	49.3,	0.0);
(416358.9, 3744002.6,	47.3,	47.3,	0.0);	(416339.0, 3743998.5,	46.1,	46.1,	0.0);
(416319.0, 3743996.1,	46.4,	46.4,	0.0);				

2825_MCP_REV2
PAGE 9
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

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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 1 1 1 1 1  1 1 1 1 1 1 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 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1
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NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS 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 16216r *** *** East South Street Project *** 04/20/17
*** AERMET - VERSION 14134 *** *** Stationary Source Unit Emissions *** 22:03:06
PAGE 10
*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

Surface file: ..\anah8.sfc Met Version: 14134
Profile file: ..\anah8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2006 Year: 2006

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
06	01	01	1	01	-2.9	0.060	-9.000	-9.000	-999.	35.	6.6	0.45	1.00	1.00	0.90	39.	9.1	285.4	5.5
06	01	01	1	02	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	64.	9.1	285.4	5.5
06	01	01	1	03	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	103.	9.1	284.9	5.5
06	01	01	1	04	-2.1	0.060	-9.000	-9.000	-999.	35.	9.4	0.45	1.00	1.00	0.90	76.	9.1	284.9	5.5
06	01	01	1	05	-5.9	0.087	-9.000	-9.000	-999.	61.	10.0	0.45	1.00	1.00	1.30	93.	9.1	284.9	5.5
06	01	01	1	06	-4.3	0.087	-9.000	-9.000	-999.	61.	13.6	0.45	1.00	1.00	1.30	59.	9.1	284.9	5.5
06	01	01	1	07	-6.1	0.087	-9.000	-9.000	-999.	61.	9.6	0.45	1.00	1.00	1.30	58.	9.1	284.2	5.5
06	01	01	1	08	-9.6	0.199	-9.000	-9.000	-999.	213.	73.9	0.45	1.00	0.53	1.80	39.	9.1	284.9	5.5
06	01	01	1	09	33.2	0.322	0.787	0.005	528.	438.	-90.3	0.45	1.00	0.30	2.20	61.	9.1	286.4	5.5
06	01	01	1	10	27.9	0.211	0.832	0.005	742.	239.	-30.3	0.45	1.00	0.23	1.30	187.	9.1	287.0	5.5
06	01	01	1	11	25.2	0.209	0.819	0.005	784.	230.	-32.7	0.45	1.00	0.20	1.30	221.	9.1	287.5	5.5
06	01	01	1	12	75.8	0.233	1.237	0.015	899.	270.	-15.0	0.45	1.00	0.19	1.30	126.	9.1	288.8	5.5
06	01	01	1	13	47.6	0.282	1.084	0.016	963.	359.	-42.3	0.45	1.00	0.19	1.80	77.	9.1	288.8	5.5
06	01	01	1	14	70.8	0.339	1.275	0.017	1053.	473.	-49.4	0.45	1.00	0.20	2.20	50.	9.1	289.2	5.5
06	01	01	1	15	29.3	0.212	0.960	0.017	1088.	244.	-29.3	0.45	1.00	0.24	1.30	179.	9.1	289.2	5.5
06	01	01	1	16	4.4	0.299	0.510	0.017	1091.	393.	-550.5	0.45	1.00	0.32	2.20	116.	9.1	288.1	5.5
06	01	01	1	17	-11.9	0.173	-9.000	-9.000	-999.	182.	39.1	0.45	1.00	0.59	1.80	67.	9.1	287.5	5.5
06	01	01	1	18	-10.6	0.191	-9.000	-9.000	-999.	201.	59.5	0.45	1.00	1.00	1.80	127.	9.1	287.0	5.5
06	01	01	1	19	-10.6	0.191	-9.000	-9.000	-999.	200.	59.1	0.45	1.00	1.00	1.80	145.	9.1	285.9	5.5
06	01	01	1	20	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	71.	9.1	285.4	5.5
06	01	01	1	21	-18.5	0.332	-9.000	-9.000	-999.	458.	177.5	0.45	1.00	1.00	2.70	56.	9.1	284.9	5.5
06	01	01	1	22	-18.4	0.332	-9.000	-9.000	-999.	458.	177.9	0.45	1.00	1.00	2.70	65.	9.1	285.4	5.5
06	01	01	1	23	-10.6	0.191	-9.000	-9.000	-999.	213.	59.1	0.45	1.00	1.00	1.80	70.	9.1	285.9	5.5
06	01	01	1	24	-14.2	0.257	-9.000	-9.000	-999.	313.	107.1	0.45	1.00	1.00	2.20	66.	9.1	286.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
06	01	01	01	5.5	0	-999.	-99.00	285.4	99.0	-99.00	-99.00

06 01 01 01 9.1 1 39. 0.90 -999.0 99.0 -99.00 -99.00

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416413.95	3743528.49	1.50509	416426.40	3743528.99	1.49536
416409.26	3743546.45	1.58694	416419.88	3743547.54	1.57483
416439.88	3743547.54	1.52560	416459.88	3743547.54	1.46180
416479.88	3743547.54	1.40019	416499.88	3743547.54	1.34992
416403.32	3743566.45	1.66488	416419.88	3743567.54	1.65917
416439.88	3743567.54	1.61054	416459.88	3743567.54	1.52876
416479.88	3743567.54	1.46339	416499.88	3743567.54	1.41462
416519.88	3743567.54	1.37942	416539.88	3743567.54	1.35651
416399.88	3743587.54	1.73990	416419.88	3743587.54	1.74755
416439.88	3743587.54	1.70672	416459.88	3743587.54	1.60927
416479.88	3743587.54	1.53393	416499.88	3743587.54	1.48050
416519.88	3743587.54	1.44536	416539.88	3743587.54	1.41895
416393.55	3743607.36	1.81011	416419.88	3743607.54	1.73376
416439.88	3743607.54	1.69576	416459.88	3743607.54	1.70926
416479.88	3743607.54	1.61319	416499.88	3743607.54	1.54435
416519.88	3743607.54	1.49619	416539.88	3743607.54	1.47929
416387.84	3743627.90	1.85084	416399.88	3743627.54	1.87780
416419.88	3743627.54	1.88249	416439.88	3743627.54	1.80413
416459.88	3743627.54	1.79868	416479.88	3743627.54	1.70465
416499.88	3743627.54	1.62801	416519.88	3743627.54	1.56502
416381.51	3743647.54	1.90700	416399.88	3743647.54	1.94163
416419.88	3743647.54	1.93954	416439.88	3743647.54	1.90995
416459.88	3743647.54	1.86689	416479.88	3743647.54	1.79492
416499.88	3743647.54	1.71395	416519.88	3743647.54	1.63310
416379.88	3743667.54	2.00130	416399.88	3743667.54	2.04539
416419.88	3743667.54	2.00443	416439.88	3743667.54	1.96125
416459.88	3743667.54	1.91747	416479.88	3743667.54	1.87093
416499.88	3743667.54	1.79375	416519.88	3743667.54	1.69320
416371.75	3743687.44	2.06559	416379.88	3743687.54	2.06089
416399.88	3743687.54	2.04419	416419.88	3743687.54	2.00058
416439.88	3743687.54	1.97288	416459.88	3743687.54	1.96251
416479.88	3743687.54	1.90511	416499.88	3743687.54	1.83555
416519.88	3743687.54	1.75747	416366.21	3743708.44	2.12902
416379.88	3743707.54	2.09950	416399.88	3743707.54	2.03991
416419.88	3743707.54	2.01017	416439.88	3743707.54	1.99211
416459.88	3743707.54	1.99834	416479.88	3743707.54	1.93719
416499.88	3743707.54	1.87382	416519.88	3743707.54	1.80902
416360.42	3743727.54	2.16322	416379.88	3743727.54	2.12975
416399.88	3743727.54	2.07060	416419.88	3743727.54	2.04130
416439.88	3743727.54	2.02879	416459.88	3743727.54	2.01926

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

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

416479.88	3743727.54	1.97773	416499.88	3743727.54	1.91566
416516.30	3743727.54	1.85170	416355.49	3743747.36	2.24912
416364.59	3743747.90	2.25038	416379.88	3743747.54	2.21551
416399.88	3743747.54	2.15300	416419.88	3743747.54	2.10688
416439.88	3743747.54	2.07806	416459.88	3743747.54	2.06516
416479.88	3743747.54	2.02984	416499.88	3743747.54	1.97605
416349.83	3743767.90	2.35005	416363.32	3743767.90	2.36218
416379.88	3743767.54	2.32956	416399.88	3743767.54	2.26256
416419.88	3743767.54	2.19415	416439.88	3743767.54	2.14959
416459.88	3743767.54	2.12684	416479.88	3743767.54	2.09289
416499.88	3743767.54	2.04358	416344.22	3743787.36	2.40626
416359.88	3743787.54	2.48253	416379.88	3743787.54	2.48857
416399.88	3743787.54	2.41079	416419.88	3743787.54	2.31120
416439.88	3743787.54	2.25437	416459.88	3743787.54	2.23167
416479.88	3743787.54	2.16233	416499.88	3743787.54	2.11697
416340.71	3743805.95	2.36452	416359.88	3743807.54	2.48997
416379.88	3743807.54	2.54239	416399.88	3743807.54	2.47016
416419.88	3743807.54	2.41012	416439.88	3743807.54	2.36240
416459.88	3743807.54	2.32237	416479.88	3743807.54	2.26244
416495.31	3743807.54	2.22811	416333.49	3743827.31	2.33891
416343.86	3743827.90	2.37451	416359.88	3743827.54	2.46173
416379.88	3743827.54	2.53955	416399.88	3743827.54	2.52182
416419.88	3743827.54	2.48923	416439.88	3743827.54	2.45035
416459.88	3743827.54	2.40808	416479.88	3743827.54	2.36837
416327.66	3743848.44	2.36707	416339.88	3743847.54	2.38588
416359.88	3743847.54	2.45078	416379.88	3743847.54	2.51644
416399.88	3743847.54	2.56399	416419.88	3743847.54	2.53589
416439.88	3743847.54	2.50250	416459.88	3743847.54	2.48422
416479.88	3743847.54	2.46820	416322.96	3743867.72	2.43727
416339.88	3743867.54	2.44813	416359.88	3743867.54	2.47805
416379.88	3743867.54	2.51341	416399.88	3743867.54	2.54347
416419.88	3743867.54	2.57950	416439.88	3743867.54	2.57302
416459.88	3743867.54	2.57465	416479.88	3743867.54	2.57999
416319.88	3743887.54	2.56543	416339.88	3743887.54	2.55226
416359.88	3743887.54	2.55241	416379.88	3743887.54	2.56598
416399.88	3743887.54	2.58831	416419.88	3743887.54	2.64580
416439.88	3743887.54	2.67548	416459.88	3743887.54	2.68101
416474.86	3743886.63	2.68611	416312.31	3743906.99	2.77946
416324.40	3743907.54	2.74211	416339.88	3743907.54	2.70663
416359.88	3743907.54	2.67469	416379.88	3743907.54	2.67576

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
416399.88	3743907.54	2.70504	416419.88	3743907.54	2.75855
416439.88	3743907.54	2.81036	416459.88	3743907.54	2.80167
416306.58	3743928.08	3.09525	416322.23	3743927.90	2.99823
416339.88	3743927.54	2.92270	416359.88	3743927.54	2.86433
416379.88	3743927.54	2.84977	416399.88	3743927.54	2.87052
416419.88	3743927.54	2.90397	416439.88	3743927.54	2.95859
416459.88	3743927.54	2.95740	416301.87	3743947.72	3.46674
416319.88	3743947.54	3.29726	416339.88	3743947.54	3.17217
416359.88	3743947.54	3.08906	416379.88	3743947.54	3.05602
416399.88	3743947.54	3.06168	416419.88	3743947.54	3.07825
416439.88	3743947.54	3.12032	416459.88	3743947.54	3.12528
416307.12	3743967.18	3.76409	416319.88	3743967.54	3.61866
416339.88	3743967.54	3.43350	416359.88	3743967.54	3.33277
416379.88	3743967.54	3.28061	416399.88	3743967.54	3.26449
416419.88	3743967.54	3.28239	416439.88	3743967.54	3.31016

416319.88	3743987.54	3.92333	416339.88	3743987.54	3.69291
416359.88	3743987.54	3.56899	416379.88	3743987.54	3.50512
416399.88	3743987.54	3.49239	416419.88	3743987.54	3.48911
416439.88	3743987.54	3.50630	416379.88	3744007.54	3.76768
416399.88	3744007.54	3.74223	416419.88	3744007.54	3.70947
416439.88	3744007.54	3.71363	416436.78	3744021.35	3.86013
416510.28	3743748.17	1.94305	416297.59	3743966.85	3.90314
416305.11	3743986.12	4.12191	416291.25	3743985.57	4.30969
416358.87	3744002.60	3.78102	416339.02	3743998.54	3.86310
416319.04	3743996.11	4.08158			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	37.22173	(12091523)	416426.40	3743528.99	37.22792	(07082404)
416409.26	3743546.45	38.83733	(07102801)	416419.88	3743547.54	38.84600	(07082404)
416439.88	3743547.54	37.92866	(08042621)	416459.88	3743547.54	36.48400	(08042621)
416479.88	3743547.54	34.76756	(09090504)	416499.88	3743547.54	34.09647	(09090504)
416403.32	3743566.45	40.29095	(07082404)	416419.88	3743567.54	40.61450	(07082404)
416439.88	3743567.54	39.74169	(08042621)	416459.88	3743567.54	37.39877	(08042621)
416479.88	3743567.54	36.38459	(09090504)	416499.88	3743567.54	35.37180	(09090504)
416519.88	3743567.54	34.38267	(09071106)	416539.88	3743567.54	33.93377	(09071106)
416399.88	3743587.54	41.78732	(07082404)	416419.88	3743587.54	42.45364	(08042621)
416439.88	3743587.54	41.50882	(08042621)	416459.88	3743587.54	39.32630	(09090504)
416479.88	3743587.54	37.85317	(09090504)	416499.88	3743587.54	36.38021	(09042023)
416519.88	3743587.54	35.64801	(09071106)	416539.88	3743587.54	35.05225	(12091503)
416393.55	3743607.36	42.90814	(07082404)	416419.88	3743607.54	44.53230	(08042621)
416439.88	3743607.54	43.41492	(09090504)	416459.88	3743607.54	41.67993	(09090504)
416479.88	3743607.54	39.15864	(09042023)	416499.88	3743607.54	37.50513	(09071106)
416519.88	3743607.54	36.33144	(12091503)	416539.88	3743607.54	36.01169	(09082623)
416387.84	3743627.90	43.05360	(07082404)	416399.88	3743627.54	44.20234	(08042621)
416419.88	3743627.54	44.26920	(08042621)	416439.88	3743627.54	44.49900	(09090504)
416459.88	3743627.54	43.24221	(09090504)	416479.88	3743627.54	40.90766	(09071106)
416499.88	3743627.54	38.97900	(12091503)	416519.88	3743627.54	37.42369	(09082623)
416381.51	3743647.54	43.53898	(08042621)	416399.88	3743647.54	44.90587	(08042621)
416419.88	3743647.54	45.36291	(09090504)	416439.88	3743647.54	45.19802	(09090504)
416459.88	3743647.54	44.12122	(09071106)	416479.88	3743647.54	42.38144	(12091503)
416499.88	3743647.54	40.42892	(09082623)	416519.88	3743647.54	38.56293	(09080906)
416379.88	3743667.54	45.10619	(08042621)	416399.88	3743667.54	46.44162	(09090504)
416419.88	3743667.54	46.45015	(09090504)	416439.88	3743667.54	45.38837	(09071106)
416459.88	3743667.54	44.48197	(09071106)	416479.88	3743667.54	43.43496	(09082623)
416499.88	3743667.54	41.77267	(09080906)	416519.88	3743667.54	39.35600	(12091004)
416371.75	3743687.44	45.72384	(08042621)	416379.88	3743687.54	45.43285	(08042621)
416399.88	3743687.54	45.87000	(09090504)	416419.88	3743687.54	45.08194	(09042023)
416439.88	3743687.54	44.72400	(09071106)	416459.88	3743687.54	44.67853	(12091503)
416479.88	3743687.54	43.54052	(09080906)	416499.88	3743687.54	41.98797	(12091004)
416519.88	3743687.54	40.27372	(12091004)	416366.21	3743708.44	46.13558	(08042621)
416379.88	3743707.54	45.96901	(09090504)	416399.88	3743707.54	44.76386	(09042023)
416419.88	3743707.54	44.14201	(09071106)	416439.88	3743707.54	44.02675	(12091503)
416459.88	3743707.54	44.62236	(09080906)	416479.88	3743707.54	43.37098	(12091004)
416499.88	3743707.54	42.07341	(12091004)	416519.88	3743707.54	40.21459	(06103024)
416360.42	3743727.54	45.80699	(07090103)	416379.88	3743727.54	45.87984	(09090504)
416399.88	3743727.54	44.57413	(09071106)	416419.88	3743727.54	43.99125	(12091503)
416439.88	3743727.54	43.79660	(09080906)	416459.88	3743727.54	43.97357	(12091004)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416479.88	3743727.54	43.30559	(12091004)	416499.88	3743727.54	41.60256	(06103024)
416516.30	3743727.54	40.05808	(08083004)	416355.49	3743747.36	46.93437	(09090504)
416364.59	3743747.90	47.38912	(09090504)	416379.88	3743747.54	46.83190	(09071106)
416399.88	3743747.54	45.57987	(12091503)	416419.88	3743747.54	44.64449	(09080906)
416439.88	3743747.54	44.12423	(12091004)	416459.88	3743747.54	43.87345	(12091004)
416479.88	3743747.54	42.93555	(12101107)	416499.88	3743747.54	41.74807	(06101505)
416349.83	3743767.90	47.68271	(09090504)	416363.32	3743767.90	48.65940	(09071106)
416379.88	3743767.54	48.44796	(12091503)	416399.88	3743767.54	47.13563	(09082623)
416419.88	3743767.54	45.71363	(12091004)	416439.88	3743767.54	44.75265	(12091004)
416459.88	3743767.54	44.01014	(12101107)	416479.88	3743767.54	43.02541	(06101505)
416499.88	3743767.54	41.91120	(06101506)	416344.22	3743787.36	46.97446	(09080402)
416359.88	3743787.54	49.84134	(12091503)	416379.88	3743787.54	50.95986	(09082623)
416399.88	3743787.54	49.56261	(12091004)	416419.88	3743787.54	47.18137	(12091004)
416439.88	3743787.54	45.83418	(08083004)	416459.88	3743787.54	45.22968	(06101505)
416479.88	3743787.54	43.28035	(06101506)	416499.88	3743787.54	42.46205	(07102321)
416340.71	3743805.95	44.35568	(12121001)	416359.88	3743807.54	48.27420	(08072602)
416379.88	3743807.54	50.19107	(12091004)	416399.88	3743807.54	48.92643	(06103024)
416419.88	3743807.54	47.86178	(08083004)	416439.88	3743807.54	46.74185	(06101506)
416459.88	3743807.54	45.94800	(07102321)	416479.88	3743807.54	44.61230	(07102321)
416495.31	3743807.54	43.34863	(07102321)	416333.49	3743827.31	39.47385	(12121001)
416343.86	3743827.90	41.65407	(12092005)	416359.88	3743827.54	45.65156	(12092005)
416379.88	3743827.54	48.04448	(06092502)	416399.88	3743827.54	47.83863	(09082804)
416419.88	3743827.54	47.56036	(06101506)	416439.88	3743827.54	47.19787	(07102321)
416459.88	3743827.54	46.15521	(07102321)	416479.88	3743827.54	44.83485	(06080205)
416327.66	3743848.44	34.86521	(12092005)	416339.88	3743847.54	37.91047	(12092005)
416359.88	3743847.54	41.63808	(07011805)	416379.88	3743847.54	45.10885	(06121907)
416399.88	3743847.54	46.39902	(12090302)	416419.88	3743847.54	46.26125	(07102321)
416439.88	3743847.54	45.66425	(08070702)	416459.88	3743847.54	45.50095	(06080205)
416479.88	3743847.54	44.85314	(06071602)	416322.96	3743867.72	32.71623	(08041118)
416339.88	3743867.54	33.15147	(07011805)	416359.88	3743867.54	37.85498	(12021605)
416379.88	3743867.54	41.48316	(08122307)	416399.88	3743867.54	43.16838	(07120922)
416419.88	3743867.54	44.14381	(07090105)	416439.88	3743867.54	44.41670	(06071602)
416459.88	3743867.54	44.65084	(08061406)	416479.88	3743867.54	44.85226	(08100620)
416319.88	3743887.54	35.34522	(08120310)	416339.88	3743887.54	36.67369	(12121016)
416359.88	3743887.54	36.84000	(12121016)	416379.88	3743887.54	38.04538	(07120922)
416399.88	3743887.54	40.99121	(12120720)	416419.88	3743887.54	42.67352	(07070302)
416439.88	3743887.54	43.63913	(08100620)	416459.88	3743887.54	44.12571	(09042101)
416474.86	3743886.63	44.51665	(09042101)	416312.31	3743906.99	41.62469	(12121016)
416324.40	3743907.54	43.27078	(12121016)	416339.88	3743907.54	43.24533	(12121016)
416359.88	3743907.54	40.74554	(12121016)	416379.88	3743907.54	37.09923	(12121016)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	39.50101	(12031005)	416419.88	3743907.54	41.97757	(08112922)
416439.88	3743907.54	43.25000	(06082304)	416459.88	3743907.54	43.46815	(09053023)
416306.58	3743928.08	50.37588	(12010816)	416322.23	3743927.90	50.14158	(12010816)
416339.88	3743927.54	47.81490	(12010816)	416359.88	3743927.54	43.44848	(12010816)
416379.88	3743927.54	38.70738	(12010816)	416399.88	3743927.54	38.73035	(08122523)
416419.88	3743927.54	41.49559	(09041506)	416439.88	3743927.54	42.96804	(07082624)
416459.88	3743927.54	43.37088	(09080401)	416301.87	3743947.72	56.94978	(12010816)
416319.88	3743947.54	54.25465	(12010816)	416339.88	3743947.54	49.42189	(12010816)

416359.88	3743947.54	45.14764	(07020517)	416379.88	3743947.54	44.18722	(09041318)
416399.88	3743947.54	42.21131	(07012917)	416419.88	3743947.54	40.95989	(07021603)
416439.88	3743947.54	42.75597	(08112902)	416459.88	3743947.54	43.40996	(07031120)
416307.12	3743967.18	55.16700	(09012414)	416319.88	3743967.54	55.21999	(08101008)
416339.88	3743967.54	53.89551	(07012917)	416359.88	3743967.54	53.88942	(07012917)
416379.88	3743967.54	51.66078	(07012917)	416399.88	3743967.54	48.24551	(07012917)
416419.88	3743967.54	44.52007	(07012917)	416439.88	3743967.54	42.89794	(06102804)
416319.88	3743987.54	63.42712	(08101008)	416339.88	3743987.54	58.41280	(08101008)
416359.88	3743987.54	55.48697	(07012917)	416379.88	3743987.54	52.62486	(07012917)
416399.88	3743987.54	49.19426	(12042518)	416419.88	3743987.54	45.62988	(12042518)
416439.88	3743987.54	42.93154	(06012421)	416379.88	3744007.54	56.85320	(12042518)
416399.88	3744007.54	53.80815	(12042518)	416419.88	3744007.54	49.37523	(12042518)
416439.88	3744007.54	45.20007	(12042518)	416436.78	3744021.35	45.18791	(12042518)
416510.28	3743748.17	40.91368	(06101505)	416297.59	3743966.85	56.26150	(12010816)
416305.11	3743986.12	65.65491	(08101008)	416291.25	3743985.57	66.50341	(08101008)
416358.87	3744002.60	58.52990	(12042518)	416339.02	3743998.54	59.18032	(08101008)
416319.04	3743996.11	64.62208	(08101008)				

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	13.92735	(09123124)	416426.40	3743528.99	13.95480	(07020908)
416409.26	3743546.45	14.58443	(07020908)	416419.88	3743547.54	14.64359	(07020908)
416439.88	3743547.54	14.35675	(07020908)	416459.88	3743547.54	13.75265	(07020908)
416479.88	3743547.54	13.01825	(07020908)	416499.88	3743547.54	12.27949	(07020908)
416403.32	3743566.45	15.28068	(07020908)	416419.88	3743567.54	15.44041	(07020908)
416439.88	3743567.54	15.05943	(07020908)	416459.88	3743567.54	14.18980	(07020908)
416479.88	3743567.54	13.32797	(07020908)	416499.88	3743567.54	12.51897	(07020908)
416519.88	3743567.54	11.76370	(07020908)	416539.88	3743567.54	11.37442	(08042624)
416399.88	3743587.54	15.97651	(07020908)	416419.88	3743587.54	16.21749	(07020908)
416439.88	3743587.54	15.79066	(07020908)	416459.88	3743587.54	14.66111	(07020908)
416479.88	3743587.54	13.60342	(07020908)	416499.88	3743587.54	12.66074	(07020908)
416519.88	3743587.54	12.01066	(09101424)	416539.88	3743587.54	11.61847	(09101424)
416393.55	3743607.36	16.55289	(07020908)	416419.88	3743607.54	16.82153	(07020908)
416439.88	3743607.54	16.26444	(07020908)	416459.88	3743607.54	15.19863	(07020908)
416479.88	3743607.54	13.84282	(07020908)	416499.88	3743607.54	12.72433	(09101424)
416519.88	3743607.54	12.13219	(09101424)	416539.88	3743607.54	11.82501	(06090108)
416387.84	3743627.90	16.81288	(07020908)	416399.88	3743627.54	17.15523	(07020908)
416419.88	3743627.54	17.10128	(07020908)	416439.88	3743627.54	16.42305	(07020908)
416459.88	3743627.54	15.49034	(07020908)	416479.88	3743627.54	14.05048	(07020908)
416499.88	3743627.54	13.15707	(09101424)	416519.88	3743627.54	12.37745	(09101424)
416381.51	3743647.54	17.16008	(07020908)	416399.88	3743647.54	17.53363	(07020908)
416419.88	3743647.54	17.25872	(07020908)	416439.88	3743647.54	16.49171	(07020908)
416459.88	3743647.54	15.44475	(07020908)	416479.88	3743647.54	14.49372	(09101424)
416499.88	3743647.54	13.54257	(09101424)	416519.88	3743647.54	12.81066	(07123024)
416379.88	3743667.54	17.84965	(07020908)	416399.88	3743667.54	18.13956	(07020908)
416419.88	3743667.54	17.31954	(07020908)	416439.88	3743667.54	16.27478	(07020908)
416459.88	3743667.54	15.32677	(09101424)	416479.88	3743667.54	14.73075	(09101424)
416499.88	3743667.54	13.96785	(07123024)	416519.88	3743667.54	13.14426	(07123024)
416371.75	3743687.44	18.27385	(07020908)	416379.88	3743687.54	18.13766	(07020908)
416399.88	3743687.54	17.57106	(07020908)	416419.88	3743687.54	16.56747	(07020908)
416439.88	3743687.54	15.53806	(07020908)	416459.88	3743687.54	15.21247	(09101424)
416479.88	3743687.54	14.70119	(07123024)	416499.88	3743687.54	14.14379	(07123024)
416519.88	3743687.54	13.38983	(07123024)	416366.21	3743708.44	18.65235	(07020908)
416379.88	3743707.54	18.11986	(07020908)	416399.88	3743707.54	16.88707	(07020908)
416419.88	3743707.54	15.74839	(07020908)	416439.88	3743707.54	14.94494	(07123024)
416459.88	3743707.54	15.24482	(07123024)	416479.88	3743707.54	14.78051	(07123024)
416499.88	3743707.54	14.14681	(07123024)	416519.88	3743707.54	13.39725	(07123024)
416360.42	3743727.54	18.57556	(07020908)	416379.88	3743727.54	17.73891	(07020908)
416399.88	3743727.54	16.33989	(07020908)	416419.88	3743727.54	15.10687	(07123024)

416439.88	3743727.54	15.19771	(07123024)	416459.88	3743727.54	15.19670	(07123024)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416479.88	3743727.54	14.75696	(07123024)	416499.88	3743727.54	14.10739	(06080608)
416516.30	3743727.54	14.24141	(06080608)	416355.49	3743747.36	18.87654	(07020908)
416364.59	3743747.90	18.60883	(07020908)	416379.88	3743747.54	17.64870	(07020908)
416399.88	3743747.54	16.01547	(07020908)	416419.88	3743747.54	15.71718	(07123024)
416439.88	3743747.54	15.49228	(07123024)	416459.88	3743747.54	15.18659	(07123024)
416479.88	3743747.54	14.87969	(06080608)	416499.88	3743747.54	15.27775	(06080608)
416349.83	3743767.90	19.06497	(07020908)	416363.32	3743767.90	18.66920	(07020908)
416379.88	3743767.54	17.49298	(07020908)	416399.88	3743767.54	16.81991	(07123024)
416419.88	3743767.54	16.30029	(07123024)	416439.88	3743767.54	15.75381	(07123024)
416459.88	3743767.54	15.58042	(06080608)	416479.88	3743767.54	16.06303	(06080608)
416499.88	3743767.54	16.22860	(06080608)	416344.22	3743787.36	18.59460	(07020908)
416359.88	3743787.54	18.58284	(07020908)	416379.88	3743787.54	18.42105	(07123024)
416399.88	3743787.54	17.92281	(07123024)	416419.88	3743787.54	16.88914	(07123024)
416439.88	3743787.54	16.57926	(06080608)	416459.88	3743787.54	17.22499	(06080608)
416479.88	3743787.54	17.04201	(06080608)	416499.88	3743787.54	16.84219	(06080608)
416340.71	3743805.95	18.78313	(08020608)	416359.88	3743807.54	18.75885	(08020608)
416379.88	3743807.54	18.47207	(07123024)	416399.88	3743807.54	17.83548	(07123024)
416419.88	3743807.54	17.71911	(06080608)	416439.88	3743807.54	18.17135	(06080608)
416459.88	3743807.54	18.28536	(06080608)	416479.88	3743807.54	17.84522	(06080608)
416495.31	3743807.54	17.42245	(06080608)	416333.49	3743827.31	19.54680	(08020608)
416343.86	3743827.90	19.46287	(08020608)	416359.88	3743827.54	19.34007	(08020608)
416379.88	3743827.54	18.66986	(08020608)	416399.88	3743827.54	18.20098	(06080608)
416419.88	3743827.54	18.87576	(06080608)	416439.88	3743827.54	18.99653	(06080608)
416459.88	3743827.54	18.66477	(06080608)	416479.88	3743827.54	18.06722	(06080608)
416327.66	3743848.44	20.19745	(08020608)	416339.88	3743847.54	20.02293	(08020608)
416359.88	3743847.54	19.72190	(08020608)	416379.88	3743847.54	19.04235	(08020608)
416399.88	3743847.54	18.79087	(06080608)	416419.88	3743847.54	18.93466	(06080608)
416439.88	3743847.54	18.66448	(06080608)	416459.88	3743847.54	18.36506	(07120324)
416479.88	3743847.54	18.73094	(07120324)	416322.96	3743867.72	20.66956	(08020608)
416339.88	3743867.54	20.48092	(08020608)	416359.88	3743867.54	20.00136	(08020608)
416379.88	3743867.54	19.17063	(08020608)	416399.88	3743867.54	18.52402	(08102708)
416419.88	3743867.54	18.18985	(08102708)	416439.88	3743867.54	18.59501	(08092508)
416459.88	3743867.54	18.87402	(07120324)	416479.88	3743867.54	19.32723	(07120324)
416319.88	3743887.54	21.15549	(08020608)	416339.88	3743887.54	20.92375	(08020608)
416359.88	3743887.54	20.28603	(08020608)	416379.88	3743887.54	19.34603	(08020608)
416399.88	3743887.54	18.91745	(08102708)	416419.88	3743887.54	18.55525	(08102708)
416439.88	3743887.54	18.92947	(08092508)	416459.88	3743887.54	19.29697	(08092508)
416474.86	3743886.63	19.38034	(07120324)	416312.31	3743906.99	21.73215	(08020608)
416324.40	3743907.54	21.66560	(08020608)	416339.88	3743907.54	21.41840	(08020608)
416359.88	3743907.54	20.62879	(08020608)	416379.88	3743907.54	19.69085	(08020608)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	19.36648	(08102708)	416419.88	3743907.54	19.01497	(06013124)

416439.88	3743907.54	19.96915	(06013124)	416459.88	3743907.54	20.43954	(06013124)
416306.58	3743928.08	22.05750	(08020608)	416322.23	3743927.90	22.18736	(08020608)
416339.88	3743927.54	22.03947	(08020608)	416359.88	3743927.54	21.27315	(08020608)
416379.88	3743927.54	20.32330	(08020608)	416399.88	3743927.54	19.55245	(08102708)
416419.88	3743927.54	20.70536	(06013124)	416439.88	3743927.54	21.46295	(06013124)
416459.88	3743927.54	21.73289	(06013124)	416301.87	3743947.72	23.16935	(09012416)
416319.88	3743947.54	22.37034	(08020608)	416339.88	3743947.54	22.35862	(08020608)
416359.88	3743947.54	21.74679	(08020608)	416379.88	3743947.54	20.83799	(08020608)
416399.88	3743947.54	20.76255	(06013124)	416419.88	3743947.54	21.71854	(06013124)
416439.88	3743947.54	22.28320	(06013124)	416459.88	3743947.54	22.41828	(06013124)
416307.12	3743967.18	25.86577	(09012416)	416319.88	3743967.54	24.38904	(09012416)
416339.88	3743967.54	22.17506	(08020608)	416359.88	3743967.54	21.85266	(08020608)
416379.88	3743967.54	21.07838	(08020608)	416399.88	3743967.54	20.89123	(06013124)
416419.88	3743967.54	21.87179	(06013124)	416439.88	3743967.54	22.35050	(06013124)
416319.88	3743987.54	26.77312	(09053016)	416339.88	3743987.54	23.83114	(09053016)
416359.88	3743987.54	21.37363	(08020608)	416379.88	3743987.54	20.88008	(08020608)
416399.88	3743987.54	20.14951	(08020608)	416419.88	3743987.54	20.92195	(06013124)
416439.88	3743987.54	21.46431	(06013124)	416379.88	3744007.54	20.69467	(08020608)
416399.88	3744007.54	20.22289	(08020524)	416419.88	3744007.54	21.09104	(08102724)
416439.88	3744007.54	22.00030	(08102724)	416436.78	3744021.35	22.26654	(08102724)
416510.28	3743748.17	15.34443	(06080608)	416297.59	3743966.85	26.91940	(09012416)
416305.11	3743986.12	28.47959	(09053016)	416291.25	3743985.57	29.91584	(09053016)
416358.87	3744002.60	22.48860	(09053016)	416339.02	3743998.54	24.99976	(09053016)
416319.04	3743996.11	27.99866	(09053016)				

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416413.95	3743528.49	7.19528	(09123124)	416426.40	3743528.99	7.09671	(09123124)
416409.26	3743546.45	7.52711	(09123124)	416419.88	3743547.54	7.40678	(09123124)
416439.88	3743547.54	7.03150	(09123124)	416459.88	3743547.54	6.56275	(09123124)
416479.88	3743547.54	6.10381	(09123124)	416499.88	3743547.54	5.73093	(08042624)
416403.32	3743566.45	7.80372	(09123124)	416419.88	3743567.54	7.68306	(09123124)
416439.88	3743567.54	7.28714	(09123124)	416459.88	3743567.54	6.69840	(09123124)
416479.88	3743567.54	6.20350	(09123124)	416499.88	3743567.54	5.92178	(08042624)
416519.88	3743567.54	5.68694	(08042624)	416539.88	3743567.54	5.45874	(08042624)
416399.88	3743587.54	8.01200	(09123124)	416419.88	3743587.54	7.94872	(09123124)
416439.88	3743587.54	7.57187	(09123124)	416459.88	3743587.54	6.86862	(09123124)
416479.88	3743587.54	6.37532	(08042624)	416499.88	3743587.54	6.06842	(08042624)
416519.88	3743587.54	5.78786	(08042624)	416539.88	3743587.54	5.50202	(08042624)
416393.55	3743607.36	8.18574	(09123124)	416419.88	3743607.54	7.90582	(09123124)
416439.88	3743607.54	7.52345	(09123124)	416459.88	3743607.54	7.09994	(09123124)
416479.88	3743607.54	6.58381	(08042624)	416499.88	3743607.54	6.14944	(08042624)
416519.88	3743607.54	5.87830	(08020424)	416539.88	3743607.54	5.71072	(08020424)
416387.84	3743627.90	8.13676	(09123124)	416399.88	3743627.54	8.22191	(09123124)
416419.88	3743627.54	8.08580	(09123124)	416439.88	3743627.54	7.60001	(09123124)
416459.88	3743627.54	7.33167	(08042624)	416479.88	3743627.54	6.78711	(08042624)
416499.88	3743627.54	6.42896	(08020424)	416519.88	3743627.54	6.14451	(08020424)
416381.51	3743647.54	8.22082	(08020424)	416399.88	3743647.54	8.21871	(09123124)
416419.88	3743647.54	8.01539	(09123124)	416439.88	3743647.54	7.70621	(08042624)
416459.88	3743647.54	7.41754	(08020424)	416479.88	3743647.54	7.09204	(08020424)
416499.88	3743647.54	6.75271	(08020424)	416519.88	3743647.54	6.41376	(08020424)
416379.88	3743667.54	8.74629	(08020424)	416399.88	3743667.54	8.64133	(08020424)
416419.88	3743667.54	8.34142	(08020424)	416439.88	3743667.54	8.03627	(08020424)
416459.88	3743667.54	7.73112	(08020424)	416479.88	3743667.54	7.42445	(08020424)
416499.88	3743667.54	7.06753	(08020424)	416519.88	3743667.54	6.66799	(08020424)
416371.75	3743687.44	9.33098	(08020424)	416379.88	3743687.54	9.22070	(08020424)
416399.88	3743687.54	8.93564	(08020424)	416419.88	3743687.54	8.60127	(08020424)
416439.88	3743687.54	8.30395	(08020424)	416459.88	3743687.54	8.04036	(08020424)
416479.88	3743687.54	7.68455	(08020424)	416499.88	3743687.54	7.31213	(08020424)

416519.88	3743687.54	6.92961 (08020424)	416366.21	3743708.44	9.97647 (08020424)
416379.88	3743707.54	9.68886 (08020424)	416399.88	3743707.54	9.23974 (08020424)
416419.88	3743707.54	8.87717 (08020424)	416439.88	3743707.54	8.57706 (08020424)
416459.88	3743707.54	8.33096 (08020424)	416479.88	3743707.54	7.93510 (08020424)
416499.88	3743707.54	7.54393 (08020424)	416519.88	3743707.54	7.16004 (08020424)
416360.42	3743727.54	10.53242 (08020424)	416379.88	3743727.54	10.13672 (08020424)
416399.88	3743727.54	9.64236 (08020424)	416419.88	3743727.54	9.24221 (08020424)
416439.88	3743727.54	8.88979 (08020424)	416459.88	3743727.54	8.57736 (08020424)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC (YYMMDDHH)
416479.88	3743727.54	8.19322 (08020424)	416499.88	3743727.54	7.77158 (08020424)
416516.30	3743727.54	7.40272 (08020424)	416355.49	3743747.36	11.31224 (08020424)
416364.59	3743747.90	11.17322 (08020424)	416379.88	3743747.54	10.77758 (08020424)
416399.88	3743747.54	10.21572 (08020424)	416419.88	3743747.54	9.71336 (08020424)
416439.88	3743747.54	9.26911 (08020424)	416459.88	3743747.54	8.87533 (08020424)
416479.88	3743747.54	8.46577 (08020424)	416499.88	3743747.54	8.02891 (08020424)
416349.83	3743767.90	12.22711 (08020424)	416363.32	3743767.90	11.99835 (08020424)
416379.88	3743767.54	11.53280 (08020424)	416399.88	3743767.54	10.88982 (08020424)
416419.88	3743767.54	10.25189 (08020424)	416439.88	3743767.54	9.70620 (08020424)
416459.88	3743767.54	9.23779 (08020424)	416479.88	3743767.54	8.75334 (08020424)
416499.88	3743767.54	8.28735 (08020424)	416344.22	3743787.36	13.08070 (08020424)
416359.88	3743787.54	12.93723 (08020424)	416379.88	3743787.54	12.43368 (08020424)
416399.88	3743787.54	11.68397 (08020424)	416419.88	3743787.54	10.88177 (08020424)
416439.88	3743787.54	10.23185 (08020424)	416459.88	3743787.54	9.70770 (08020424)
416479.88	3743787.54	9.06717 (08020424)	416499.88	3743787.54	8.53973 (08020424)
416340.71	3743805.95	13.70202 (08020424)	416359.88	3743807.54	13.57133 (08020424)
416379.88	3743807.54	13.02530 (08020424)	416399.88	3743807.54	12.19572 (08020424)
416419.88	3743807.54	11.43877 (08020424)	416439.88	3743807.54	10.74523 (08020424)
416459.88	3743807.54	10.10883 (08020424)	416479.88	3743807.54	9.44680 (08020424)
416495.31	3743807.54	8.99065 (08020424)	416333.49	3743827.31	14.47395 (08020424)
416343.86	3743827.90	14.32663 (08020424)	416359.88	3743827.54	14.10436 (08020424)
416379.88	3743827.54	13.50662 (08020424)	416399.88	3743827.54	12.64335 (08020424)
416419.88	3743827.54	11.89668 (08020424)	416439.88	3743827.54	11.16486 (08020424)
416459.88	3743827.54	10.45708 (08020424)	416479.88	3743827.54	9.80312 (08020424)
416327.66	3743848.44	15.22613 (08020424)	416339.88	3743847.54	14.94843 (08020424)
416359.88	3743847.54	14.52469 (08020424)	416379.88	3743847.54	13.88161 (08020424)
416399.88	3743847.54	13.06203 (08020424)	416419.88	3743847.54	12.17153 (08020424)
416439.88	3743847.54	11.39879 (08020424)	416459.88	3743847.54	10.72303 (08020424)
416479.88	3743847.54	10.09313 (08020424)	416322.96	3743867.72	15.88352 (08020424)
416339.88	3743867.54	15.49149 (08020424)	416359.88	3743867.54	14.89552 (08020424)
416379.88	3743867.54	14.10487 (08020424)	416399.88	3743867.54	13.17532 (08020424)
416419.88	3743867.54	12.32696 (08020424)	416439.88	3743867.54	11.59357 (08020424)
416459.88	3743867.54	10.95984 (08020424)	416479.88	3743867.54	10.36083 (08020424)
416319.88	3743887.54	16.57350 (08020424)	416339.88	3743887.54	16.04141 (08020424)
416359.88	3743887.54	15.27905 (08020424)	416379.88	3743887.54	14.36829 (08020424)
416399.88	3743887.54	13.37295 (08020424)	416419.88	3743887.54	12.54463 (08020424)
416439.88	3743887.54	11.81173 (08020424)	416459.88	3743887.54	11.16403 (08020424)
416474.86	3743886.63	10.79426 (09053024)	416312.31	3743906.99	17.46499 (08020424)
416324.40	3743907.54	17.13461 (08020424)	416339.88	3743907.54	16.62688 (08020424)
416359.88	3743907.54	15.70462 (08020424)	416379.88	3743907.54	14.74509 (08020424)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 2825 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
416399.88	3743907.54	13.79664	(08020424)	416419.88	3743907.54	12.91074	(08020424)
416439.88	3743907.54	12.08845	(08020424)	416459.88	3743907.54	11.32755	(08020424)
416306.58	3743928.08	18.28061	(08020424)	416322.23	3743927.90	17.85762	(08020424)
416339.88	3743927.54	17.28568	(08020424)	416359.88	3743927.54	16.32198	(08020424)
416379.88	3743927.54	15.30569	(08020424)	416399.88	3743927.54	14.30512	(08020424)
416419.88	3743927.54	13.27078	(08020424)	416439.88	3743927.54	12.35532	(08020424)
416459.88	3743927.54	11.89314	(08102724)	416301.87	3743947.72	18.84484	(08020424)
416319.88	3743947.54	18.35801	(08020424)	416339.88	3743947.54	17.71473	(08020424)
416359.88	3743947.54	16.80050	(08020424)	416379.88	3743947.54	15.77112	(08020424)
416399.88	3743947.54	14.71837	(08020424)	416419.88	3743947.54	13.59739	(08020424)
416439.88	3743947.54	12.75317	(08102724)	416459.88	3743947.54	12.48457	(08102724)
416307.12	3743967.18	18.89448	(08020424)	416319.88	3743967.54	18.51529	(08020424)
416339.88	3743967.54	17.76099	(08020424)	416359.88	3743967.54	16.99617	(08020424)
416379.88	3743967.54	16.02528	(08020424)	416399.88	3743967.54	14.94357	(08020424)
416419.88	3743967.54	13.89577	(08020424)	416439.88	3743967.54	13.36471	(08102724)
416319.88	3743987.54	18.20293	(08020424)	416339.88	3743987.54	17.43478	(08020424)
416359.88	3743987.54	16.74983	(08020424)	416379.88	3743987.54	15.95005	(08020424)
416399.88	3743987.54	15.07896	(08020424)	416419.88	3743987.54	14.02508	(08020424)
416439.88	3743987.54	13.80377	(08102724)	416379.88	3744007.54	15.84334	(08020424)
416399.88	3744007.54	15.11733	(08020424)	416419.88	3744007.54	14.27356	(08102724)
416439.88	3744007.54	14.09520	(08102724)	416436.78	3744021.35	14.22829	(08102724)
416510.28	3743748.17	7.79820	(08020424)	416297.59	3743966.85	19.08489	(08020424)
416305.11	3743986.12	18.62528	(08020424)	416291.25	3743985.57	17.99927	(08052524)
416358.87	3744002.60	16.59173	(08020424)	416339.02	3743998.54	17.29370	(08020424)
416319.04	3743996.11	18.10278	(08020424)				

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project *** 04/20/17
*** AERMET - VERSION 14134 *** *** Stationary Source Unit Emissions *** 22:03:06
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

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

GROUP ID	AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	4.30969 AT (416291.25, 3743985.57, 49.34, 49.34, 0.00)	DC	
	2ND HIGHEST VALUE IS	4.12191 AT (416305.11, 3743986.12, 47.89, 51.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.08158 AT (416319.04, 3743996.11, 46.39, 46.39, 0.00)	DC	
	4TH HIGHEST VALUE IS	3.92333 AT (416319.88, 3743987.54, 47.25, 47.25, 0.00)	DC	
	5TH HIGHEST VALUE IS	3.90314 AT (416297.59, 3743966.85, 49.74, 49.74, 0.00)	DC	
	6TH HIGHEST VALUE IS	3.86310 AT (416339.02, 3743998.54, 46.15, 46.15, 0.00)	DC	
	7TH HIGHEST VALUE IS	3.86013 AT (416436.78, 3744021.35, 50.16, 50.16, 0.00)	DC	
	8TH HIGHEST VALUE IS	3.78102 AT (416358.87, 3744002.60, 47.26, 47.26, 0.00)	DC	
	9TH HIGHEST VALUE IS	3.76768 AT (416379.88, 3744007.54, 48.66, 48.66, 0.00)	DC	
	10TH HIGHEST VALUE IS	3.76409 AT (416307.12, 3743967.18, 49.17, 49.17, 0.00)	DC	

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

♀ *** AERMOD - VERSION 16216r *** *** East South Street Project *** 04/20/17
*** AERMET - VERSION 14134 *** *** Stationary Source Unit Emissions *** 22:03:06
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

** CONC OF UNITEMIS 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 66.50341 ON 08101008: AT (416291.25, 3743985.57, 49.34, 49.34, 0.00) DC

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF UNITEMIS 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 29.91584 ON 09053016: AT (416291.25, 3743985.57, 49.34, 49.34, 0.00) DC

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF UNITEMIS 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 19.08489 ON 08020424: AT (416297.59, 3743966.85, 49.74, 49.74, 0.00) DC

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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 814 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 61 Calm Hours Identified

A Total of 753 Missing Hours Identified (1.72 Percent)

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

******** WARNING MESSAGES ********
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 12010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 2 year gap

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

901 East South Street Project

Annual DPM Concentrations from Rail Line and Recycle Facility

X (m)	y (m)	2019 (ug/m3)	2020 (ug/m3)	2021 (ug/m3)	2022 (ug/m3)	2023 (ug/m3)	2024 (ug/m3)	2025 (ug/m3)	2026 (ug/m3)	2027 (ug/m3)	2028 (ug/m3)	2029 (ug/m3)	2030 (ug/m3)	2031 (ug/m3)	2032 (ug/m3)	2033 (ug/m3)	2034 (ug/m3)	2035 (ug/m3)	2036 (ug/m3)	2037 (ug/m3)	2038 (ug/m3)	2039 (ug/m3)	2040 (ug/m3)	2041 (ug/m3)	2042 (ug/m3)	2043 (ug/m3)	2044 (ug/m3)	2045 (ug/m3)	2046 (ug/m3)	2047 (ug/m3)	2048 (ug/m3)
416414	3743528	0.05367	0.02664	0.025286	0.023932	0.022578	0.021224	0.01987	0.019868	0.019866	0.019864	0.019862	0.01986	0.019864	0.019868	0.019872	0.019876	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988	0.01988
416426.4	3743529	0.03995	0.01986	0.018506	0.017152	0.015798	0.014444	0.01478	0.014778	0.014776	0.014774	0.014772	0.01478	0.014784	0.014788	0.014792	0.014796	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479	0.01479
416409.3	3743546	0.05332	0.02647	0.025116	0.023762	0.022408	0.021054	0.01974	0.019738	0.019736	0.019734	0.019732	0.01973	0.019734	0.019738	0.019742	0.019746	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975	0.01975
416419.9	3743548	0.04108	0.02041	0.019056	0.017702	0.016348	0.014994	0.01521	0.015208	0.015206	0.015204	0.015202	0.0152	0.015204	0.015208	0.015212	0.015216	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522	0.01522
416439.9	3743548	0.02912	0.01449	0.013136	0.011782	0.010428	0.009074	0.01078	0.010778	0.010776	0.010774	0.010772	0.01077	0.010774	0.010778	0.010782	0.010786	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079	0.01079
416459.9	3743548	0.02262	0.01128	0.009926	0.008572	0.007218	0.005864	0.00837	0.008368	0.008366	0.008364	0.008362	0.00836	0.008364	0.008368	0.008372	0.008376	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838
416479.9	3743548	0.01846	0.00922	0.007866	0.006512	0.005158	0.003804	0.00683	0.006828	0.006826	0.006824	0.006822	0.00682	0.006824	0.006828	0.006832	0.006836	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684	0.00684
416499.9	3743548	0.01554	0.00776	0.006406	0.005052	0.003698	0.002344	0.00575	0.005748	0.005746	0.005744	0.005742	0.00574	0.005744	0.005748	0.005752	0.005756	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576
416403.3	3743566	0.05369	0.02664	0.025286	0.023932	0.022578	0.021224	0.01989	0.019888	0.019886	0.019884	0.019882	0.01988	0.019884	0.019888	0.019892	0.019896	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199
416419.9	3743568	0.0367	0.01823	0.016876	0.015522	0.014168	0.012814	0.01359	0.013588	0.013586	0.013584	0.013582	0.01358	0.013584	0.013588	0.013592	0.013596	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136
416439.9	3743568	0.02696	0.01341	0.012056	0.010702	0.009348	0.007994	0.00998	0.009978	0.009976	0.009974	0.009972	0.00998	0.009984	0.009988	0.009992	0.009996	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
416459.9	3743568	0.02131	0.01062	0.009266	0.007912	0.006558	0.005204	0.00789	0.007888	0.007886	0.007884	0.007882	0.00788	0.007884	0.007888	0.007892	0.007896	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079	0.0079
416479.9	3743568	0.01765	0.00881	0.007456	0.006102	0.004748	0.003394	0.00653	0.006528	0.006526	0.006524	0.006522	0.00652	0.006524	0.006528	0.006532	0.006536	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654	0.00654
416499.9	3743568	0.01505	0.00753	0.006176	0.004822	0.003468	0.002114	0.00557	0.005568	0.005566	0.005564	0.005562	0.00555	0.005554	0.005558	0.005562	0.005566	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558	0.00558
416519.9	3743568	0.01314	0.0066	0.005246	0.003892	0.002538	0.001184	0.00485	0.004848	0.004846	0.004844	0.004842	0.00484	0.004844	0.004848	0.004852	0.004856	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486
416539.9	3743568	0.01169	0.0059	0.004546	0.003192	0.001838	0.000484	0.00431	0.004308	0.004306	0.004304	0.004302	0.00429	0.004294	0.004298	0.004302	0.004306	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431	0.00431
416399.9	3743588	0.05036	0.02499	0.023636	0.022282	0.020928	0.019574	0.01866	0.018658	0.018656	0.018654	0.018652	0.01865	0.018654	0.018658	0.018662	0.018666	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867	0.01867
416419.9	3743588	0.03261	0.0162	0.014846	0.013492	0.012138	0.010784	0.01208	0.012078	0.012076	0.012074	0.012072	0.01207	0.012074	0.012078	0.012082	0.012086	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121	0.0121
416439.9	3743588	0.02494	0.01241	0.011056	0.009702	0.008348	0.006994	0.00924	0.009238	0.009236	0.009234	0.009232	0.00923	0.009234	0.009238	0.009242	0.009246	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926	0.00926
416459.9	3743588	0.02017	0.01005	0.008696	0.007342	0.005988	0.004634	0.00748	0.007478	0.007476	0.007474	0.007472	0.00746	0.007464	0.007468	0.007472	0.007476	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749	0.00749
416479.9	3743588	0.01687	0.00842	0.007066	0.005712	0.004358	0.003004	0.00625	0.006248	0.006246	0.006244	0.006242	0.00624	0.006244	0.006248	0.006252	0.006256	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626	0.00626
416499.9	3743588	0.01451	0.00726	0.005906	0.004552	0.003198	0.001844	0.00537	0.005368	0.005366	0.005364	0.005362	0.00536	0.005364	0.005368	0.005372	0.005376	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538	0.00538
416519.9	3743588	0.01272	0.00638	0.005026	0.003672	0.002318	0.000964	0.0047	0.004698	0.004696	0.004694	0.004692	0.00469	0.004694	0.004698	0.004702	0.004706	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471	0.00471
416539.9	3743588	0.01135	0.00572	0.004366	0.003012	0.001658	0.000304	0.00419	0.004188	0.004186	0.004184	0.004182	0.00417	0.004174	0.004178	0.004182	0.004186	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419	0.00419
416393.6	3743607	0.05171	0.02566	0.024306	0.022952	0.021598	0.020244	0.01916	0.019158	0.019156	0.019154	0.019152	0.01915	0.019154	0.019158	0.019162	0.019166	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918	0.01918
416419.9	3743608	0.02845	0.01414	0.012786	0.011432	0.010078	0.008724	0.01055	0.010548	0.010546	0.010544	0.010542	0.01054	0.010544	0.010548	0.010552	0.010556	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056	0.01056
416439.9	3743608	0.02256	0.01123	0.009876	0.008522	0.007168	0.005814	0.00836	0.008358	0.008356	0.008354	0.008352	0.00835	0.008354	0.008358	0.008362	0.008366	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838	0.00838
416459.9	3743608	0.01918	0.00956	0.008206	0.006852	0.005498	0.004144	0.00711	0.007108	0.007106	0.007104	0.007102	0.0071	0.007104	0.007108	0.007112	0.007116	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713	0.00713
416479.9	3743608	0.01613	0.00806	0.006706	0.005352	0.003998	0.002644	0.00598	0.005978	0.005976	0.005974	0.005972	0.00597	0.005974	0.005978	0.005982	0.005986	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
416499.9	3743608	0.01399	0.00701	0.005656	0.004302	0.002948	0.001594	0.00519	0.005188	0.005186	0.005184	0.005182	0.00517	0.005174	0.005178	0.005182	0.005186	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052	0.0052
416519.9	3743608	0.01234	0.0062	0.004846	0.003492	0.002138	0.000784	0.00457	0.004568	0.004566	0.004564	0.004562	0.00455	0.004554	0.004558	0.004562	0.004566	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458
416539.9	3743608	0.01106	0.00558	0.004226	0.002872	0.001518	0.000164	0.00408	0.004078	0.004076	0.004074	0.004072	0.00406	0.004064	0.004068	0.004072	0.004076	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408	0.00408
416387.8	3743628	0.05248	0.02604	0.024686	0.023332	0.021978	0.020624	0.01945	0.019448	0.019446	0.019444	0.019442	0.01944	0.019444	0.019448	0.019452	0.019456	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947	0.01947
416399.9	3743628	0.03936	0.01955	0.018196	0.016842	0.015488	0.014134	0.01459	0.014588	0.014586	0.014584	0.014582	0.01458	0.014584	0.014588	0.014592	0.014596	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461	0.01461
416419.9	3743628	0.02695	0.0134	0.012046	0.010692	0.009338	0.007984	0.01	0.009998	0.009996	0.009994	0.009992	0.00998	0.009984	0.009988	0.009992	0.009996	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001	0.01001
416439.9	3743628	0.02138	0.01065	0.009296	0.007942	0.006588	0.005234	0.00793	0.007928	0.007926	0.007924	0.007922	0.00792	0.007924	0.007928	0.007932	0.007936	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795	0.00795
416459.9	3743628	0.01812	0.00904	0.007686	0.006332	0.004978	0.003624	0.00673	0.006728	0.006726	0.006724	0.006722	0.00671	0.006714	0.006718	0.006722	0.006726	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674	0.00674
416479.9	3743628	0.01548	0.00774	0.006386	0.005032	0.003678	0.002324	0.00575	0.005748	0.005746	0.005744	0.005742	0.00573	0.005734	0.005738	0.005742	0.005746	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576	0.00576
416499.9	3743628	0.01349	0.00676	0.005406	0.004052	0.002698	0.001344	0.005	0.004998	0.004996	0.004994	0.004992	0.00498	0.004984	0.004988	0.004992	0.004996	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502
416519.9	3743628	0.01199	0.00603	0.004676	0.003322	0.001968	0.000614	0.00444	0.004438	0.004436	0.004434	0.004432	0.00442	0.004424	0.004428	0.004432	0.004436	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445	0.00445
416381.5	3743648	0.05431	0.02695	0.025596	0.024242	0.022888	0.021534	0.02013	0.020128	0.020126	0.020124	0.020122	0.02012	0.020124	0.020128	0.020132	0.020136	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015	0.02015
416399.9	3743648	0.03562	0.01769	0.016336	0.014982	0.013628	0.012274	0.01321	0.013208	0.013206	0.013204	0.013202	0.0132	0.013204	0.013208	0.013212	0.013216	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323	0.01323
416419.9	3743648	0.02613	0.013	0.011646	0.010292	0.008938	0.007584	0.0097	0.009698	0.009696	0.009694	0.009692	0.00968	0.009684	0.009688	0.009692	0.009696	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972	0.00972
416439.9	3743648	0.02059	0.01026	0.008906	0.007552	0.006198	0.004844	0.00765	0.007648	0.007646	0.007644	0.007642	0.00763	0.007634	0.007638	0.007642	0.007646	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767	0.00767
416459.9	3743648	0.01723	0.00861	0.007256	0.005902	0.004548	0.003194	0.0064	0.006398	0.006396	0.006394	0.006392	0.00639	0.006394	0.006398	0.006402	0.006406	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643	0.00643
416479.9	3743648	0.01488	0.00745	0.006096	0.004742	0.003388	0.002034	0.00553	0.005528	0.005526	0.005524	0.005522	0.00551	0.005514	0.005518	0.005522	0.005526	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555	0.00555
416499.9	3743648	0.01304	0.00655	0.005196	0.003842	0.002488	0.001134	0.00485	0.004848	0.004846	0.004844	0.004842	0.00482	0.004824	0.004828	0.004832	0.004836	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486	0.00486
416519.9	3743648	0.01165	0.00587	0.004516	0.003162	0.001808	0.000454	0.00432	0.004318	0.004316	0.004314	0.004312	0.0043	0.004304	0.004308	0.004312	0.004316	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434
416379.9	3743668	0.0491	0.02437	0.023016	0.021662	0.020308	0.018954	0.0182	0.018198	0.018196	0.018194	0.018192	0.01819	0.018194	0.018198	0.018202	0.018206	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822	0.01822
416399.9	3743668	0.03223	0.01602	0.014666	0.013312	0.011958	0.010604	0.01196	0.011958	0.011956	0.011954	0.011952	0.01194	0.011944	0.011948	0.011952	0.011956	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198	0.01198
416419.9	3743668	0.02443	0.01216	0.010806	0.009452	0.008098	0.006744	0.00907	0.009068	0.009066	0.009064	0.009062	0.00906	0.009064	0.009068	0.009072	0.009076	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091
416439.9	3743668	0.01973	0.00985	0.008496	0.007142	0.005788	0.004434	0.00734	0.007338	0.007336	0.007334	0.007332	0.00732	0.007324	0.007328	0.007332	0.007336	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736	0.00736
416459.9	3743668	0.01659	0.0083	0.006946	0.005592	0.004238	0.002884	0.00617	0.006168	0.006166	0.006164	0.006162	0.00615	0.006154	0.006158	0.006162	0.006166	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062
416479.9	3743668	0.01434	0.00719	0.005836	0.004482	0.003128	0.001774	0.00534	0.005338	0.005336	0.005334	0.005332	0.00531	0.005314	0.005318	0.005322	0.005326	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536	0.00536
416499.9	3743668	0.01262	0.00635	0.004996	0.003642	0.002288	0.000934	0.0047	0.004698	0.004696	0.004694	0.004692	0.00467	0.004674	0.004678	0.004682	0.004686	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472	0.00472
416519.9	3743668	0.01137	0.00575	0.004396	0.003042	0.001688	0.000334	0.00423	0.004228	0.004226	0.004224	0.004222	0.00419	0.004194	0.004198	0.004202	0.004206	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425
416371.8	3743687	0.05291	0.02625	0.024896	0.023542	0.022188	0.020834	0.01961	0.019608	0.019606	0.019604	0.019602	0.0196	0.019604	0.019608	0.019612	0.019616	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963	0.01963
416379.9	3743688	0.04332	0.0215	0.020146	0.018792	0.017438	0.016084	0.01606	0.016058	0.016056	0.016054	0.016052	0.01605	0.016054	0.016058	0.016062	0.016066	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608	0.01608
416399.9	3743688	0.03013	0.01498	0.013626	0.012272	0.010918	0.009564	0.01118	0.011178	0.011176	0.011174	0.011172	0.01117	0.011174	0.011178	0.011182	0.011186	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121	0.01121
416419.9	3743688	0.02323	0.01157	0.010216	0.008862	0.007508	0.006154	0.00863	0.008628	0.008626	0.008624	0.008622	0.00862	0.008624	0.008628	0.008632	0.008636	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866	0.00866
416439.9	3743688	0.0189	0.00944	0.008086	0.006732	0.005378	0.004024	0.00703	0.007028	0.007026	0.007024	0.007022	0.00701	0.007014	0.007018	0.007022	0.007026	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706	0.00706
416459.9	3743688	0.01593	0.00798	0.006626	0.005272	0.003918	0.002564	0.00594	0.005938	0.005936	0.005934	0.005932	0.00591	0.005914	0.005918	0.005922	0.005926	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597	0.00597
416479.9	3743688	0.01386	0.00696	0.005606	0.004252	0.002898	0.001544	0.00517	0.005168	0.005166	0.005164	0.005162	0.00514	0.005144	0.005148	0.005152	0.005156	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521
416499.9	3743688	0.01228	0.0062	0.004846	0.003492	0.002138	0.000784	0.00458	0.004578	0.004576	0.004574	0.004572	0.00455	0.004554	0.004558	0.004562	0.004566	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462	0.00462
416519.9	3743688	0.01112	0.00565	0.004296	0.002942	0.001588	0.000234	0.00415	0.004148	0.004146	0.004144	0.004142	0.00411	0.004114	0.004118	0.004122	0.004126	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417
416366.2	3743708	0.05269	0.02614	0.024786	0.023432	0.022078	0.020724	0.01953	0.019528	0.019526	0.019524	0.019522	0.01952	0.019524	0.019528	0.019532	0.019536	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955	0.01955
416379.9	3743708	0.03874	0.01924	0.017886	0.016532	0.015178	0.013824	0.01437	0.014368	0.014366	0.014364	0.014362	0.01436	0.014364	0.014368	0.014372	0.014376	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439	0.01439
416399.9	3743708	0.028	0.01392	0.012566	0.011212	0.009858	0.008504	0.01039	0.010388	0.010386	0.010384	0.010382	0.01038	0.010384	0.010388	0.010392	0.010396	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042	0.01042
416419.9	3743708	0.022	0.01097	0.009616	0.008262	0.006908	0.005554	0.00818	0.008178	0.008176	0.008174	0.008172	0.00816	0.008164	0.008168	0.008172	0.008176	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821	0.00821
416439.9	3743708	0.01812	0.00906	0.007706	0.006352	0.004998	0.003644	0.00675	0.006748	0.006746	0.006744	0.006742	0.00673	0.006734	0.006738	0.006742	0.006746	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678	0.00678
416459.9	3743708	0.01536	0.00771	0.006356	0.005002	0.003648	0.002294	0.00573	0.005728	0.005726	0.005724	0.005722	0.00571	0.005714	0.005718	0.005722	0.005726	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577	0.00577
416479.9	3743708	0.01345	0.00678	0.005426	0.004072	0.002718	0.001364	0.00503	0.005028	0.005026	0.005024	0.005022	0.005	0.005004	0.005008	0.005012	0.005016	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508	0.00508
416499.9	3743708	0.012	0.00609	0.004736	0.003382	0.002028	0.000674	0.0045	0.004498	0.004496	0.004494	0.004492	0.00446	0.004464	0.004468	0.004472	0.004476	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455	0.00455
416519.9	3743708	0.01094	0.0056	0.004246	0.002892	0.001538	0.000184	0.0041	0.004098	0.004096	0.004094	0.004092	0.00405	0.004054	0.004058	0.004062	0.004066	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415
416360.4	3743728	0.05371	0.02664	0.025286	0.023932	0.022578	0.021224	0.01991	0.019908	0.019906	0.019904	0.019902	0.0199	0.019904	0.019908	0.019912	0.019916	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992	0.01992

416379.9	3743728	0.03504	0.0174	0.016046	0.014692	0.013338	0.011984	0.013	0.012998	0.012996	0.012994	0.012992	0.01298	0.012984	0.012988	0.012992	0.012996	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302	0.01302
416399.9	3743728	0.02602	0.01295	0.011596	0.010242	0.008888	0.007534	0.00966	0.009658	0.009656	0.009654	0.009652	0.00965	0.009654	0.009658	0.009662	0.009666	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969	0.00969
416419.9	3743728	0.02078	0.01036	0.009006	0.007652	0.006298	0.004944	0.00773	0.007728	0.007726	0.007724	0.007722	0.00771	0.007714	0.007718	0.007722	0.007726	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776	0.00776
416439.9	3743728	0.01735	0.00868	0.007326	0.005972	0.004618	0.003264	0.00647	0.006468	0.006466	0.006464	0.006462	0.00644	0.006444	0.006448	0.006452	0.006456	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065
416459.9	3743728	0.01486	0.00747	0.006116	0.004762	0.003408	0.002054	0.00556	0.005558	0.005556	0.005554	0.005552	0.00553	0.005534	0.005538	0.005542	0.005546	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056	0.0056
416479.9	3743728	0.01307	0.00661	0.005256	0.003902	0.002548	0.001194	0.00491	0.004908	0.004906	0.004904	0.004902	0.00487	0.004874	0.004878	0.004882	0.004886	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496	0.00496
416499.9	3743728	0.01177	0.00601	0.004656	0.003302	0.001948	0.000594	0.00444	0.004438	0.004436	0.004434	0.004432	0.00439	0.004394	0.004398	0.004402	0.004406	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451	0.00451
416516.3	3743728	0.01098	0.00567	0.004316	0.002962	0.001608	0.000254	0.00416	0.004158	0.004156	0.004154	0.004152	0.0041	0.004104	0.004108	0.004112	0.004116	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424
416355.5	3743747	0.053	0.02629	0.024936	0.023582	0.022228	0.020874	0.01964	0.019638	0.019636	0.019634	0.019632	0.01963	0.019634	0.019638	0.019642	0.019646	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966	0.01966
416364.6	3743748	0.04225	0.02096	0.019606	0.018252	0.016898	0.015544	0.01566	0.015658	0.015656	0.015654	0.015652	0.01565	0.015654	0.015658	0.015662	0.015666	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568	0.01568
416379.9	3743748	0.03192	0.01586	0.014506	0.013152	0.011798	0.010444	0.01184	0.011838	0.011836	0.011834	0.011832	0.01183	0.011834	0.011838	0.011842	0.011846	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186	0.01186
416399.9	3743748	0.0243	0.01209	0.010736	0.009382	0.008028	0.006674	0.00903	0.009028	0.009026	0.009024	0.009022	0.00901	0.009014	0.009018	0.009022	0.009026	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905	0.00905
416419.9	3743748	0.01968	0.00982	0.008466	0.007112	0.005758	0.004404	0.00732	0.007318	0.007316	0.007314	0.007312	0.00731	0.007314	0.007318	0.007322	0.007326	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	0.00735
416439.9	3743748	0.01657	0.00829	0.006936	0.005582	0.004228	0.002874	0.00618	0.006178	0.006176	0.006174	0.006172	0.00616	0.006164	0.006168	0.006172	0.006176	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622	0.00622
416459.9	3743748	0.01434	0.00721	0.005856	0.004502	0.003148	0.001794	0.00537	0.005368	0.005366	0.005364	0.005362	0.00534	0.005344	0.005348	0.005352	0.005356	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542	0.00542
416479.9	3743748	0.01269	0.00643	0.005076	0.003722	0.002368	0.001014	0.00478	0.004778	0.004776	0.004774	0.004772	0.00474	0.004744	0.004748	0.004752	0.004756	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484	0.00484
416499.9	3743748	0.0115	0.0059	0.004546	0.003192	0.001838	0.000484	0.00437	0.004368	0.004366	0.004364	0.004362	0.00431	0.004314	0.004318	0.004322	0.004326	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446
416349.8	3743768	0.05284	0.0262	0.024846	0.023492	0.022138	0.020784	0.01958	0.019578	0.019576	0.019574	0.019572	0.01957	0.019574	0.019578	0.019582	0.019586	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196
416363.3	3743768	0.0384	0.01905	0.017696	0.016342	0.014988	0.013634	0.01424	0.014238	0.014236	0.014234	0.014232	0.01423	0.014234	0.014238	0.014242	0.014246	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425	0.01425
416379.9	3743768	0.02908	0.01445	0.013096	0.011742	0.010388	0.009034	0.01079	0.010788	0.010786	0.010784	0.010782	0.01078	0.010784	0.010788	0.010792	0.010796	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081	0.01081
416399.9	3743768	0.02267	0.01128	0.009926	0.008572	0.007218	0.005864	0.00842	0.008418	0.008416	0.008414	0.008412	0.00841	0.008414	0.008418	0.008422	0.008426	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844	0.00844
416419.9	3743768	0.01866	0.00931	0.007956	0.006602	0.005248	0.003894	0.00694	0.006938	0.006936	0.006934	0.006932	0.00693	0.006934	0.006938	0.006942	0.006946	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697	0.00697
416439.9	3743768	0.01584	0.00793	0.006576	0.005222	0.003868	0.002514	0.00591	0.005908	0.005906	0.005904	0.005902	0.00589	0.005894	0.005898	0.005902	0.005906	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595	0.00595
416459.9	3743768	0.01379	0.00693	0.005576	0.004222	0.002868	0.001514	0.00516	0.005158	0.005156	0.005154	0.005152	0.00513	0.005134	0.005138	0.005142	0.005146	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521	0.00521
416479.9	3743768	0.01226	0.00622	0.004866	0.003512	0.002158	0.000804	0.00462	0.004618	0.004616	0.004614	0.004612	0.00458	0.004584	0.004588	0.004592	0.004596	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469	0.00469
416499.9	3743768	0.01118	0.00576	0.004406	0.003052	0.001698	0.000344	0.00427	0.004268	0.004266	0.004264	0.004262	0.0042	0.004204	0.004208	0.004212	0.004216	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437	0.00437
416344.2	3743787	0.05307	0.02631	0.024956	0.023602	0.022248	0.020894	0.01966	0.019658	0.019656	0.019654	0.019652	0.01966	0.019664	0.019668	0.019672	0.019676	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968	0.01968
416359.9	3743788	0.03613	0.01793	0.016576	0.015222	0.013868	0.012514	0.01339	0.013388	0.013386	0.013384	0.013382	0.01339	0.013394	0.013398	0.013402	0.013406	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341	0.01341
416379.9	3743788	0.02602	0.01293	0.011576	0.010222	0.008868	0.007514	0.00965	0.009648	0.009646	0.009644	0.009642	0.00964	0.009644	0.009648	0.009652	0.009656	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967	0.00967
416399.9	3743788	0.02092	0.01041	0.009056	0.007702	0.006348	0.004994	0.00777	0.007768	0.007766	0.007764	0.007762	0.00776	0.007764	0.007768	0.007772	0.007776	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779	0.00779
416419.9	3743788	0.01762	0.00879	0.007436	0.006082	0.004728	0.003374	0.00655	0.006548	0.006546	0.006544	0.006542	0.00654	0.006544	0.006548	0.006552	0.006556	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658	0.00658
416439.9	3743788	0.01511	0.00756	0.006206	0.004852	0.003498	0.002144	0.00563	0.005628	0.005626	0.005624	0.005622	0.00561	0.005614	0.005618	0.005622	0.005626	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567	0.00567
416459.9	3743788	0.0132	0.00663	0.005276	0.003922	0.002568	0.001214	0.00494	0.004938	0.004936	0.004934	0.004932	0.00491	0.004914	0.004918	0.004922	0.004926	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498	0.00498
416479.9	3743788	0.01182	0.00599	0.004636	0.003282	0.001928	0.000574	0.00446	0.004458	0.004456	0.004454	0.004452	0.00442	0.004424	0.004428	0.004432	0.004436	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452	0.00452
416499.9	3743788	0.01077	0.00553	0.004176	0.002822	0.001468	0.000114	0.00411	0.004108	0.004106	0.004104	0.004102	0.00405	0.004054	0.004058	0.004062	0.004066	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
416340.7	3743806	0.0511	0.02534	0.023986	0.022632	0.021278	0.019924	0.01894	0.018938	0.018936	0.018934	0.018932	0.01893	0.018934	0.018938	0.018942	0.018946	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895	0.01895
416359.9	3743808	0.03282	0.01629	0.014936	0.013582	0.012228	0.010874	0.01217	0.012168	0.012166	0.012164	0.012162	0.01216	0.012164	0.012168	0.012172	0.012176	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218
416379.9	3743808	0.02433	0.01208	0.010726	0.009372	0.008018	0.006664	0.00903	0.009028	0.009026	0.009024	0.009022	0.00902	0.009024	0.009028	0.009032	0.009036	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904	0.00904
416399.9	3743808	0.01984	0.00987	0.008516	0.007162	0.005808	0.004454	0.00737	0.007368	0.007366	0.007364	0.007362	0.00735	0.007354	0.007358	0.007362	0.007366	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738	0.00738
416419.9	3743808	0.01671	0.00833	0.006976	0.005622	0.004268	0.002914	0.00622	0.006218	0.006216	0.006214	0.006212	0.0062	0.006204	0.006208	0.006212	0.006216	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624	0.00624
416439.9	3743808	0.01442	0.00721	0.005856	0.004502	0.003148	0.001794	0.00537	0.005368	0.005366	0.005364	0.005362	0.00536	0.005364	0.005368	0.005372	0.005376	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054
416459.9	3743808	0.01269	0.00637	0.005016	0.003662	0.002308	0.000954	0.00474	0.004738	0.004736	0.004734	0.004732	0.00472	0.004724	0.004728	0.004732	0.004736	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478	0.00478
416479.9	3743808	0.01137	0.00574	0.004386	0.003032	0.001678	0.000324	0.00427	0.004268	0.004266	0.004264	0.004262	0.00424	0.004244	0.004248	0.004252	0.004256	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433	0.00433
416495.3	3743808	0.01056	0.00538	0.004026	0.002672	0.001318	-3.6E-05	0.004	0.003998	0.003996	0.003994	0.003992	0.00396	0.003964	0.003968	0.003972	0.003976	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407
416333.5	3743827	0.05328	0.02642	0.025066	0.023712	0.022358	0.021004	0.01974	0.019738	0.019736	0.019734	0.019732	0.01974	0.019744	0.019748	0.019752	0.019756	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976	0.01976
416343.9	3743828	0.04123	0.02045	0.019096	0.017742	0.016388	0.015034	0.01528	0.015278	0.015276	0.015274	0.015272	0.01527	0.015274	0.015278	0.015282	0.015286	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529	0.01529
416359.9	3743828	0.03036	0.01507	0.013716	0.012362	0.011008	0.009654	0.01126	0.011258	0.011256	0.011254	0.011252	0.01125	0.011254	0.011258	0.011262	0.011266	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127	0.01127
416379.9	3743828	0.02304	0.01144	0.010086	0.008732	0.007378	0.006024	0.00855	0.008548	0.008546	0.008544	0.008542	0.00854	0.008544	0.008548	0.008552	0.008556	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856	0.00856
416399.9	3743828	0.01891	0.00941	0.008056	0.006702	0.005348	0.003994	0.00702	0.007018	0.007016	0.007014	0.007012	0.00701	0.007014	0.007018	0.007022	0.007026	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704	0.00704
416419.9	3743828	0.01598	0.00796	0.006606	0.005252	0.003898	0.002544	0.00594	0.005938	0.005936	0.005934	0.005932	0.00593	0.005934	0.005938	0.005942	0.005946	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596	0.00596
416439.9	3743828	0.01385	0.00692	0.005566	0.004212	0.002858	0.001504	0.00516	0.005158	0.005156	0.005154	0.005152	0.00514	0.005144	0.005148	0.005152	0.005156	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518	0.00518
416459.9	3743828	0.01222	0.00613	0.004776	0.003422	0.002068	0.000714	0.00457	0.004568	0.004566	0.004564	0.004562	0.00455	0.004554	0.004558	0.004562	0.004566	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
416479.9	3743828	0.01094	0.00551	0.004156	0.002802	0.001448	9.4E-05	0.0041	0.004098	0.004096	0.004094	0.004092	0.00408	0.004084	0.004088	0.004092	0.004096	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415	0.00415
416327.7	3743848	0.05345	0.0265	0.025146	0.023792	0.022438	0.021084	0.01981	0.019808	0.019806	0.019804	0.019802	0.0198	0.019804	0.019808	0.019812	0.019816	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982	0.01982
416339.9	3743848	0.04012	0.0199	0.018546	0.017192	0.015838	0.014484	0.01487	0.014868	0.014866	0.014864	0.014862	0.01486	0.014864	0.014868	0.014872	0.014876	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488	0.01488
416359.9	3743848	0.02847	0.01413	0.012776	0.011422	0.010068	0.008714	0.01056	0.010558	0.010556	0.010554	0.010552	0.01055	0.010554	0.010558	0.010562	0.010566	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057	0.01057
416379.9	3743848	0.02196	0.01091	0.009556	0.008202	0.006848	0.005494	0.00815	0.008148	0.008146	0.008144	0.008142	0.00814	0.008144	0.008148	0.008152	0.008156	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816	0.00816
416399.9	3743848	0.01805	0.00898	0.007626	0.006272	0.004918	0.003564	0.0067	0.006698	0.006696	0.006694	0.006692	0.00669	0.006694	0.006698	0.006702	0.006706	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672
416419.9	3743848	0.01539	0.00767	0.006316	0.004962	0.003608	0.002254	0.00572	0.005718	0.005716	0.005714	0.005712	0.00571	0.005714	0.005718	0.005722	0.005726	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574	0.00574
416439.9	3743848	0.01335	0.00667	0.005316	0.003962	0.002608	0.001254	0.00497	0.004968	0.004966	0.004964	0.004962	0.00496	0.004964	0.004968	0.004972	0.004976	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
416459.9	3743848	0.01178	0.0059	0.004546	0.003192	0.001838	0.000484	0.0044	0.004398	0.004396	0.004394	0.004392	0.00438	0.004384	0.004388	0.004392	0.004396	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443	0.00443
416479.9	3743848	0.01054	0.0053	0.003946	0.002592	0.001238	-0.00012	0.00395	0.003948	0.003946	0.003944	0.003942	0.00393	0.003934	0.003938	0.003942	0.003946	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399
416323	3743868	0.0527	0.02612	0.024766	0.023412	0.022058	0.020704	0.01953	0.019528	0.019526	0.019524	0.019522	0.01952	0.019524	0.019528	0.019532	0.019536	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954	0.01954
416339.9	3743868	0.03609	0.0179	0.016546	0.015192	0.013838	0.012484	0.01338	0.013378	0.013376	0.013374	0.013372	0.01337	0.013374	0.013378	0.013382	0.013386	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339	0.01339
416359.9	3743868	0.02643	0.01312	0.011766	0.010412	0.009058	0.007704	0.0098	0.009798	0.009796	0.009794	0.009792	0.0098	0.009804	0.009808	0.009812	0.009816	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982	0.00982
416379.9	3743868	0.02089	0.01038	0.009026	0.007672	0.006318	0.004964	0.00775	0.007748	0.007746	0.007744	0.007742	0.00774	0.007744	0.007748	0.007752	0.007756	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	0.00777
416399.9	3743868	0.01728	0.0086	0.007246	0.005892	0.004538	0.003184	0.00642	0.006418	0.006416	0.006414	0.006412	0.00641	0.006414	0.006418	0.006422	0.006426	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644	0.00644
416419.9	3743868	0.01472	0.00734	0.005986	0.004632	0.003278	0.001924	0.00548	0.005478	0.005476	0.005474	0.005472	0.00546	0.005464	0.005468	0.005472	0.005476	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055	0.0055
416439.9	3743868	0.01282	0.0064	0.005046	0.003692	0.002338	0.000984	0.00478	0.004778	0.004776	0.004774	0.004772	0.00476	0.004764	0.004768	0.004772	0.004776	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048
416459.9	3743868	0.01135	0.00568	0.004326	0.002972	0.001618	0.000264	0.00424	0.004238	0.004236	0.004234	0.004232	0.00422	0.004224	0.004228	0.004232	0.004236	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426
416479.9	3743868	0.01017	0.0051	0.003746	0.002392	0.001038	-0.00032	0.0038	0.003798	0.003796	0.003794	0.003792	0.00379	0.003794	0.003798	0.003802	0.003806	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	0.00384
416319.9	3743888	0.04966	0.02462	0.023266	0.021912	0.020558	0.019204	0.0184	0.018398	0.018396	0.018394	0.018392	0.01839	0.018394	0.018398	0.018402	0.018406	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841	0.01841
416339.9	3743888	0.03284	0.01629	0.014936	0.013582	0.012228	0.010874	0.01217	0.012168	0.012166	0.012164	0.012162	0.01216	0.012164	0.012168	0.012172	0.012176	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218	0.01218
416359.9	3743888	0.02462	0.01222	0.010866	0.009512	0.008158	0.006804	0.00913	0.009128	0.009126	0.009124	0.009122	0.00912	0.009124	0.009128	0.009132	0.009136	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914	0.00914
416379.9	3743888	0.01971	0.00979	0.008436	0.007082	0.005728	0.004374	0.00732	0.007318	0.007316	0.007314	0.007312	0.00731	0.007314	0.007318	0.007322	0.007326	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733	0.00733
416399.9	3743888	0.01642	0.00817	0.006816	0.005462	0.004108	0.002754	0.0061	0.006098	0.006096	0.006094	0.006092	0.00609	0.006094	0.006098	0.006102	0.006106	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611	0.00611
416419.9	3743888	0.01407	0.00701	0.005656	0.004302	0.002948	0.001594	0.00523	0.005228	0.005226	0.005224	0.005222	0.00522	0.005224	0.005228	0.005232	0.005236	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525	0.00525
416439.9	3743888	0.0123	0.00614	0.004786	0.003432	0.002078	0.000724	0.00458	0.004578	0.004576	0.004574	0.004572	0.00457	0.004574	0.004578	0.004582	0.004586	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046	0.0046
416459.9	3743888	0.01092	0.00546	0.004106	0.002752	0.001398	4.4E-05	0.00407	0.004068	0.004066	0.004064	0.004062	0.00406	0.004064	0.004068	0.004072	0.004076	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041
416474.9	3743887	0.01009	0.00505	0.003696	0.002342	0.000988	-0.00037	0.00377	0.003768	0.003766	0.003764	0.003762	0.00375	0.003754	0.003758	0.003762	0.003766	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379
416312.3	3743907	0.05298	0.02626	0.024906	0.023552	0.022198	0.020844	0.01963	0.019628	0.019626	0.019624	0.019622	0.01962	0.019624	0.019628	0.019632	0.019636	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964	0.01964
416324.4	3743908	0.03962	0.01964	0.018286	0.016932	0.015578	0.014224	0.01468	0.014678	0.014676	0.014674	0.014672	0.01467	0.014674	0.014678	0.014682	0.014686	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469	0.01469

416339.9	3743908	0.03013	0.01494	0.013586	0.012232	0.010878	0.009524	0.01117	0.011168	0.011166	0.011164	0.011162	0.01116	0.011164	0.011168	0.011172	0.011176	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118	0.01118
416359.9	3743908	0.02302	0.01142	0.010066	0.008712	0.007358	0.006004	0.00854	0.008538	0.008536	0.008534	0.008532	0.00853	0.008534	0.008538	0.008542	0.008546	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855	0.00855
416379.9	3743908	0.01863	0.00926	0.007906	0.006552	0.005198	0.003844	0.00691	0.006908	0.006906	0.006904	0.006902	0.00691	0.006914	0.006918	0.006922	0.006926	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693
416399.9	3743908	0.01565	0.00778	0.006426	0.005072	0.003718	0.002364	0.00581	0.005808	0.005806	0.005804	0.005802	0.0058	0.005804	0.005808	0.005812	0.005816	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582
416419.9	3743908	0.01347	0.00671	0.005356	0.004002	0.002648	0.001294	0.00501	0.005008	0.005006	0.005004	0.005002	0.005	0.005004	0.005008	0.005012	0.005016	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502
416439.9	3743908	0.01182	0.00589	0.004536	0.003182	0.001828	0.000474	0.0044	0.004398	0.004396	0.004394	0.004392	0.00439	0.004394	0.004398	0.004402	0.004406	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441
416459.9	3743908	0.01051	0.00525	0.003896	0.002542	0.001188	-0.00017	0.00392	0.003918	0.003916	0.003914	0.003912	0.0039	0.003904	0.003908	0.003912	0.003916	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394	0.00394
416306.6	3743928	0.05292	0.02623	0.024876	0.023522	0.022168	0.020814	0.01961	0.019608	0.019606	0.019604	0.019602	0.0196	0.019604	0.019608	0.019612	0.019616	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961	0.01961
416322.2	3743928	0.03708	0.01838	0.017026	0.015672	0.014318	0.012964	0.01374	0.013738	0.013736	0.013734	0.013732	0.01373	0.013734	0.013738	0.013742	0.013746	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375	0.01375
416339.9	3743928	0.02781	0.01379	0.012436	0.011082	0.009728	0.008374	0.01031	0.010308	0.010306	0.010304	0.010302	0.0103	0.010304	0.010308	0.010312	0.010316	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032	0.01032
416359.9	3743928	0.02162	0.01073	0.009376	0.008022	0.006668	0.005314	0.00802	0.008018	0.008016	0.008014	0.008012	0.00801	0.008014	0.008018	0.008022	0.008026	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803	0.00803
416379.9	3743928	0.01768	0.00878	0.007426	0.006072	0.004718	0.003364	0.00656	0.006558	0.006556	0.006554	0.006552	0.00655	0.006554	0.006558	0.006562	0.006566	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657	0.00657
416399.9	3743928	0.01494	0.00743	0.006076	0.004722	0.003368	0.002014	0.00555	0.005548	0.005546	0.005544	0.005542	0.00554	0.005544	0.005548	0.005552	0.005556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556
416419.9	3743928	0.01291	0.00642	0.005066	0.003712	0.002358	0.001004	0.0048	0.004798	0.004796	0.004794	0.004792	0.00479	0.004794	0.004798	0.004802	0.004806	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481	0.00481
416439.9	3743928	0.01135	0.00566	0.004306	0.002952	0.001598	0.000244	0.00422	0.004218	0.004216	0.004214	0.004212	0.00421	0.004214	0.004218	0.004222	0.004226	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424	0.00424
416459.9	3743928	0.01012	0.00505	0.003696	0.002342	0.000988	-0.00037	0.00377	0.003768	0.003766	0.003764	0.003762	0.00376	0.003764	0.003768	0.003772	0.003776	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379	0.00379
416301.9	3743948	0.05172	0.02563	0.024276	0.022922	0.021568	0.020214	0.01916	0.019158	0.019156	0.019154	0.019152	0.01915	0.019154	0.019158	0.019162	0.019166	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917	0.01917
416319.9	3743948	0.03488	0.01729	0.015936	0.014582	0.013228	0.011874	0.01292	0.012918	0.012916	0.012914	0.012912	0.01292	0.012924	0.012928	0.012932	0.012936	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293	0.01293
416339.9	3743948	0.02571	0.01275	0.011396	0.010042	0.008688	0.007334	0.00953	0.009528	0.009526	0.009524	0.009522	0.00953	0.009534	0.009538	0.009542	0.009546	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954	0.00954
416359.9	3743948	0.02032	0.01009	0.008736	0.007382	0.006028	0.004674	0.00754	0.007538	0.007536	0.007534	0.007532	0.00753	0.007534	0.007538	0.007542	0.007546	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755	0.00755
416379.9	3743948	0.01678	0.00833	0.006976	0.005622	0.004268	0.002914	0.00622	0.006218	0.006216	0.006214	0.006212	0.00622	0.006224	0.006228	0.006232	0.006236	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623	0.00623
416399.9	3743948	0.01426	0.00709	0.005736	0.004382	0.003028	0.001674	0.00529	0.005288	0.005286	0.005284	0.005282	0.00529	0.005294	0.005298	0.005302	0.005306	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531	0.00531
416419.9	3743948	0.01237	0.00615	0.004796	0.003442	0.002088	0.000734	0.0046	0.004598	0.004596	0.004594	0.004592	0.00459	0.004594	0.004598	0.004602	0.004606	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461	0.00461
416439.9	3743948	0.01091	0.00543	0.004076	0.002722	0.001368	1.4E-05	0.00406	0.004058	0.004056	0.004054	0.004052	0.00405	0.004054	0.004058	0.004062	0.004066	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407
416459.9	3743948	0.00975	0.00486	0.003506	0.002152	0.000798	-0.00056	0.00363	0.003628	0.003626	0.003624	0.003622	0.00362	0.003624	0.003628	0.003632	0.003636	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364	0.00364
416307.1	3743967	0.03977	0.01971	0.018356	0.017002	0.015648	0.014294	0.01473	0.014728	0.014726	0.014724	0.014722	0.01473	0.014734	0.014738	0.014742	0.014746	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474	0.01474
416319.9	3743968	0.03139	0.01556	0.014206	0.012852	0.011498	0.010144	0.01163	0.011628	0.011626	0.011624	0.011622	0.01163	0.011634	0.011638	0.011642	0.011646	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164	0.01164
416339.9	3743968	0.02372	0.01176	0.010406	0.009052	0.007698	0.006344	0.00879	0.008788	0.008786	0.008784	0.008782	0.00879	0.008794	0.008798	0.008802	0.008806	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088
416359.9	3743968	0.01908	0.00947	0.008116	0.006762	0.005408	0.004054	0.00708	0.007078	0.007076	0.007074	0.007072	0.00707	0.007074	0.007078	0.007082	0.007086	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708	0.00708
416379.9	3743968	0.01591	0.0079	0.006546	0.005192	0.003838	0.002484	0.0059	0.005898	0.005896	0.005894	0.005892	0.0059	0.005904	0.005908	0.005912	0.005916	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591	0.00591
416399.9	3743968	0.0136	0.00676	0.005406	0.004052	0.002698	0.001344	0.00505	0.005048	0.005046	0.005044	0.005042	0.00504	0.005044	0.005048	0.005052	0.005056	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506	0.00506
416419.9	3743968	0.01185	0.0059	0.004546	0.003192	0.001838	0.000484	0.0044	0.004398	0.004396	0.004394	0.004392	0.0044	0.004404	0.004408	0.004412	0.004416	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441
416439.9	3743968	0.01049	0.00522	0.003866	0.002512	0.001158	-0.0002	0.0039	0.003898	0.003896	0.003894	0.003892	0.00389	0.003894	0.003898	0.003902	0.003906	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391	0.00391
416319.9	3743988	0.02798	0.01387	0.012516	0.011162	0.009808	0.008454	0.01037	0.010368	0.010366	0.010364	0.010362	0.01036	0.010364	0.010368	0.010372	0.010376	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037	0.01037
416339.9	3743988	0.0217	0.01076	0.009406	0.008052	0.006698	0.005344	0.00804	0.008038	0.008036	0.008034	0.008032	0.00804	0.008044	0.008048	0.008052	0.008056	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805
416359.9	3743988	0.01781	0.00884	0.007486	0.006132	0.004778	0.003424	0.0066	0.006598	0.006596	0.006594	0.006592	0.0066	0.006604	0.006608	0.006612	0.006616	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661	0.00661
416379.9	3743988	0.01504	0.00747	0.006116	0.004762	0.003408	0.002054	0.00558	0.005578	0.005576	0.005574	0.005572	0.00557	0.005574	0.005578	0.005582	0.005586	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559	0.00559
416399.9	3743988	0.01296	0.00644	0.005086	0.003732	0.002378	0.001024	0.00481	0.004808	0.004806	0.004804	0.004802	0.0048	0.004804	0.004808	0.004812	0.004816	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482	0.00482
416419.9	3743988	0.01134	0.00564	0.004286	0.002932	0.001578	0.000224	0.00421	0.004208	0.004206	0.004204	0.004202	0.00421	0.004214	0.004218	0.004222	0.004226	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422	0.00422
416439.9	3743988	0.01007	0.00501	0.003656	0.002302	0.000948	-0.00041	0.00374	0.003738	0.003736	0.003734	0.003732	0.00373	0.003734	0.003738	0.003742	0.003746	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375
416379.9	3744008	0.01422	0.00706	0.005706	0.004352	0.002998	0.001644	0.00528	0.005278	0.005276	0.005274	0.005272	0.00527	0.005274	0.005278	0.005282	0.005286	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528
416399.9	3744008	0.01234	0.00613	0.004776	0.003422	0.002068	0.000714	0.00458	0.004578	0.004576	0.004574	0.004572	0.00458	0.004584	0.004588	0.004592	0.004596	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459	0.00459
416419.9	3744008	0.01084	0.00539	0.004036	0.002682	0.001328	-2.6E-05	0.00403	0.004028	0.004026	0.004024	0.004022	0.00402	0.004024	0.004028	0.004032	0.004036	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404	0.00404
416439.9	3744008	0.00965	0.0048	0.003446	0.002092	0.000738	-0.00062	0.00359	0.003588	0.003586	0.003584	0.003582	0.00358	0.003584	0.003588	0.003592	0.003596	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036
416436.8	3744021	0.00953	0.00474	0.003386	0.002032	0.000678	-0.00068	0.00354	0.003538	0.003536	0.003534	0.003532	0.00354	0.003544	0.003548	0.003552	0.003556	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355	0.00355
416510.3	3743748	0.01104	0.00574	0.004386	0.003032	0.001678	0.000324	0.00423	0.004228	0.004226	0.004224	0.004222	0.00415	0.004154	0.004158	0.004162	0.004166	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434	0.00434
416297.6	3743967	0.05022	0.02488	0.023526	0.022172	0.020818	0.019464	0.0186	0.018598	0.018596	0.018594	0.018592	0.0186	0.018604	0.018608	0.018612	0.018616	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861	0.01861
416305.1	3743986	0.03622	0.01795	0.016596	0.015242	0.013888	0.012534	0.01342	0.013418	0.013416	0.013414	0.013412	0.01342	0.013424	0.013428	0.013432	0.013436	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343	0.01343
416291.3	3743986	0.05097	0.02526	0.023906	0.022552	0.021198	0.019844	0.01888	0.018878	0.018876	0.018874	0.018872	0.01888	0.018884	0.018888	0.018892	0.018896	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889	0.01889
416358.9	3744003	0.01706	0.00847	0.007116	0.005762	0.004408	0.003054	0.00633	0.006328	0.006326	0.006324	0.006322	0.00632	0.006324	0.006328	0.006332	0.006336	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633	0.00633
416339	3743999	0.02085	0.01034	0.008986	0.007632	0.006278	0.004924	0.00773	0.007728	0.007726	0.007724	0.007722	0.00772	0.007724	0.007728	0.007732	0.007736	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773	0.00773
416319	3743996	0.02695	0.01336	0.012006	0.010652	0.009298	0.007944	0.00999	0.009988	0.009986	0.009984	0.009982	0.00998	0.009984	0.009988	0.009992	0.009996	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	0.00999

Estimation of Annual Average TAC Concentrations
from Permitted Stationary Source Facility ID#2825

CAS#	Pollutant	Average Emission Rate (g/sec)
7664417	ammonia	4.643E-03
7782505	Chlorine	5.758E-08
71432	Benzene	9.314E-06
50000	Formadehyde	1.977E-05
110543	hexane	5.528E-06
67561	Methanol	1.008E-07
91203	Naphthalene	4.319E-07
1151	PAH, total	1.440E-07
106990	1,3-butadiene	2.015E-07
75070	Acetaldehyde	6.574E-04
100414	Ethylbenzene	8.235E-06
100425	Styrene	1.440E-08
108883	Toluene	3.183E-05
1330207	Xylenes	2.285E-05
1151	PAH, total	1.440E-07
107028	Acrolein	2.850E-06
1634044	MTBE	2.879E-07

X	Y	Annual Average TAC Concentration from AERMOD (unit emissions)	Annual Average Concentration (with Actual Emission - ug/m^3)															
(m)	(m)	(ug/m3)	Ammonia (ug/m^3)	Acrolein (ug/m3)	Benzene (ug/m^3)	Chlorine (ug/m^3)	Formaldehyde (ug/m^3)	Hexane (ug/m^3)	Methanol (ug/m^3)	Naphthalene (ug/m^3)	PAH,Total (ug/m^3)	1,3-Butadiene (ug/m^3)	Acetaldehyde (ug/m^3)	Ethylbenzene (ug/m^3)	Styrene (ug/m^3)	Toluene (ug/m^3)	Xylenes (ug/m^3)	MTBE (ug/m^3)
416414	3743528.49	1.395	6.48E-03	3.98E-06	1.30E-05	8.03E-08	2.76E-05	7.71E-06	1.41E-07	6.02E-07	2.01E-07	2.81E-07	9.17E-04	1.15E-05	2.01E-08	4.44E-05	3.19E-05	4.02E-07
416426.4	3743528.99	1.384	6.43E-03	3.94E-06	1.29E-05	7.97E-08	2.74E-05	7.65E-06	1.39E-07	5.98E-07	1.99E-07	2.79E-07	9.10E-04	1.14E-05	1.99E-08	4.40E-05	3.16E-05	3.98E-07
416409.3	3743546.45	1.470	6.83E-03	4.19E-06	1.37E-05	8.47E-08	2.91E-05	8.13E-06	1.48E-07	6.35E-07	2.12E-07	2.96E-07	9.66E-04	1.21E-05	2.12E-08	4.68E-05	3.36E-05	4.23E-07
416419.9	3743547.54	1.457	6.76E-03	4.15E-06	1.36E-05	8.39E-08	2.88E-05	8.05E-06	1.47E-07	6.29E-07	2.10E-07	2.94E-07	9.58E-04	1.20E-05	2.10E-08	4.64E-05	3.33E-05	4.19E-07
416439.9	3743547.54	1.408	6.54E-03	4.01E-06	1.31E-05	8.11E-08	2.78E-05	7.78E-06	1.42E-07	6.08E-07	2.03E-07	2.84E-07	9.25E-04	1.16E-05	2.03E-08	4.48E-05	3.22E-05	4.05E-07
416459.9	3743547.54	1.345	6.25E-03	3.83E-06	1.25E-05	7.75E-08	2.66E-05	7.44E-06	1.36E-07	5.81E-07	1.94E-07	2.71E-07	8.84E-04	1.11E-05	1.94E-08	4.28E-05	3.07E-05	3.87E-07
416479.9	3743547.54	1.285	5.97E-03	3.66E-06	1.20E-05	7.40E-08	2.54E-05	7.10E-06	1.30E-07	5.55E-07	1.85E-07	2.59E-07	8.45E-04	1.06E-05	1.85E-08	4.09E-05	2.94E-05	3.70E-07
416499.9	3743547.54	1.236	5.74E-03	3.52E-06	1.15E-05	7.12E-08	2.44E-05	6.84E-06	1.25E-07	5.34E-07	1.78E-07	2.49E-07	8.13E-04	1.02E-05	1.78E-08	3.94E-05	2.82E-05	3.56E-07
416403.3	3743566.45	1.541	7.16E-03	4.39E-06	1.44E-05	8.88E-08	3.05E-05	8.52E-06	1.55E-07	6.66E-07	2.22E-07	3.11E-07	1.01E-03	1.27E-05	2.22E-08	4.91E-05	3.52E-05	4.44E-07
416419.9	3743567.54	1.533	7.12E-03	4.37E-06	1.43E-05	8.83E-08	3.03E-05	8.48E-06	1.55E-07	6.62E-07	2.21E-07	3.09E-07	1.01E-03	1.26E-05	2.21E-08	4.88E-05	3.50E-05	4.41E-07
416439.9	3743567.54	1.484	6.89E-03	4.23E-06	1.38E-05	8.55E-08	2.93E-05	8.21E-06	1.50E-07	6.41E-07	2.14E-07	2.99E-07	9.76E-04	1.22E-05	2.14E-08	4.73E-05	3.39E-05	4.27E-07
416459.9	3743567.54	1.405	6.52E-03	4.00E-06	1.31E-05	8.09E-08	2.78E-05	7.77E-06	1.42E-07	6.07E-07	2.02E-07	2.83E-07	9.24E-04	1.16E-05	2.02E-08	4.47E-05	3.21E-05	4.05E-07
416479.9	3743567.54	1.342	6.23E-03	3.82E-06	1.25E-05	7.73E-08	2.65E-05	7.42E-06	1.35E-07	5.79E-07	1.93E-07	2.70E-07	8.82E-04	1.10E-05	1.93E-08	4.27E-05	3.07E-05	3.86E-07
416499.9	3743567.54	1.295	6.01E-03	3.69E-06	1.21E-05	7.46E-08	2.56E-05	7.16E-06	1.30E-07	5.59E-07	1.86E-07	2.61E-07	8.51E-04	1.07E-05	1.86E-08	4.12E-05	2.96E-05	3.73E-07
416519.9	3743567.54	1.261	5.86E-03	3.60E-06	1.17E-05	7.26E-08	2.49E-05	6.97E-06	1.27E-07	5.45E-07	1.82E-07	2.54E-07	8.29E-04	1.04E-05	1.82E-08	4.01E-05	2.88E-05	3.63E-07
416539.9	3743567.54	1.240	5.76E-03	3.53E-06	1.15E-05	7.14E-08	2.45E-05	6.85E-06	1.25E-07	5.36E-07	1.79E-07	2.50E-07	8.15E-04	1.02E-05	1.79E-08	3.95E-05	2.83E-05	3.57E-07
416399.9	3743587.54	1.609	7.47E-03	4.59E-06	1.50E-05	9.27E-08	3.18E-05	8.90E-06	1.62E-07	6.95E-07	2.32E-07	3.24E-07	1.06E-03	1.33E-05	2.32E-08	5.12E-05	3.68E-05	4.63E-07
416419.9	3743587.54	1.613	7.49E-03	4.60E-06	1.50E-05	9.29E-08	3.19E-05	8.92E-06	1.63E-07	6.97E-07	2.32E-07	3.25E-07	1.06E-03	1.33E-05	2.32E-08	5.13E-05	3.69E-05	4.64E-07
416439.9	3743587.54	1.572	7.30E-03	4.48E-06	1.46E-05	9.05E-08	3.11E-05	8.69E-06	1.58E-07	6.79E-07	2.26E-07	3.17E-07	1.03E-03	1.29E-05	2.26E-08	5.00E-05	3.59E-05	4.53E-07
416459.9	3743587.54	1.478	6.86E-03	4.21E-06	1.38E-05	8.51E-08	2.92E-05	8.17E-06	1.49E-07	6.38E-07	2.13E-07	2.98E-07	9.71E-04	1.22E-05	2.13E-08	4.70E-05	3.38E-05	4.25E-07
416479.9	3743587.54	1.405	6.52E-03	4.01E-06	1.31E-05	8.09E-08	2.78E-05	7.77E-06	1.42E-07	6.07E-07	2.02E-07	2.83E-07	9.24E-04	1.16E-05	2.02E-08	4.47E-05	3.21E-05	4.05E-07
416499.9	3743587.54	1.354	6.29E-03	3.86E-06	1.26E-05	7.80E-08	2.68E-05	7.49E-06	1.36E-07	5.85E-07	1.95E-07	2.73E-07	8.90E-04	1.12E-05	1.95E-08	4.31E-05	3.09E-05	3.90E-07
416519.9	3743587.54	1.321	6.14E-03	3.77E-06	1.23E-05	7.61E-08	2.61E-05	7.31E-06	1.33E-07	5.71E-07	1.90E-07	2.66E-07	8.69E-04	1.09E-05	1.90E-08	4.21E-05	3.02E-05	3.80E-07
416539.9	3743587.54	1.298	6.02E-03	3.70E-06	1.21E-05	7.47E-08	2.56E-05	7.17E-06	1.31E-07	5.60E-07	1.87E-07	2.62E-07	8.53E-04	1.07E-05	1.87E-08	4.13E-05	2.96E-05	3.74E-07
416393.6	3743607.36	1.673	7.77E-03	4.77E-06	1.56E-05	9.63E-08	3.31E-05	9.25E-06	1.69E-07	7.23E-07	2.41E-07	3.37E-07	1.10E-03	1.38E-05	2.41E-08	5.33E-05	3.82E-05	4.82E-07
416419.9	3743607.54	1.590	7.38E-03	4.53E-06	1.48E-05	9.16E-08	3.14E-05	8.79E-06	1.60E-07	6.87E-07	2.29E-07	3.21E-07	1.05E-03	1.31E-05	2.29E-08	5.06E-05	3.63E-05	4.58E-07
416439.9	3743607.54	1.552	7.20E-03	4.42E-06	1.45E-05	8.94E-08	3.07E-05	8.58E-06	1.56E-07	6.70E-07	2.23E-07	3.13E-07	1.02E-03	1.28E-05	2.23E-08	4.94E-05	3.55E-05	4.47E-07
416459.9	3743607.54	1.569	7.28E-03	4.47E-06	1.46E-05	9.03E-08	3.10E-05	8.67E-06	1.58E-07	6.77E-07	2.26E-07	3.16E-07	1.03E-03	1.29E-05	2.26E-08	4.99E-05	3.58E-05	4.52E-07
416479.9	3743607.54	1.477	6.86E-03	4.21E-06	1.38E-05	8.51E-08	2.92E-05	8.17E-06	1.49E-07	6.38E-07	2.13E-07	2.98E-07	9.71E-04	1.22E-05	2.13E-08	4.70E-05	3.38E-05	4.25E-07
416499.9	3743607.54	1.413	6.56E-03	4.03E-06	1.32E-05	8.13E-08	2.79E-05	7.81E-06	1.42E-07	6.10E-07	2.03E-07	2.85E-07	9.29E-04	1.16E-05	2.03E-08	4.50E-05	3.23E-05	4.07E-07
416519.9	3743607.54	1.368	6.35E-03	3.90E-06	1.27E-05	7.88E-08	2.70E-05	7.56E-06	1.38E-07	5.91E-07	1.97E-07	2.76E-07	8.99E-04	1.13E-05	1.97E-08	4.35E-05	3.13E-05	3.94E-07
416539.9	3743607.54	1.354	6.29E-03	3.86E-06	1.26E-05	7.80E-08	2.68E-05	7.48E-06	1.36E-07	5.85E-07	1.95E-07	2.73E-07	8.90E-04	1.11E-05	1.95E-08	4.31E-05	3.09E-05	3.90E-07
416387.8	3743627.9	1.708	7.93E-03	4.87E-06	1.59E-05	9.84E-08	3.38E-05	9.44E-06	1.72E-07	7.38E-07	2.46E-07	3.44E-07	1.12E-03	1.41E-05	2.46E-08	5.44E-05	3.90E-05	4.92E-07
416399.9	3743627.54	1.732	8.04E-03	4.94E-06	1.61E-05	9.97E-08	3.42E-05	9.57E-06	1.75E-07	7.48E-07	2.49E-07	3.49E-07	1.14E-03	1.43E-05	2.49E-08	5.51E-05	3.96E-05	4.99E-07
416419.9	3743627.54	1.733	8.05E-03	4.94E-06	1.61E-05	9.98E-08	3.43E-05	9.58E-06	1.75E-07	7.48E-07	2.49E-07	3.49E-07	1.14E-03	1.43E-05	2.49E-08	5.52E-05	3.96E-05	4.99E-07
416439.9	3743627.54	1.653	7.68E-03	4.71E-06	1.54E-05	9.52E-08	3.27E-05	9.14E-06	1.67E-07	7.14E-07	2.38E-07	3.33E-07	1.09E-03	1.36E-05	2.38E-08	5.26E-05	3.78E-05	4.76E-07
416459.9	3743627.54	1.650	7.66E-03	4.70E-06	1.54E-05	9.50E-08	3.26E-05	9.12E-06	1.66E-07	7.13E-07	2.38E-07	3.33E-07	1.08E-03	1.36E-05	2.38E-08	5.25E-05	3.77E-05	4.75E-07
416479.9	3743627.54	1.561	7.25E-03	4.45E-06	1.45E-05	8.99E-08	3.09E-05	8.63E-06	1.57E-07	6.74E-07	2.25E-07	3.15E-07	1.03E-03	1.29E-05	2.25E-08	4.97E-05	3.57E-05	4.49E-07
416499.9	3743627.54	1.490	6.92E-03	4.25E-06	1.39E-05	8.58E-08	2.94E-05	8.24E-06	1.50E-07	6.43E-07	2.14E-07	3.00E-07	9.79E-04	1.23E-05	2.14E-08	4.74E-05	3.40E-05	4.29E-07

416519.9	3743627.54	1.432	6.65E-03	4.08E-06	1.33E-05	8.25E-08	2.83E-05	7.92E-06	1.44E-07	6.19E-07	2.06E-07	2.89E-07	9.42E-04	1.18E-05	2.06E-08	4.56E-05	3.27E-05	4.12E-07
416381.5	3743647.54	1.758	8.16E-03	5.01E-06	1.64E-05	1.01E-07	3.48E-05	9.72E-06	1.77E-07	7.59E-07	2.53E-07	3.54E-07	1.16E-03	1.45E-05	2.53E-08	5.60E-05	4.02E-05	5.06E-07
416399.9	3743647.54	1.788	8.30E-03	5.10E-06	1.67E-05	1.03E-07	3.53E-05	9.88E-06	1.80E-07	7.72E-07	2.57E-07	3.60E-07	1.18E-03	1.47E-05	2.57E-08	5.69E-05	4.08E-05	5.15E-07
416419.9	3743647.54	1.783	8.28E-03	5.08E-06	1.66E-05	1.03E-07	3.52E-05	9.86E-06	1.80E-07	7.70E-07	2.57E-07	3.59E-07	1.17E-03	1.47E-05	2.57E-08	5.68E-05	4.07E-05	5.13E-07
416439.9	3743647.54	1.753	8.14E-03	5.00E-06	1.63E-05	1.01E-07	3.47E-05	9.69E-06	1.77E-07	7.57E-07	2.52E-07	3.53E-07	1.15E-03	1.44E-05	2.52E-08	5.58E-05	4.01E-05	5.05E-07
416459.9	3743647.54	1.712	7.95E-03	4.88E-06	1.59E-05	9.86E-08	3.38E-05	9.46E-06	1.72E-07	7.39E-07	2.46E-07	3.45E-07	1.13E-03	1.41E-05	2.46E-08	5.45E-05	3.91E-05	4.93E-07
416479.9	3743647.54	1.644	7.63E-03	4.69E-06	1.53E-05	9.47E-08	3.25E-05	9.09E-06	1.66E-07	7.10E-07	2.37E-07	3.31E-07	1.08E-03	1.35E-05	2.37E-08	5.23E-05	3.76E-05	4.73E-07
416499.9	3743647.54	1.570	7.29E-03	4.48E-06	1.46E-05	9.04E-08	3.10E-05	8.68E-06	1.58E-07	6.78E-07	2.26E-07	3.16E-07	1.03E-03	1.29E-05	2.26E-08	5.00E-05	3.59E-05	4.52E-07
416519.9	3743647.54	1.497	6.95E-03	4.27E-06	1.39E-05	8.62E-08	2.96E-05	8.27E-06	1.51E-07	6.46E-07	2.15E-07	3.02E-07	9.84E-04	1.23E-05	2.15E-08	4.76E-05	3.42E-05	4.31E-07
416379.9	3743667.54	1.843	8.56E-03	5.25E-06	1.72E-05	1.06E-07	3.64E-05	1.02E-05	1.86E-07	7.96E-07	2.65E-07	3.71E-07	1.21E-03	1.52E-05	2.65E-08	5.87E-05	4.21E-05	5.31E-07
416399.9	3743667.54	1.881	8.74E-03	5.36E-06	1.75E-05	1.08E-07	3.72E-05	1.04E-05	1.90E-07	8.13E-07	2.71E-07	3.79E-07	1.24E-03	1.55E-05	2.71E-08	5.99E-05	4.30E-05	5.42E-07
416419.9	3743667.54	1.840	8.54E-03	5.25E-06	1.71E-05	1.06E-07	3.64E-05	1.02E-05	1.85E-07	7.95E-07	2.65E-07	3.71E-07	1.21E-03	1.52E-05	2.65E-08	5.86E-05	4.20E-05	5.30E-07
416439.9	3743667.54	1.798	8.35E-03	5.13E-06	1.68E-05	1.04E-07	3.55E-05	9.94E-06	1.81E-07	7.77E-07	2.59E-07	3.62E-07	1.18E-03	1.48E-05	2.59E-08	5.72E-05	4.11E-05	5.18E-07
416459.9	3743667.54	1.758	8.16E-03	5.01E-06	1.64E-05	1.01E-07	3.47E-05	9.72E-06	1.77E-07	7.59E-07	2.53E-07	3.54E-07	1.16E-03	1.45E-05	2.53E-08	5.59E-05	4.02E-05	5.06E-07
416479.9	3743667.54	1.715	7.96E-03	4.89E-06	1.60E-05	9.88E-08	3.39E-05	9.48E-06	1.73E-07	7.41E-07	2.47E-07	3.46E-07	1.13E-03	1.41E-05	2.47E-08	5.46E-05	3.92E-05	4.94E-07
416499.9	3743667.54	1.646	7.64E-03	4.69E-06	1.53E-05	9.48E-08	3.25E-05	9.10E-06	1.66E-07	7.11E-07	2.37E-07	3.32E-07	1.08E-03	1.36E-05	2.37E-08	5.24E-05	3.76E-05	4.74E-07
416519.9	3743667.54	1.555	7.22E-03	4.43E-06	1.45E-05	8.95E-08	3.07E-05	8.59E-06	1.57E-07	6.71E-07	2.24E-07	3.13E-07	1.02E-03	1.28E-05	2.24E-08	4.95E-05	3.55E-05	4.48E-07
416371.8	3743687.44	1.898	8.81E-03	5.41E-06	1.77E-05	1.09E-07	3.75E-05	1.05E-05	1.91E-07	8.20E-07	2.73E-07	3.82E-07	1.25E-03	1.56E-05	2.73E-08	6.04E-05	4.34E-05	5.46E-07
416379.9	3743687.54	1.893	8.79E-03	5.39E-06	1.76E-05	1.09E-07	3.74E-05	1.05E-05	1.91E-07	8.17E-07	2.72E-07	3.81E-07	1.24E-03	1.56E-05	2.72E-08	6.02E-05	4.32E-05	5.45E-07
416399.9	3743687.54	1.876	8.71E-03	5.35E-06	1.75E-05	1.08E-07	3.71E-05	1.04E-05	1.89E-07	8.10E-07	2.70E-07	3.78E-07	1.23E-03	1.54E-05	2.70E-08	5.97E-05	4.28E-05	5.40E-07
416419.9	3743687.54	1.833	8.51E-03	5.22E-06	1.71E-05	1.06E-07	3.62E-05	1.01E-05	1.85E-07	7.92E-07	2.64E-07	3.69E-07	1.20E-03	1.51E-05	2.64E-08	5.83E-05	4.19E-05	5.28E-07
416439.9	3743687.54	1.807	8.39E-03	5.15E-06	1.68E-05	1.04E-07	3.57E-05	9.99E-06	1.82E-07	7.80E-07	2.60E-07	3.64E-07	1.19E-03	1.49E-05	2.60E-08	5.75E-05	4.13E-05	5.20E-07
416459.9	3743687.54	1.799	8.35E-03	5.13E-06	1.68E-05	1.04E-07	3.56E-05	9.95E-06	1.81E-07	7.77E-07	2.59E-07	3.63E-07	1.18E-03	1.48E-05	2.59E-08	5.73E-05	4.11E-05	5.18E-07
416479.9	3743687.54	1.748	8.12E-03	4.98E-06	1.63E-05	1.01E-07	3.46E-05	9.66E-06	1.76E-07	7.55E-07	2.52E-07	3.52E-07	1.15E-03	1.44E-05	2.52E-08	5.56E-05	3.99E-05	5.03E-07
416499.9	3743687.54	1.687	7.83E-03	4.81E-06	1.57E-05	9.71E-08	3.33E-05	9.32E-06	1.70E-07	7.29E-07	2.43E-07	3.40E-07	1.11E-03	1.39E-05	2.43E-08	5.37E-05	3.85E-05	4.86E-07
416519.9	3743687.54	1.618	7.51E-03	4.61E-06	1.51E-05	9.32E-08	3.20E-05	8.95E-06	1.63E-07	6.99E-07	2.33E-07	3.26E-07	1.06E-03	1.33E-05	2.33E-08	5.15E-05	3.70E-05	4.66E-07
416366.2	3743708.44	1.949	9.05E-03	5.56E-06	1.82E-05	1.12E-07	3.85E-05	1.08E-05	1.96E-07	8.42E-07	2.81E-07	3.93E-07	1.28E-03	1.61E-05	2.81E-08	6.21E-05	4.45E-05	5.61E-07
416379.9	3743707.54	1.921	8.92E-03	5.48E-06	1.79E-05	1.11E-07	3.80E-05	1.06E-05	1.94E-07	8.30E-07	2.77E-07	3.87E-07	1.26E-03	1.58E-05	2.77E-08	6.12E-05	4.39E-05	5.53E-07
416399.9	3743707.54	1.865	8.66E-03	5.32E-06	1.74E-05	1.07E-07	3.69E-05	1.03E-05	1.88E-07	8.06E-07	2.69E-07	3.76E-07	1.23E-03	1.54E-05	2.69E-08	5.94E-05	4.26E-05	5.37E-07
416419.9	3743707.54	1.839	8.54E-03	5.24E-06	1.71E-05	1.06E-07	3.63E-05	1.02E-05	1.85E-07	7.94E-07	2.65E-07	3.71E-07	1.21E-03	1.51E-05	2.65E-08	5.85E-05	4.20E-05	5.29E-07
416439.9	3743707.54	1.823	8.47E-03	5.20E-06	1.70E-05	1.05E-07	3.60E-05	1.01E-05	1.84E-07	7.87E-07	2.62E-07	3.67E-07	1.20E-03	1.50E-05	2.62E-08	5.80E-05	4.17E-05	5.25E-07
416459.9	3743707.54	1.833	8.51E-03	5.22E-06	1.71E-05	1.06E-07	3.62E-05	1.01E-05	1.85E-07	7.92E-07	2.64E-07	3.69E-07	1.20E-03	1.51E-05	2.64E-08	5.83E-05	4.19E-05	5.28E-07
416479.9	3743707.54	1.780	8.26E-03	5.07E-06	1.66E-05	1.02E-07	3.52E-05	9.84E-06	1.79E-07	7.69E-07	2.56E-07	3.59E-07	1.17E-03	1.47E-05	2.56E-08	5.67E-05	4.07E-05	5.12E-07
416499.9	3743707.54	1.726	8.01E-03	4.92E-06	1.61E-05	9.94E-08	3.41E-05	9.54E-06	1.74E-07	7.45E-07	2.48E-07	3.48E-07	1.13E-03	1.42E-05	2.48E-08	5.49E-05	3.94E-05	4.97E-07
416519.9	3743707.54	1.671	7.76E-03	4.76E-06	1.56E-05	9.62E-08	3.30E-05	9.24E-06	1.68E-07	7.22E-07	2.41E-07	3.37E-07	1.10E-03	1.38E-05	2.41E-08	5.32E-05	3.82E-05	4.81E-07
416360.4	3743727.54	1.974	9.17E-03	5.63E-06	1.84E-05	1.14E-07	3.90E-05	1.09E-05	1.99E-07	8.53E-07	2.84E-07	3.98E-07	1.30E-03	1.63E-05	2.84E-08	6.28E-05	4.51E-05	5.68E-07
416379.9	3743727.54	1.942	9.02E-03	5.54E-06	1.81E-05	1.12E-07	3.84E-05	1.07E-05	1.96E-07	8.39E-07	2.80E-07	3.91E-07	1.28E-03	1.60E-05	2.80E-08	6.18E-05	4.44E-05	5.59E-07
416399.9	3743727.54	1.888	8.77E-03	5.38E-06	1.76E-05	1.09E-07	3.73E-05	1.04E-05	1.90E-07	8.15E-07	2.72E-07	3.81E-07	1.24E-03	1.55E-05	2.72E-08	6.01E-05	4.31E-05	5.44E-07
416419.9	3743727.54	1.864	8.65E-03	5.31E-06	1.74E-05	1.07E-07	3.68E-05	1.03E-05	1.88E-07	8.05E-07	2.68E-07	3.76E-07	1.23E-03	1.53E-05	2.68E-08	5.93E-05	4.26E-05	5.37E-07
416439.9	3743727.54	1.857	8.62E-03	5.29E-06	1.73E-05	1.07E-07	3.67E-05	1.03E-05	1.87E-07	8.02E-07	2.67E-07	3.74E-07	1.22E-03	1.53E-05	2.67E-08	5.91E-05	4.24E-05	5.35E-07
416459.9	3743727.54	1.853	8.61E-03	5.28E-06	1.73E-05	1.07E-07	3.66E-05	1.02E-05	1.87E-07	8.00E-07	2.67E-07	3.74E-07	1.22E-03	1.53E-05	2.67E-08	5.90E-05	4.23E-05	5.34E-07
416479.9	3743727.54	1.821	8.46E-03	5.19E-06	1.70E-05	1.05E-07	3.60E-05	1.01E-05	1.84E-07	7.87E-07	2.62E-07	3.67E-07	1.20E-03	1.50E-05	2.62E-08	5.80E-05	4.16E-05	5.24E-07
416499.9	3743727.54	1.770	8.22E-03	5.05E-06	1.65E-05	1.02E-07	3.50E-05	9.79E-06	1.78E-07	7.65E-07	2.55E-07	3.57E-07	1.16E-03	1.46E-05	2.55E-08	5.64E-05	4.04E-05	5.10E-07
416516.3	3743727.54	1.716	7.97E-03	4.89E-06	1.60E-05	9.88E-08	3.39E-05	9.49E-06	1.73E-07	7.41E-07	2.47E-07	3.46E-07	1.13E-03	1.41E-05	2.47E-08	5.46E-05	3.92E-05	4.94E-07
416355.5	3743747.36	2.047	9.50E-03	5.84E-06	1.91E-05	1.18E-07	4.05E-05	1.13E-05	2.06E-07	8.84E-07	2.95E-07	4.13E-07	1.35E-03	1.69E-05	2.95E-08	6.52E-05	4.68E-05	5.89E-07
416364.6	3743747.9	2.048	9.51E-03	5.84E-06	1.91E-05	1.18E-07	4.05E-05	1.13E-05	2.06E-07	8.85E-07	2.95E-07	4.13E-07	1.35E-03	1.69E-05	2.95E-08	6.52E-05	4.68E-05	5.90E-07
416379.9	3743747.54	2.017	9.36E-03	5.75E-06	1.88E-05	1.16E-07	3.99E-05	1.11E-05	2.03E-07	8.71E-07	2.90E-07	4.06E-07	1.33E-03	1.66E-05	2.90E-08	6.42E-05	4.61E-05	5.81E-07
416399.9	3743747.54	1.961	9.10E-03	5.59E-06	1.83E-05	1.13E-07	3.88E-05	1.08E-05	1.98E-07	8.47E-07	2.82E-07	3.95E-07	1.29E-03	1.61E-05	2.82E-08	6.24E-05	4.48E-05	5.65E-07
416419.9	3743747.54	1.922	8.93E-03	5.48E-06	1.79E-05	1.11E-07	3.80E-05	1.06E-05	1.94E-07	8.30E-07	2.77E-07	3.87E-07	1.26E-03	1.58E-05	2.77E-08	6.12E-05	4.39E-05	5.54E-07
416439.9	3743747.54	1.902	8.83E-03	5.42E-06	1.77E-05	1.10E-07	3.76E-05	1.05E-05	1.92E-07	8.22E-07	2.74E-07	3.83E-07	1.25E-03	1.57E-05	2.74E-08	6.05E-05	4.35E-05	5.48E-07
416459.9	3743747.54	1.899	8.82E-03	5.41E-06	1.77E-05	1.09E-07	3.75E-05	1.05E-05	1.91E-07	8.20E-07	2.73E-07	3.83E-07	1.25E-03	1.56E-05	2.73E-08	6.04E-05	4.34E-05	5.47E-07
416479.9	3743747.54	1.875	8.71E-03	5.34E-06	1.75E-05	1.08E-07	3.71E-05	1.04E-05	1.89E-07	8.10E-07	2.70E-07	3.78E-07	1.23E-03	1.54E-05	2.70E-08	5.97E-05	4.28E-05	5.40E-07
416499.9	3743747.54	1.834	8.52E-03	5.23E-06	1.71E-05	1.06E-07	3.63E-05	1.01E-05	1.85E-07	7.92E-07	2.64E-07	3.70E-07	1.21E-03	1.51E-05	2.64E-08	5.84E-05	4.19E-05	5.28E-07
416349.8	3743767.9	2.133	9.90E-03	6.08E-06	1.99E-05	1.23E-07	4.22E-05	1.18E-05	2.15E-07	9.21E-07	3.07E-07	4.30E-07	1.40E-03	1.76E-05	3.07E-08	6.79E-05	4.87E-05	6.14E-07
416363.3	3743767.9	2.146	9.97E-03	6.12E-06	2.00E-05	1.24E-07	4.24E-05	1.19E-05	2.16E-07	9.27E-07	3.09E-07	4.33E-07	1.41E-03	1.77E-05	3.09E-08	6.83E-05	4.90E-05	6.18E-07
416379.9	3743767.54	2.119	9.84E-03	6.04E-06	1.97E-05	1.22E-07	4.19E-05	1.17E-05	2.14E-07	9.15E-07	3.05E-07	4.27E-07	1.39E-03	1.74E-05	3.05E-08	6.74E-05	4.84E-05	6.10E-07
416399.9	3743767.54	2.061	9.57E-03	5.87E-06	1.92E-05	1.19E-07	4.07E-05	1.14E-05	2.08E-07	8.90E-07	2.97E-07	4.15E-07	1.35E-03	1.70E-05	2.97E-08	6.56E-05	4.71E-05	5.93E-07
416419.9	3743767.54	2.003	9.30E-03	5.71E-06	1.87E-05	1.15E-07	3.96E-05	1.11E-05	2.02E-07	8.65E-07	2.88E-07	4.04E-07	1.32E-03	1.65E-05	2.88E-08	6.38E-05	4.58E-05	5.77E-07
416439.9	3743767.54	1.971	9.15E-03	5.62E-06	1.84E-05	1.13E-07	3.90E-05	1.09E-05	1.99E-07	8.51E-07	2.84E-07	3.97E-07	1.30E-03	1.62E-05	2.84E-08	6.27E-05	4.50E-05	5.67E-07
416459.9	3743767.54	1.960	9.10E-03	5.59E-06	1.83E-05	1.13E-07	3.87E-05	1.08E-05	1.98E-07	8.47E-07	2.82E-07	3.95E-07	1.29E-03	1.61E-05	2.82E-08	6.24E-05	4.48E-05	5.64E-07
416479.9	3743767.54	1.941	9.01E-03	5.53E-06	1.81E-05	1.12E-07	3.84E-05	1.07E-05	1.96E-07	8.38E-07	2.79E-07	3.91E-07	1.28E-03	1.60E-05	2.79E-08	6.18E-05	4.43E-05	5.59E-07
416499.9	3743767.54	1.906	8.85E-03	5.43E-06	1.78E-05	1.10E-07	3.77E-05	1.05E-05	1.92E-07	8.23E-07	2.74E-07	3.84E-07	1.25E-03	1.57E-05	2.74E-08	6.07E-05	4.36E-05	5.49E-07
416344.2	3743787.36	2.174	1.01E-02	6.20E-06	2.03E-05	1.25E-07	4.30E-05	1.20E-05	2.19E-07	9.39E-07	3.13E-07	4.38E-07	1.43E-03	1.79E-05	3.13E-08	6.92E-05	4.97E-05	6.26E-07
416359.9	3743787.54	2.251	1.05E-02	6.42E-06	2.10E-05	1.30E-07	4.45E-05	1.24E-05	2.27E-07	9.72E-07	3.24E-07	4.54E-07	1.48E-03	1.85E-05	3.24E-08	7.17E-05	5.14E-05	6.48E-07
416379.9	3743787.54	2.265	1.05E-02	6.46E-06	2.11E-05	1.30E-07	4.48E-05	1.25E-05	2.28E-07	9.78E-07	3.26E-07	4.56E-07	1.49E-03	1.86E-05	3.26E-08	7.21E-05	5.17E-05	6.52E-07
416399.9	3743787.54	2.199	1.02E-02	6.27E-06	2.05E-05	1.27E-07	4.35E-05	1.22E-05	2.22E-07	9.50E-07	3.17E-07	4.43E-07	1.45E-03	1.81E-05	3.17E-08	7.00E-05	5.02E-05	6.33E-07
416419.9	3743787.54	2.115	9.82E-03	6.03E-06	1.97E-05	1.22E-07	4.18E-05	1.17E-05	2.13E-07	9.13E-07	3.04E-07	4.26E-07	1.39E-03	1.74E-05	3.04E-08	6.73E-05	4.83E-05	6.09E-07
416439.9	3743787.54	2.073	9.63E-03	5.91E-06	1.93E-05	1.19E-07	4.10E-05	1.15E-05	2.09E-07	8.95E-07	2.98E-07	4.18E-07	1.36E-03	1.71E-05	2.98E-08	6.60E-05	4.74E-05	5.97E-07

416459.9	3743787.54	2.065	9.59E-03	5.89E-06	1.92E-05	1.19E-07	4.08E-05	1.14E-05	2.08E-07	8.92E-07	2.97E-07	4.16E-07	1.36E-03	1.70E-05	2.97E-08	6.57E-05	4.72E-05	5.95E-07
416479.9	3743787.54	2.014	9.35E-03	5.74E-06	1.88E-05	1.16E-07	3.98E-05	1.11E-05	2.03E-07	8.70E-07	2.90E-07	4.06E-07	1.32E-03	1.66E-05	2.90E-08	6.41E-05	4.60E-05	5.80E-07
416499.9	3743787.54	1.986	9.22E-03	5.66E-06	1.85E-05	1.14E-07	3.93E-05	1.10E-05	2.00E-07	8.58E-07	2.86E-07	4.00E-07	1.31E-03	1.64E-05	2.86E-08	6.32E-05	4.54E-05	5.72E-07
416340.7	3743805.95	2.111	9.80E-03	6.02E-06	1.97E-05	1.22E-07	4.17E-05	1.17E-05	2.13E-07	9.12E-07	3.04E-07	4.26E-07	1.39E-03	1.74E-05	3.04E-08	6.72E-05	4.82E-05	6.08E-07
416359.9	3743807.54	2.246	1.04E-02	6.40E-06	2.09E-05	1.29E-07	4.44E-05	1.24E-05	2.26E-07	9.70E-07	3.23E-07	4.53E-07	1.48E-03	1.85E-05	3.23E-08	7.15E-05	5.13E-05	6.47E-07
416379.9	3743807.54	2.313	1.07E-02	6.59E-06	2.15E-05	1.33E-07	4.57E-05	1.28E-05	2.33E-07	9.99E-07	3.33E-07	4.66E-07	1.52E-03	1.90E-05	3.33E-08	7.36E-05	5.28E-05	6.66E-07
416399.9	3743807.54	2.256	1.05E-02	6.43E-06	2.10E-05	1.30E-07	4.46E-05	1.25E-05	2.27E-07	9.74E-07	3.25E-07	4.55E-07	1.48E-03	1.86E-05	3.25E-08	7.18E-05	5.15E-05	6.50E-07
416419.9	3743807.54	2.212	1.03E-02	6.31E-06	2.06E-05	1.27E-07	4.37E-05	1.22E-05	2.23E-07	9.55E-07	3.18E-07	4.46E-07	1.45E-03	1.82E-05	3.18E-08	7.04E-05	5.05E-05	6.37E-07
416439.9	3743807.54	2.182	1.01E-02	6.22E-06	2.03E-05	1.26E-07	4.31E-05	1.21E-05	2.20E-07	9.42E-07	3.14E-07	4.40E-07	1.43E-03	1.80E-05	3.14E-08	6.94E-05	4.98E-05	6.28E-07
416459.9	3743807.54	2.160	1.00E-02	6.16E-06	2.01E-05	1.24E-07	4.27E-05	1.19E-05	2.18E-07	9.33E-07	3.11E-07	4.35E-07	1.42E-03	1.78E-05	3.11E-08	6.88E-05	4.93E-05	6.22E-07
416479.9	3743807.54	2.120	9.84E-03	6.04E-06	1.97E-05	1.22E-07	4.19E-05	1.17E-05	2.14E-07	9.15E-07	3.05E-07	4.27E-07	1.39E-03	1.75E-05	3.05E-08	6.75E-05	4.84E-05	6.10E-07
416495.3	3743807.54	2.100	9.75E-03	5.99E-06	1.96E-05	1.21E-07	4.15E-05	1.16E-05	2.12E-07	9.07E-07	3.02E-07	4.23E-07	1.38E-03	1.73E-05	3.02E-08	6.68E-05	4.80E-05	6.05E-07
416333.5	3743827.31	2.064	9.58E-03	5.88E-06	1.92E-05	1.19E-07	4.08E-05	1.14E-05	2.08E-07	8.91E-07	2.97E-07	4.16E-07	1.36E-03	1.70E-05	2.97E-08	6.57E-05	4.71E-05	5.94E-07
416343.9	3743827.9	2.105	9.77E-03	6.00E-06	1.96E-05	1.21E-07	4.16E-05	1.16E-05	2.12E-07	9.09E-07	3.03E-07	4.24E-07	1.38E-03	1.73E-05	3.03E-08	6.70E-05	4.81E-05	6.06E-07
416359.9	3743827.54	2.204	1.02E-02	6.28E-06	2.05E-05	1.27E-07	4.36E-05	1.22E-05	2.22E-07	9.52E-07	3.17E-07	4.44E-07	1.45E-03	1.81E-05	3.17E-08	7.01E-05	5.03E-05	6.34E-07
416379.9	3743827.54	2.305	1.07E-02	6.57E-06	2.15E-05	1.33E-07	4.56E-05	1.27E-05	2.32E-07	9.95E-07	3.32E-07	4.65E-07	1.52E-03	1.90E-05	3.32E-08	7.34E-05	5.27E-05	6.64E-07
416399.9	3743827.54	2.309	1.07E-02	6.58E-06	2.15E-05	1.33E-07	4.56E-05	1.28E-05	2.33E-07	9.97E-07	3.32E-07	4.65E-07	1.52E-03	1.90E-05	3.32E-08	7.35E-05	5.28E-05	6.65E-07
416419.9	3743827.54	2.294	1.07E-02	6.54E-06	2.14E-05	1.32E-07	4.53E-05	1.27E-05	2.31E-07	9.91E-07	3.30E-07	4.62E-07	1.51E-03	1.89E-05	3.30E-08	7.30E-05	5.24E-05	6.60E-07
416439.9	3743827.54	2.275	1.06E-02	6.48E-06	2.12E-05	1.31E-07	4.50E-05	1.26E-05	2.29E-07	9.83E-07	3.28E-07	4.59E-07	1.50E-03	1.87E-05	3.28E-08	7.24E-05	5.20E-05	6.55E-07
416459.9	3743827.54	2.253	1.05E-02	6.42E-06	2.10E-05	1.30E-07	4.45E-05	1.25E-05	2.27E-07	9.73E-07	3.24E-07	4.54E-07	1.48E-03	1.86E-05	3.24E-08	7.17E-05	5.15E-05	6.49E-07
416479.9	3743827.54	2.234	1.04E-02	6.37E-06	2.08E-05	1.29E-07	4.41E-05	1.23E-05	2.25E-07	9.65E-07	3.22E-07	4.50E-07	1.47E-03	1.84E-05	3.22E-08	7.11E-05	5.10E-05	6.43E-07
416327.7	3743848.44	2.075	9.63E-03	5.91E-06	1.93E-05	1.19E-07	4.10E-05	1.15E-05	2.09E-07	8.96E-07	2.99E-07	4.18E-07	1.36E-03	1.71E-05	2.99E-08	6.60E-05	4.74E-05	5.97E-07
416339.9	3743847.54	2.103	9.76E-03	5.99E-06	1.96E-05	1.21E-07	4.16E-05	1.16E-05	2.12E-07	9.08E-07	3.03E-07	4.24E-07	1.38E-03	1.73E-05	3.03E-08	6.69E-05	4.80E-05	6.05E-07
416359.9	3743847.54	2.185	1.01E-02	6.23E-06	2.04E-05	1.26E-07	4.32E-05	1.21E-05	2.20E-07	9.44E-07	3.15E-07	4.40E-07	1.44E-03	1.80E-05	3.15E-08	6.96E-05	4.99E-05	6.29E-07
416379.9	3743847.54	2.276	1.06E-02	6.49E-06	2.12E-05	1.31E-07	4.50E-05	1.26E-05	2.29E-07	9.83E-07	3.28E-07	4.59E-07	1.50E-03	1.87E-05	3.28E-08	7.25E-05	5.20E-05	6.55E-07
416399.9	3743847.54	2.355	1.09E-02	6.71E-06	2.19E-05	1.36E-07	4.65E-05	1.30E-05	2.37E-07	1.02E-06	3.39E-07	4.75E-07	1.55E-03	1.94E-05	3.39E-08	7.50E-05	5.38E-05	6.78E-07
416419.9	3743847.54	2.349	1.09E-02	6.69E-06	2.19E-05	1.35E-07	4.64E-05	1.30E-05	2.37E-07	1.01E-06	3.38E-07	4.73E-07	1.54E-03	1.93E-05	3.38E-08	7.48E-05	5.37E-05	6.76E-07
416439.9	3743847.54	2.337	1.08E-02	6.66E-06	2.18E-05	1.35E-07	4.62E-05	1.29E-05	2.35E-07	1.01E-06	3.36E-07	4.71E-07	1.54E-03	1.92E-05	3.36E-08	7.44E-05	5.34E-05	6.73E-07
416459.9	3743847.54	2.339	1.09E-02	6.67E-06	2.18E-05	1.35E-07	4.62E-05	1.29E-05	2.36E-07	1.01E-06	3.37E-07	4.71E-07	1.54E-03	1.93E-05	3.37E-08	7.45E-05	5.34E-05	6.73E-07
416479.9	3743847.54	2.344	1.09E-02	6.68E-06	2.18E-05	1.35E-07	4.63E-05	1.30E-05	2.36E-07	1.01E-06	3.37E-07	4.72E-07	1.54E-03	1.93E-05	3.37E-08	7.46E-05	5.35E-05	6.75E-07
416323	3743867.72	2.133	9.90E-03	6.08E-06	1.99E-05	1.23E-07	4.22E-05	1.18E-05	2.15E-07	9.21E-07	3.07E-07	4.30E-07	1.40E-03	1.76E-05	3.07E-08	6.79E-05	4.87E-05	6.14E-07
416339.9	3743867.54	2.158	1.00E-02	6.15E-06	2.01E-05	1.24E-07	4.27E-05	1.19E-05	2.17E-07	9.32E-07	3.11E-07	4.35E-07	1.42E-03	1.78E-05	3.11E-08	6.87E-05	4.93E-05	6.21E-07
416359.9	3743867.54	2.211	1.03E-02	6.30E-06	2.06E-05	1.27E-07	4.37E-05	1.22E-05	2.23E-07	9.55E-07	3.18E-07	4.46E-07	1.45E-03	1.82E-05	3.18E-08	7.04E-05	5.05E-05	6.37E-07
416379.9	3743867.54	2.275	1.06E-02	6.48E-06	2.12E-05	1.31E-07	4.50E-05	1.26E-05	2.29E-07	9.83E-07	3.28E-07	4.59E-07	1.50E-03	1.87E-05	3.28E-08	7.24E-05	5.20E-05	6.55E-07
416399.9	3743867.54	2.338	1.09E-02	6.67E-06	2.18E-05	1.35E-07	4.62E-05	1.29E-05	2.36E-07	1.01E-06	3.37E-07	4.71E-07	1.54E-03	1.93E-05	3.37E-08	7.44E-05	5.34E-05	6.73E-07
416419.9	3743867.54	2.405	1.12E-02	6.86E-06	2.24E-05	1.38E-07	4.75E-05	1.33E-05	2.42E-07	1.04E-06	3.46E-07	4.85E-07	1.58E-03	1.98E-05	3.46E-08	7.66E-05	5.49E-05	6.92E-07
416439.9	3743867.54	2.419	1.12E-02	6.90E-06	2.25E-05	1.39E-07	4.78E-05	1.34E-05	2.44E-07	1.04E-06	3.48E-07	4.88E-07	1.59E-03	1.99E-05	3.48E-08	7.70E-05	5.53E-05	6.97E-07
416459.9	3743867.54	2.441	1.13E-02	6.96E-06	2.27E-05	1.41E-07	4.83E-05	1.35E-05	2.46E-07	1.05E-06	3.51E-07	4.92E-07	1.61E-03	2.01E-05	3.51E-08	7.77E-05	5.58E-05	7.03E-07
416479.9	3743867.54	2.467	1.15E-02	7.03E-06	2.30E-05	1.42E-07	4.88E-05	1.36E-05	2.49E-07	1.07E-06	3.55E-07	4.97E-07	1.62E-03	2.03E-05	3.55E-08	7.85E-05	5.64E-05	7.10E-07
416319.9	3743887.54	2.253	1.05E-02	6.42E-06	2.10E-05	1.30E-07	4.45E-05	1.25E-05	2.27E-07	9.73E-07	3.24E-07	4.54E-07	1.48E-03	1.86E-05	3.24E-08	7.17E-05	5.15E-05	6.49E-07
416339.9	3743887.54	2.260	1.05E-02	6.44E-06	2.11E-05	1.30E-07	4.47E-05	1.25E-05	2.28E-07	9.76E-07	3.25E-07	4.56E-07	1.49E-03	1.86E-05	3.25E-08	7.19E-05	5.16E-05	6.51E-07
416359.9	3743887.54	2.287	1.06E-02	6.52E-06	2.13E-05	1.32E-07	4.52E-05	1.26E-05	2.31E-07	9.88E-07	3.29E-07	4.61E-07	1.50E-03	1.88E-05	3.29E-08	7.28E-05	5.23E-05	6.59E-07
416379.9	3743887.54	2.333	1.08E-02	6.65E-06	2.17E-05	1.34E-07	4.61E-05	1.29E-05	2.35E-07	1.01E-06	3.36E-07	4.70E-07	1.53E-03	1.92E-05	3.36E-08	7.43E-05	5.33E-05	6.72E-07
416399.9	3743887.54	2.390	1.11E-02	6.81E-06	2.23E-05	1.38E-07	4.72E-05	1.32E-05	2.41E-07	1.03E-06	3.44E-07	4.82E-07	1.57E-03	1.97E-05	3.44E-08	7.61E-05	5.46E-05	6.88E-07
416419.9	3743887.54	2.481	1.15E-02	7.07E-06	2.31E-05	1.43E-07	4.90E-05	1.37E-05	2.50E-07	1.07E-06	3.57E-07	5.00E-07	1.63E-03	2.04E-05	3.57E-08	7.90E-05	5.67E-05	7.14E-07
416439.9	3743887.54	2.535	1.18E-02	7.23E-06	2.36E-05	1.46E-07	5.01E-05	1.40E-05	2.55E-07	1.09E-06	3.65E-07	5.11E-07	1.67E-03	2.09E-05	3.65E-08	8.07E-05	5.79E-05	7.30E-07
416459.9	3743887.54	2.560	1.19E-02	7.30E-06	2.38E-05	1.47E-07	5.06E-05	1.42E-05	2.58E-07	1.11E-06	3.69E-07	5.16E-07	1.68E-03	2.11E-05	3.69E-08	8.15E-05	5.85E-05	7.37E-07
416474.9	3743886.63	2.580	1.20E-02	7.35E-06	2.40E-05	1.49E-07	5.10E-05	1.43E-05	2.60E-07	1.11E-06	3.71E-07	5.20E-07	1.70E-03	2.12E-05	3.71E-08	8.21E-05	5.89E-05	7.43E-07
416312.3	3743906.99	2.457	1.14E-02	7.00E-06	2.29E-05	1.41E-07	4.86E-05	1.36E-05	2.48E-07	1.06E-06	3.54E-07	4.95E-07	1.62E-03	2.02E-05	3.54E-08	7.82E-05	5.61E-05	7.07E-07
416324.4	3743907.54	2.433	1.13E-02	6.93E-06	2.27E-05	1.40E-07	4.81E-05	1.34E-05	2.45E-07	1.05E-06	3.50E-07	4.90E-07	1.60E-03	2.00E-05	3.50E-08	7.74E-05	5.56E-05	7.00E-07
416339.9	3743907.54	2.416	1.12E-02	6.89E-06	2.25E-05	1.39E-07	4.78E-05	1.34E-05	2.43E-07	1.04E-06	3.48E-07	4.87E-07	1.59E-03	1.99E-05	3.48E-08	7.69E-05	5.52E-05	6.96E-07
416359.9	3743907.54	2.415	1.12E-02	6.88E-06	2.25E-05	1.39E-07	4.77E-05	1.34E-05	2.43E-07	1.04E-06	3.48E-07	4.87E-07	1.59E-03	1.99E-05	3.48E-08	7.69E-05	5.52E-05	6.95E-07
416379.9	3743907.54	2.449	1.14E-02	6.98E-06	2.28E-05	1.41E-07	4.84E-05	1.35E-05	2.47E-07	1.06E-06	3.53E-07	4.94E-07	1.61E-03	2.02E-05	3.53E-08	7.80E-05	5.60E-05	7.05E-07
416399.9	3743907.54	2.512	1.17E-02	7.16E-06	2.34E-05	1.45E-07	4.97E-05	1.39E-05	2.53E-07	1.09E-06	3.62E-07	5.06E-07	1.65E-03	2.07E-05	3.62E-08	8.00E-05	5.74E-05	7.23E-07
416419.9	3743907.54	2.600	1.21E-02	7.41E-06	2.42E-05	1.50E-07	5.14E-05	1.44E-05	2.62E-07	1.12E-06	3.74E-07	5.24E-07	1.71E-03	2.14E-05	3.74E-08	8.28E-05	5.94E-05	7.49E-07
416439.9	3743907.54	2.682	1.25E-02	7.64E-06	2.50E-05	1.54E-07	5.30E-05	1.48E-05	2.70E-07	1.16E-06	3.86E-07	5.41E-07	1.76E-03	2.21E-05	3.86E-08	8.54E-05	6.13E-05	7.72E-07
416459.9	3743907.54	2.693	1.25E-02	7.68E-06	2.51E-05	1.55E-07	5.32E-05	1.49E-05	2.71E-07	1.16E-06	3.88E-07	5.43E-07	1.77E-03	2.22E-05	3.88E-08	8.57E-05	6.15E-05	7.75E-07
416306.6	3743928.08	2.774	1.29E-02	7.91E-06	2.58E-05	1.60E-07	5.48E-05	1.53E-05	2.80E-07	1.20E-06	3.99E-07	5.59E-07	1.82E-03	2.28E-05	3.99E-08	8.83E-05	6.34E-05	7.99E-07
416322.2	3743927.9	2.693	1.25E-02	7.68E-06	2.51E-05	1.55E-07	5.32E-05	1.49E-05	2.71E-07	1.16E-06	3.88E-07	5.43E-07	1.77E-03	2.22E-05	3.88E-08	8.57E-05	6.15E-05	7.75E-07
416339.9	3743927.54	2.639	1.23E-02	7.52E-06	2.46E-05	1.52E-07	5.22E-05	1.46E-05	2.66E-07	1.14E-06	3.80E-07	5.32E-07	1.73E-03	2.17E-05	3.80E-08	8.40E-05	6.03E-05	7.60E-07
416359.9	3743927.54	2.612	1.21E-02	7.45E-06	2.43E-05	1.50E-07	5.16E-05	1.44E-05	2.63E-07	1.13E-06	3.76E-07	5.26E-07	1.72E-03	2.15E-05	3.76E-08	8.31E-05	5.97E-05	7.52E-07
416379.9	3743927.54	2.630	1.22E-02	7.50E-06	2.45E-05	1.51E-07	5.20E-05	1.45E-05	2.65E-07	1.14E-06	3.79E-07	5.30E-07	1.73E-03	2.17E-05	3.79E-08	8.37E-05	6.01E-05	7.57E-07
416399.9	3743927.54	2.684	1.25E-02	7.65E-06	2.50E-05	1.55E-07	5.30E-05	1.48E-05	2.70E-07	1.16E-06	3.86E-07	5.41E-07	1.76E-03	2.21E-05	3.86E-08	8.54E-05	6.13E-05	7.73E-07
416419.9	3743927.54	2.752	1.28E-02	7.84E-06	2.56E-05	1.58E-07	5.44E-05	1.52E-05	2.77E-07	1.19E-06	3.96E-07	5.55E-07	1.81E-03	2.27E-05	3.96E-08	8.76E-05	6.29E-05	7.92E-07
416439.9	3743927.54	2.840	1.32E-02	8.09E-06	2.64E-05	1.64E-07	5.61E-05	1.57E-05	2.86E-07	1.23E-06	4.09E-07	5.72E-07	1.87E-03	2.34E-05	4.09E-08	9.04E-05	6.49E-05	8.18E-07
416459.9	3743927.54	2.858	1.33E-02	8.15E-06	2.66E-05	1.65E-07	5.65E-05	1.58E-05	2.88E-07	1.23E-06	4.12E-07	5.76E-07	1.88E-03	2.35E-05	4.12E-08	9.10E-05	6.53E-05	8.23E-07
416301.9	3743947.72	3.164	1.47E-02	9.02E-06	2.95E-05	1.82E-07	6.25E-05	1.75E-05	3.19E-07	1.37E-06	4.56E-07	6.38E-07	2.08E-03	2.61E-05	4.56E-08	1.01E-04	7.23E-05	9.11E-07
416319.9	3743947.54	3.013	1.40E-02	8.59E-06	2.81E-05	1.73E-07	5.95E-05	1.67E-05	3.04E-07	1.30E-06	4.34E-07	6.07E-07	1.98E-03	2.48E-05	4.34E-08	9.59E-05	6.88E-05	8.67E-07

416339.9	3743947.54	2.908	1.35E-02	8.29E-06	2.71E-05	1.67E-07	5.75E-05	1.61E-05	2.93E-07	1.26E-06	4.19E-07	5.86E-07	1.91E-03	2.40E-05	4.19E-08	9.26E-05	6.64E-05	8.37E-07
416359.9	3743947.54	2.852	1.32E-02	8.13E-06	2.66E-05	1.64E-07	5.64E-05	1.58E-05	2.87E-07	1.23E-06	4.11E-07	5.75E-07	1.88E-03	2.35E-05	4.11E-08	9.08E-05	6.52E-05	8.21E-07
416379.9	3743947.54	2.848	1.32E-02	8.12E-06	2.65E-05	1.64E-07	5.63E-05	1.57E-05	2.87E-07	1.23E-06	4.10E-07	5.74E-07	1.87E-03	2.35E-05	4.10E-08	9.07E-05	6.51E-05	8.20E-07
416399.9	3743947.54	2.884	1.34E-02	8.22E-06	2.69E-05	1.66E-07	5.70E-05	1.59E-05	2.91E-07	1.25E-06	4.15E-07	5.81E-07	1.90E-03	2.37E-05	4.15E-08	9.18E-05	6.59E-05	8.30E-07
416419.9	3743947.54	2.933	1.36E-02	8.36E-06	2.73E-05	1.69E-07	5.80E-05	1.62E-05	2.96E-07	1.27E-06	4.22E-07	5.91E-07	1.93E-03	2.42E-05	4.22E-08	9.34E-05	6.70E-05	8.44E-07
416439.9	3743947.54	3.007	1.40E-02	8.57E-06	2.80E-05	1.73E-07	5.94E-05	1.66E-05	3.03E-07	1.30E-06	4.33E-07	6.06E-07	1.98E-03	2.48E-05	4.33E-08	9.57E-05	6.87E-05	8.66E-07
416459.9	3743947.54	3.034	1.41E-02	8.65E-06	2.83E-05	1.75E-07	6.00E-05	1.68E-05	3.06E-07	1.31E-06	4.37E-07	6.12E-07	1.99E-03	2.50E-05	4.37E-08	9.66E-05	6.93E-05	8.74E-07
416307.1	3743967.18	3.517	1.63E-02	1.00E-05	3.28E-05	2.03E-07	6.95E-05	1.94E-05	3.54E-07	1.52E-06	5.06E-07	7.09E-07	2.31E-03	2.90E-05	5.06E-08	1.12E-04	8.03E-05	1.01E-06
416319.9	3743967.54	3.381	1.57E-02	9.64E-06	3.15E-05	1.95E-07	6.68E-05	1.87E-05	3.41E-07	1.46E-06	4.87E-07	6.81E-07	2.22E-03	2.78E-05	4.87E-08	1.08E-04	7.72E-05	9.74E-07
416339.9	3743967.54	3.210	1.49E-02	9.15E-06	2.99E-05	1.85E-07	6.34E-05	1.77E-05	3.23E-07	1.39E-06	4.62E-07	6.47E-07	2.11E-03	2.64E-05	4.62E-08	1.02E-04	7.33E-05	9.24E-07
416359.9	3743967.54	3.126	1.45E-02	8.91E-06	2.91E-05	1.80E-07	6.18E-05	1.73E-05	3.15E-07	1.35E-06	4.50E-07	6.30E-07	2.06E-03	2.57E-05	4.50E-08	9.95E-05	7.14E-05	9.00E-07
416379.9	3743967.54	3.095	1.44E-02	8.82E-06	2.88E-05	1.78E-07	6.12E-05	1.71E-05	3.12E-07	1.34E-06	4.46E-07	6.24E-07	2.03E-03	2.55E-05	4.46E-08	9.85E-05	7.07E-05	8.91E-07
416399.9	3743967.54	3.103	1.44E-02	8.85E-06	2.89E-05	1.79E-07	6.13E-05	1.72E-05	3.13E-07	1.34E-06	4.47E-07	6.25E-07	2.04E-03	2.56E-05	4.47E-08	9.88E-05	7.09E-05	8.93E-07
416419.9	3743967.54	3.147	1.46E-02	8.97E-06	2.93E-05	1.81E-07	6.22E-05	1.74E-05	3.17E-07	1.36E-06	4.53E-07	6.34E-07	2.07E-03	2.59E-05	4.53E-08	1.00E-04	7.19E-05	9.06E-07
416439.9	3743967.54	3.204	1.49E-02	9.13E-06	2.98E-05	1.85E-07	6.33E-05	1.77E-05	3.23E-07	1.38E-06	4.61E-07	6.46E-07	2.11E-03	2.64E-05	4.61E-08	1.02E-04	7.32E-05	9.23E-07
416319.9	3743987.54	3.761	1.75E-02	1.07E-05	3.50E-05	2.17E-07	7.43E-05	2.08E-05	3.79E-07	1.62E-06	5.42E-07	7.58E-07	2.47E-03	3.10E-05	5.42E-08	1.20E-04	8.59E-05	1.08E-06
416339.9	3743987.54	3.533	1.64E-02	1.01E-05	3.29E-05	2.03E-07	6.98E-05	1.95E-05	3.56E-07	1.53E-06	5.09E-07	7.12E-07	2.32E-03	2.91E-05	5.09E-08	1.12E-04	8.07E-05	1.02E-06
416359.9	3743987.54	3.414	1.59E-02	9.73E-06	3.18E-05	1.97E-07	6.75E-05	1.89E-05	3.44E-07	1.47E-06	4.92E-07	6.88E-07	2.24E-03	2.81E-05	4.92E-08	1.09E-04	7.80E-05	9.83E-07
416379.9	3743987.54	3.358	1.56E-02	9.57E-06	3.13E-05	1.93E-07	6.64E-05	1.86E-05	3.38E-07	1.45E-06	4.83E-07	6.77E-07	2.21E-03	2.77E-05	4.83E-08	1.07E-04	7.67E-05	9.67E-07
416399.9	3743987.54	3.358	1.56E-02	9.57E-06	3.13E-05	1.93E-07	6.64E-05	1.86E-05	3.38E-07	1.45E-06	4.83E-07	6.77E-07	2.21E-03	2.77E-05	4.83E-08	1.07E-04	7.67E-05	9.67E-07
416419.9	3743987.54	3.374	1.57E-02	9.62E-06	3.14E-05	1.94E-07	6.67E-05	1.86E-05	3.40E-07	1.46E-06	4.86E-07	6.80E-07	2.22E-03	2.78E-05	4.86E-08	1.07E-04	7.71E-05	9.71E-07
416439.9	3743987.54	3.414	1.59E-02	9.73E-06	3.18E-05	1.97E-07	6.75E-05	1.89E-05	3.44E-07	1.47E-06	4.91E-07	6.88E-07	2.24E-03	2.81E-05	4.91E-08	1.09E-04	7.80E-05	9.83E-07
416379.9	3744007.54	3.677	1.71E-02	1.05E-05	3.43E-05	2.12E-07	7.27E-05	2.03E-05	3.71E-07	1.59E-06	5.29E-07	7.41E-07	2.42E-03	3.03E-05	5.29E-08	1.17E-04	8.40E-05	1.06E-06
416399.9	3744007.54	3.650	1.69E-02	1.04E-05	3.40E-05	2.10E-07	7.21E-05	2.02E-05	3.68E-07	1.58E-06	5.25E-07	7.36E-07	2.40E-03	3.01E-05	5.25E-08	1.16E-04	8.34E-05	1.05E-06
416419.9	3744007.54	3.626	1.68E-02	1.03E-05	3.38E-05	2.09E-07	7.17E-05	2.00E-05	3.65E-07	1.57E-06	5.22E-07	7.31E-07	2.38E-03	2.99E-05	5.22E-08	1.15E-04	8.28E-05	1.04E-06
416439.9	3744007.54	3.645	1.69E-02	1.04E-05	3.39E-05	2.10E-07	7.20E-05	2.01E-05	3.67E-07	1.57E-06	5.25E-07	7.35E-07	2.40E-03	3.00E-05	5.25E-08	1.16E-04	8.33E-05	1.05E-06
416436.8	3744021.35	3.813	1.77E-02	1.09E-05	3.55E-05	2.20E-07	7.54E-05	2.11E-05	3.84E-07	1.65E-06	5.49E-07	7.69E-07	2.51E-03	3.14E-05	5.49E-08	1.21E-04	8.71E-05	1.10E-06
416510.3	3743748.17	1.808	8.39E-03	5.15E-06	1.68E-05	1.04E-07	3.57E-05	1.00E-05	1.82E-07	7.81E-07	2.60E-07	3.64E-07	1.19E-03	1.49E-05	2.60E-08	5.76E-05	4.13E-05	5.21E-07
416297.6	3743966.85	3.646	1.69E-02	1.04E-05	3.40E-05	2.10E-07	7.21E-05	2.02E-05	3.67E-07	1.57E-06	5.25E-07	7.35E-07	2.40E-03	3.00E-05	5.25E-08	1.16E-04	8.33E-05	1.05E-06
416305.1	3743986.12	3.952	1.83E-02	1.13E-05	3.68E-05	2.28E-07	7.81E-05	2.18E-05	3.98E-07	1.71E-06	5.69E-07	7.97E-07	2.60E-03	3.25E-05	5.69E-08	1.26E-04	9.03E-05	1.14E-06
416291.3	3743985.57	4.160	1.93E-02	1.19E-05	3.87E-05	2.40E-07	8.22E-05	2.30E-05	4.19E-07	1.80E-06	5.99E-07	8.38E-07	2.73E-03	3.43E-05	5.99E-08	1.32E-04	9.50E-05	1.20E-06
416358.9	3744002.6	3.679	1.71E-02	1.05E-05	3.43E-05	2.12E-07	7.27E-05	2.03E-05	3.71E-07	1.59E-06	5.30E-07	7.41E-07	2.42E-03	3.03E-05	5.30E-08	1.17E-04	8.40E-05	1.06E-06
416339	3743998.54	3.747	1.74E-02	1.07E-05	3.49E-05	2.16E-07	7.41E-05	2.07E-05	3.78E-07	1.62E-06	5.39E-07	7.55E-07	2.46E-03	3.09E-05	5.39E-08	1.19E-04	8.56E-05	1.08E-06
416319	3743996.11	3.960	1.84E-02	1.13E-05	3.69E-05	2.28E-07	7.83E-05	2.19E-05	3.99E-07	1.71E-06	5.70E-07	7.98E-07	2.60E-03	3.26E-05	5.70E-08	1.26E-04	9.05E-05	1.14E-06

901 East South Street Project

Maximum 1-hour TOG and PM10 Concentrations for the Rail Line

Actual TOG Emissions From Rail Locomotives: 0.005160908 grams.sec
Actual PM10 Emissions From Rail Locomotives: 0.001385548 grams/sec

X (m)	y (m)	Rail Hourly TOG/PM10 Concentrations w/Unit Emissions (ug/m3)	Rail Hourly TOG Concentration w/Actual Emissions (ug/m3)	Rail Hourly PM10 Concentration w/Actual Emissions (ug/m3)
416414	3743528	188.88854	0.97484	2.62E-01
416426.4	3743529	151.7063	0.78294	2.10E-01
416409.3	3743546	186.99113	0.96504	2.59E-01
416419.9	3743548	151.24418	0.78056	2.10E-01
416439.9	3743548	106.75899	0.55097	1.48E-01
416459.9	3743548	77.56796	0.40032	1.07E-01
416479.9	3743548	63.02277	0.32525	8.73E-02
416499.9	3743548	54.00894	0.27874	7.48E-02
416403.3	3743566	167.66158	0.86529	2.32E-01
416419.9	3743568	134.86341	0.69602	1.87E-01
416439.9	3743568	100.74324	0.51993	1.40E-01
416459.9	3743568	74.39153	0.38393	1.03E-01
416479.9	3743568	60.54991	0.31249	8.39E-02
416499.9	3743568	52.2179	0.26949	7.24E-02
416519.9	3743568	46.01031	0.23745	6.37E-02
416539.9	3743568	41.39189	0.21362	5.74E-02
416399.9	3743588	171.904	0.88718	2.38E-01
416419.9	3743588	126.23899	0.65151	1.75E-01
416439.9	3743588	95.87951	0.49483	1.33E-01
416459.9	3743588	71.28057	0.36787	9.88E-02
416479.9	3743588	58.26197	0.30068	8.07E-02
416499.9	3743588	50.58464	0.26106	7.01E-02
416519.9	3743588	44.93606	0.23191	6.23E-02
416539.9	3743588	40.60282	0.20955	5.63E-02
416393.6	3743607	191.51314	0.98838	2.65E-01
416419.9	3743608	118.8578	0.61341	1.65E-01
416439.9	3743608	91.4613	0.47202	1.27E-01
416459.9	3743608	71.02346	0.36655	9.84E-02
416479.9	3743608	56.30888	0.29060	7.80E-02
416499.9	3743608	48.52779	0.25045	6.72E-02
416519.9	3743608	43.28473	0.22339	6.00E-02
416539.9	3743608	39.32511	0.20295	5.45E-02
416387.8	3743628	190.61747	0.98376	2.64E-01
416399.9	3743628	152.14207	0.78519	2.11E-01
416419.9	3743628	110.37942	0.56966	1.53E-01
416439.9	3743628	85.68752	0.44223	1.19E-01
416459.9	3743628	68.80797	0.35511	9.53E-02
416479.9	3743628	55.49195	0.28639	7.69E-02
416499.9	3743628	47.16204	0.24340	6.53E-02
416519.9	3743628	41.76184	0.21553	5.79E-02
416381.5	3743648	196.59701	1.01462	2.72E-01
416399.9	3743648	140.38156	0.72450	1.95E-01
416419.9	3743648	102.90396	0.53108	1.43E-01
416439.9	3743648	80.68185	0.41639	1.12E-01
416459.9	3743648	65.96835	0.34046	9.14E-02
416479.9	3743648	54.70745	0.28234	7.58E-02
416499.9	3743648	46.0957	0.23790	6.39E-02
416519.9	3743648	40.35153	0.20825	5.59E-02
416379.9	3743668	193.19905	0.99708	2.68E-01
416399.9	3743668	131.60013	0.67918	1.82E-01
416419.9	3743668	97.30068	0.50216	1.35E-01
416439.9	3743668	76.3468	0.39402	1.06E-01
416459.9	3743668	62.60489	0.32310	8.67E-02
416479.9	3743668	53.0798	0.27394	7.35E-02
416499.9	3743668	45.11308	0.23282	6.25E-02
416519.9	3743668	39.02264	0.20139	5.41E-02

416371.8	3743687	201.06892	1.03770	2.79E-01
416379.9	3743688	168.6378	0.87032	2.34E-01
416399.9	3743688	118.49369	0.61154	1.64E-01
416419.9	3743688	88.56725	0.45709	1.23E-01
416439.9	3743688	70.81756	0.36548	9.81E-02
416459.9	3743688	59.6618	0.30791	8.27E-02
416479.9	3743688	50.23121	0.25924	6.96E-02
416499.9	3743688	43.04694	0.22216	5.96E-02
416519.9	3743688	37.92721	0.19574	5.25E-02
416366.2	3743708	187.7507	0.96896	2.60E-01
416379.9	3743708	141.94091	0.73254	1.97E-01
416399.9	3743708	96.98881	0.50055	1.34E-01
416419.9	3743708	77.20205	0.39843	1.07E-01
416439.9	3743708	65.3715	0.33738	9.06E-02
416459.9	3743708	56.59367	0.29207	7.84E-02
416479.9	3743708	47.80092	0.24670	6.62E-02
416499.9	3743708	41.45415	0.21394	5.74E-02
416519.9	3743708	36.96589	0.19078	5.12E-02
416360.4	3743728	169.53444	0.87495	2.35E-01
416379.9	3743728	114.76352	0.59228	1.59E-01
416399.9	3743728	83.93456	0.43318	1.16E-01
416419.9	3743728	69.22847	0.35728	9.59E-02
416439.9	3743728	59.72978	0.30826	8.28E-02
416459.9	3743728	52.84328	0.27272	7.32E-02
416479.9	3743728	45.75735	0.23615	6.34E-02
416499.9	3743728	40.06247	0.20676	5.55E-02
416516.3	3743728	36.7416	0.18962	5.09E-02
416355.5	3743747	175.72369	0.90689	2.43E-01
416364.6	3743748	149.80255	0.77312	2.08E-01
416379.9	3743748	112.64142	0.58133	1.56E-01
416399.9	3743748	81.18004	0.41896	1.12E-01
416419.9	3743748	65.91846	0.34020	9.13E-02
416439.9	3743748	56.28009	0.29046	7.80E-02
416459.9	3743748	49.45811	0.25525	6.85E-02
416479.9	3743748	43.6307	0.22517	6.05E-02
416499.9	3743748	38.75344	0.20000	5.37E-02
416349.8	3743768	181.54034	0.93691	2.52E-01
416363.3	3743768	145.95002	0.75323	2.02E-01
416379.9	3743768	110.99997	0.57286	1.54E-01
416399.9	3743768	82.84223	0.42754	1.15E-01
416419.9	3743768	64.13151	0.33098	8.89E-02
416439.9	3743768	53.97818	0.27858	7.48E-02
416459.9	3743768	47.32766	0.24425	6.56E-02
416479.9	3743768	41.87264	0.21610	5.80E-02
416499.9	3743768	37.71444	0.19464	5.23E-02
416344.2	3743787	178.11995	0.91926	2.47E-01
416359.9	3743788	143.91333	0.74272	1.99E-01
416379.9	3743788	107.28286	0.55368	1.49E-01
416399.9	3743788	82.76058	0.42712	1.15E-01
416419.9	3743788	64.64777	0.33364	8.96E-02
416439.9	3743788	53.36569	0.27542	7.39E-02
416459.9	3743788	46.77365	0.24139	6.48E-02
416479.9	3743788	40.57935	0.20943	5.62E-02
416499.9	3743788	36.7568	0.18970	5.09E-02
416340.7	3743806	156.90783	0.80979	2.17E-01
416359.9	3743808	126.72599	0.65402	1.76E-01
416379.9	3743808	97.86384	0.50507	1.36E-01
416399.9	3743808	76.21384	0.39333	1.06E-01
416419.9	3743808	62.08926	0.32044	8.60E-02
416439.9	3743808	52.25777	0.26970	7.24E-02
416459.9	3743808	45.1038	0.23278	6.25E-02
416479.9	3743808	39.21822	0.20240	5.43E-02
416495.3	3743808	36.41503	0.18793	5.05E-02
416333.5	3743827	163.48726	0.84374	2.27E-01
416343.9	3743828	128.13486	0.66129	1.78E-01
416359.9	3743828	111.1611	0.57369	1.54E-01
416379.9	3743828	88.17543	0.45507	1.22E-01
416399.9	3743828	69.50194	0.35869	9.63E-02

416419.9	3743828	58.15603	0.30014	8.06E-02
416439.9	3743828	49.60847	0.25602	6.87E-02
416459.9	3743828	42.81383	0.22096	5.93E-02
416479.9	3743828	37.931	0.19576	5.26E-02
416327.7	3743848	164.00351	0.84641	2.27E-01
416339.9	3743848	124.55292	0.64281	1.73E-01
416359.9	3743848	97.15731	0.50142	1.35E-01
416379.9	3743848	78.67299	0.40602	1.09E-01
416399.9	3743848	63.80632	0.32930	8.84E-02
416419.9	3743848	52.03924	0.26857	7.21E-02
416439.9	3743848	45.47065	0.23467	6.30E-02
416459.9	3743848	40.61855	0.20963	5.63E-02
416479.9	3743848	36.69296	0.18937	5.08E-02
416323	3743868	161.48703	0.83342	2.24E-01
416339.9	3743868	114.58562	0.59137	1.59E-01
416359.9	3743868	89.43326	0.46156	1.24E-01
416379.9	3743868	70.90764	0.36595	9.82E-02
416399.9	3743868	58.4063	0.30143	8.09E-02
416419.9	3743868	50.39724	0.26010	6.98E-02
416439.9	3743868	44.44316	0.22937	6.16E-02
416459.9	3743868	39.59693	0.20436	5.49E-02
416479.9	3743868	35.64625	0.18397	4.94E-02
416319.9	3743888	157.84904	0.81464	2.19E-01
416339.9	3743888	110.83297	0.57200	1.54E-01
416359.9	3743888	84.45597	0.43587	1.17E-01
416379.9	3743888	67.38769	0.34778	9.34E-02
416399.9	3743888	56.41213	0.29114	7.82E-02
416419.9	3743888	49.03327	0.25306	6.79E-02
416439.9	3743888	43.3153	0.22355	6.00E-02
416459.9	3743888	38.67258	0.19959	5.36E-02
416474.9	3743887	35.74173	0.18446	4.95E-02
416312.3	3743907	182.51536	0.94195	2.53E-01
416324.4	3743908	145.43261	0.75056	2.02E-01
416339.9	3743908	111.94102	0.57772	1.55E-01
416359.9	3743908	82.67161	0.42666	1.15E-01
416379.9	3743908	65.87175	0.33996	9.13E-02
416399.9	3743908	55.12987	0.28452	7.64E-02
416419.9	3743908	47.69826	0.24617	6.61E-02
416439.9	3743908	42.15684	0.21757	5.84E-02
416459.9	3743908	37.80826	0.19512	5.24E-02
416306.6	3743928	195.20658	1.00744	2.70E-01
416322.2	3743928	148.4911	0.76635	2.06E-01
416339.9	3743928	113.70569	0.58682	1.58E-01
416359.9	3743928	84.5585	0.43640	1.17E-01
416379.9	3743928	66.72512	0.34436	9.25E-02
416399.9	3743928	55.0951	0.28434	7.63E-02
416419.9	3743928	46.90924	0.24209	6.50E-02
416439.9	3743928	41.2462	0.21287	5.71E-02
416459.9	3743928	36.9359	0.19062	5.12E-02
416301.9	3743948	187.47827	0.96756	2.60E-01
416319.9	3743948	135.53927	0.69951	1.88E-01
416339.9	3743948	107.10927	0.55278	1.48E-01
416359.9	3743948	83.60883	0.43150	1.16E-01
416379.9	3743948	66.98543	0.34571	9.28E-02
416399.9	3743948	55.28056	0.28530	7.66E-02
416419.9	3743948	46.54906	0.24024	6.45E-02
416439.9	3743948	40.59063	0.20948	5.62E-02
416459.9	3743948	36.21961	0.18693	5.02E-02
416307.1	3743967	135.32388	0.69839	1.87E-01
416319.9	3743968	112.02713	0.57816	1.55E-01
416339.9	3743968	90.70594	0.46813	1.26E-01
416359.9	3743968	77.64898	0.40074	1.08E-01
416379.9	3743968	64.95935	0.33525	9.00E-02
416399.9	3743968	54.37244	0.28061	7.53E-02
416419.9	3743968	46.41955	0.23957	6.43E-02
416439.9	3743968	40.2497	0.20773	5.58E-02
416319.9	3743988	91.71865	0.47335	1.27E-01
416339.9	3743988	74.90118	0.38656	1.04E-01

416359.9	3743988	65.98014	0.34052	9.14E-02
416379.9	3743988	59.36071	0.30636	8.22E-02
416399.9	3743988	52.74351	0.27220	7.31E-02
416419.9	3743988	45.57595	0.23521	6.31E-02
416439.9	3743988	39.81633	0.20549	5.52E-02
416379.9	3744008	54.71031	0.28235	7.58E-02
416399.9	3744008	50.57748	0.26103	7.01E-02
416419.9	3744008	44.29086	0.22858	6.14E-02
416439.9	3744008	39.19424	0.20228	5.43E-02
416436.8	3744021	39.2733	0.20269	5.44E-02
416510.3	3743748	36.78975	0.18987	5.10E-02
416297.6	3743967	174.71618	0.90169	2.42E-01
416305.1	3743986	113.58633	0.58621	1.57E-01
416291.3	3743986	163.77075	0.84521	2.27E-01
416358.9	3744003	61.37953	0.31677	8.50E-02
416339	3743999	72.44304	0.37387	1.00E-01
416319	3743996	88.83085	0.45845	1.23E-01

901 East South Street Project

Maximum 1-hour TOG and PM10 Concentrations for the Recycle Operation

Composite Acute Non-Cancer Refernce Exposure Level (REL) for TOG for DSL Emi:	280	(ug/m3)
Composite Acute Non-Cancer Refernce Exposure Level (REL) for TOG for GAS Emi	578	(ug/m3)
Composite Acute Non-Cancer Refernce Exposure Level (REL) for PM10 Emissions:	2352	(ug/m3)

X (m)	y (m)	Recycle Hourly TOGD Concentration (ug/m3)	Recycle Hourly TOGG Concentration (ug/m3)	Recycle Hourly PM10 Concentration (ug/m3)
416414	3743528	0.05143	0.02498	2.95E-02
416426.4	3743529	0.05881	0.03616	3.16E-02
416409.3	3743546	0.05538	0.03313	3.35E-02
416419.9	3743548	0.05804	0.03327	3.41E-02
416439.9	3743548	0.06253	0.03294	3.46E-02
416459.9	3743548	0.06764	0.03774	3.31E-02
416479.9	3743548	0.06763	0.03448	2.92E-02
416499.9	3743548	0.06932	0.02929	2.89E-02
416403.3	3743566	0.05280	0.02313	3.50E-02
416419.9	3743568	0.05723	0.02479	3.78E-02
416439.9	3743568	0.06206	0.02571	3.79E-02
416459.9	3743568	0.06565	0.02424	3.68E-02
416479.9	3743568	0.07126	0.02783	3.43E-02
416499.9	3743568	0.07954	0.03488	3.25E-02
416519.9	3743568	0.09258	0.04435	3.30E-02
416539.9	3743568	0.11605	0.06142	3.42E-02
416399.9	3743588	0.05383	0.01758	3.68E-02
416419.9	3743588	0.07213	0.01935	4.11E-02
416439.9	3743588	0.07812	0.02061	4.31E-02
416459.9	3743588	0.06893	0.02012	4.17E-02
416479.9	3743588	0.07440	0.02189	3.99E-02

416499.9	3743588	0.08444	0.02778	3.90E-02
416519.9	3743588	0.09960	0.0362	3.83E-02
416539.9	3743588	0.12985	0.0488	4.08E-02
416393.6	3743607	0.05423	0.01409	3.84E-02
416419.9	3743608	0.07998	0.01549	4.39E-02
416439.9	3743608	0.08637	0.01656	4.76E-02
416459.9	3743608	0.07344	0.01737	4.63E-02
416479.9	3743608	0.07984	0.01819	4.55E-02
416499.9	3743608	0.09060	0.0221	4.46E-02
416519.9	3743608	0.10879	0.02821	4.30E-02
416539.9	3743608	0.15023	0.03755	4.70E-02
416387.8	3743628	0.05372	0.0115	3.83E-02
416399.9	3743628	0.05795	0.01207	4.16E-02
416419.9	3743628	0.08037	0.01287	4.64E-02
416439.9	3743628	0.09053	0.0137	4.89E-02
416459.9	3743628	0.09614	0.01456	5.28E-02
416479.9	3743628	0.08738	0.0155	5.17E-02
416499.9	3743628	0.09857	0.01797	5.12E-02
416519.9	3743628	0.12055	0.02259	5.10E-02
416381.5	3743648	0.05270	0.00969	3.80E-02
416399.9	3743648	0.06120	0.01028	4.48E-02
416419.9	3743648	0.07704	0.01092	4.83E-02
416439.9	3743648	0.09096	0.0116	5.21E-02
416459.9	3743648	0.10121	0.01232	5.61E-02
416479.9	3743648	0.09468	0.01316	5.75E-02
416499.9	3743648	0.10720	0.01451	5.71E-02
416519.9	3743648	0.13271	0.01788	5.83E-02
416379.9	3743668	0.05497	0.00833	4.08E-02
416399.9	3743668	0.06850	0.00883	4.74E-02
416419.9	3743668	0.07869	0.00939	5.22E-02
416439.9	3743668	0.08763	0.00996	5.46E-02
416459.9	3743668	0.09818	0.01056	5.81E-02
416479.9	3743668	0.11059	0.01124	6.37E-02
416499.9	3743668	0.11529	0.0136	6.28E-02

416519.9	3743668	0.14385	0.01426	6.36E-02
416371.8	3743687	0.05346	0.007	4.04E-02
416379.9	3743688	0.05578	0.0072	4.19E-02
416399.9	3743688	0.06249	0.00769	4.63E-02
416419.9	3743688	0.07080	0.00817	5.14E-02
416439.9	3743688	0.08078	0.00866	5.70E-02
416459.9	3743688	0.09112	0.00915	6.12E-02
416479.9	3743688	0.10404	0.01074	6.43E-02
416499.9	3743688	0.12290	0.01149	6.77E-02
416519.9	3743688	0.15355	0.01166	6.60E-02
416366.2	3743708	0.05208	0.00589	3.99E-02
416379.9	3743708	0.05641	0.00624	4.30E-02
416399.9	3743708	0.06159	0.00664	4.57E-02
416419.9	3743708	0.06891	0.00709	4.98E-02
416439.9	3743708	0.07956	0.00759	5.61E-02
416459.9	3743708	0.09297	0.0085	6.32E-02
416479.9	3743708	0.10615	0.00912	6.71E-02
416499.9	3743708	0.12420	0.00909	7.20E-02
416519.9	3743708	0.16149	0.00975	7.03E-02
416360.4	3743728	0.05029	0.0053	3.90E-02
416379.9	3743728	0.05581	0.00554	4.28E-02
416399.9	3743728	0.05981	0.0058	4.44E-02
416419.9	3743728	0.06744	0.00614	4.90E-02
416439.9	3743728	0.07921	0.00675	5.67E-02
416459.9	3743728	0.09108	0.0073	6.24E-02
416479.9	3743728	0.10372	0.00747	6.79E-02
416499.9	3743728	0.12127	0.00784	7.48E-02
416516.3	3743728	0.14854	0.00824	7.09E-02
416355.5	3743747	0.04953	0.00479	3.92E-02
416364.6	3743748	0.05275	0.00487	4.18E-02
416379.9	3743748	0.05691	0.00503	4.46E-02
416399.9	3743748	0.06241	0.00525	4.80E-02
416419.9	3743748	0.06970	0.00581	5.24E-02
416439.9	3743748	0.07952	0.00624	5.84E-02

416459.9	3743748	0.09088	0.00637	6.41E-02
416479.9	3743748	0.09965	0.00648	6.69E-02
416499.9	3743748	0.11442	0.00682	7.29E-02
416349.8	3743768	0.04834	0.00432	3.89E-02
416363.3	3743768	0.05313	0.00444	4.30E-02
416379.9	3743768	0.05780	0.0047	4.64E-02
416399.9	3743768	0.06331	0.00508	5.00E-02
416419.9	3743768	0.06920	0.00539	5.34E-02
416439.9	3743768	0.07713	0.00551	5.79E-02
416459.9	3743768	0.08689	0.00539	6.29E-02
416479.9	3743768	0.09515	0.00568	6.58E-02
416499.9	3743768	0.10587	0.00598	7.05E-02
416344.2	3743787	0.04710	0.00394	3.86E-02
416359.9	3743788	0.05385	0.00422	4.48E-02
416379.9	3743788	0.06035	0.00472	5.01E-02
416399.9	3743788	0.06666	0.00496	5.47E-02
416419.9	3743788	0.07252	0.00483	5.83E-02
416439.9	3743788	0.08004	0.00466	6.30E-02
416459.9	3743788	0.08927	0.00482	6.85E-02
416479.9	3743788	0.09488	0.005	6.84E-02
416499.9	3743788	0.09350	0.00526	6.54E-02
416340.7	3743806	0.04333	0.00366	3.53E-02
416359.9	3743808	0.05261	0.00407	4.41E-02
416379.9	3743808	0.05872	0.00438	4.92E-02
416399.9	3743808	0.06323	0.00438	5.22E-02
416419.9	3743808	0.06788	0.00418	5.51E-02
416439.9	3743808	0.07221	0.00423	5.70E-02
416459.9	3743808	0.07548	0.00436	5.73E-02
416479.9	3743808	0.08518	0.00447	6.34E-02
416495.3	3743808	0.08781	0.00461	6.22E-02
416333.5	3743827	0.03600	0.00346	2.81E-02
416343.9	3743828	0.03934	0.00358	3.17E-02
416359.9	3743828	0.04626	0.00373	3.81E-02
416379.9	3743828	0.05046	0.00387	4.13E-02

416399.9	3743828	0.05263	0.00372	4.22E-02
416419.9	3743828	0.06007	0.00376	4.85E-02
416439.9	3743828	0.06855	0.00386	5.54E-02
416459.9	3743828	0.07534	0.00396	6.02E-02
416479.9	3743828	0.07990	0.00405	6.21E-02
416327.7	3743848	0.03336	0.00324	2.57E-02
416339.9	3743848	0.03562	0.00334	2.75E-02
416359.9	3743848	0.04117	0.00339	3.24E-02
416379.9	3743848	0.04639	0.00331	3.80E-02
416399.9	3743848	0.05256	0.00336	4.34E-02
416419.9	3743848	0.05702	0.00345	4.67E-02
416439.9	3743848	0.06124	0.00353	4.96E-02
416459.9	3743848	0.06802	0.00361	5.50E-02
416479.9	3743848	0.07419	0.00368	5.96E-02
416323	3743868	0.03099	0.00303	2.39E-02
416339.9	3743868	0.03392	0.00306	2.63E-02
416359.9	3743868	0.03702	0.00301	2.88E-02
416379.9	3743868	0.04085	0.00303	3.30E-02
416399.9	3743868	0.04421	0.00311	3.56E-02
416419.9	3743868	0.04789	0.00318	3.84E-02
416439.9	3743868	0.05439	0.00324	4.41E-02
416459.9	3743868	0.05971	0.00331	4.84E-02
416479.9	3743868	0.06473	0.00336	5.24E-02
416319.9	3743888	0.02925	0.00278	2.27E-02
416339.9	3743888	0.03184	0.00274	2.49E-02
416359.9	3743888	0.03467	0.00275	2.76E-02
416379.9	3743888	0.03779	0.00281	2.98E-02
416399.9	3743888	0.04021	0.00287	3.19E-02
416419.9	3743888	0.04448	0.00293	3.61E-02
416439.9	3743888	0.04866	0.00299	3.96E-02
416459.9	3743888	0.05288	0.00304	4.31E-02
416474.9	3743887	0.05607	0.00309	4.57E-02
416312.3	3743907	0.02733	0.00253	2.14E-02
416324.4	3743908	0.02859	0.00248	2.24E-02

416339.9	3743908	0.03062	0.0025	2.41E-02
416359.9	3743908	0.03296	0.00256	2.59E-02
416379.9	3743908	0.03521	0.00262	2.78E-02
416399.9	3743908	0.03799	0.00267	3.10E-02
416419.9	3743908	0.04097	0.00272	3.34E-02
416439.9	3743908	0.04387	0.00277	3.58E-02
416459.9	3743908	0.04660	0.00281	3.81E-02
416306.6	3743928	0.02594	0.00226	2.05E-02
416322.2	3743928	0.02760	0.00229	2.19E-02
416339.9	3743928	0.02950	0.00234	2.34E-02
416359.9	3743928	0.03130	0.00239	2.48E-02
416379.9	3743928	0.03344	0.00244	2.72E-02
416399.9	3743928	0.03561	0.00249	2.92E-02
416419.9	3743928	0.03778	0.00253	3.10E-02
416439.9	3743928	0.03967	0.00257	3.25E-02
416459.9	3743928	0.04191	0.0026	3.44E-02
416301.9	3743948	0.02480	0.00211	1.98E-02
416319.9	3743948	0.02620	0.00215	2.09E-02
416339.9	3743948	0.02786	0.0022	2.22E-02
416359.9	3743948	0.02978	0.00224	2.40E-02
416379.9	3743948	0.03139	0.00228	2.56E-02
416399.9	3743948	0.03344	0.00232	2.74E-02
416419.9	3743948	0.03502	0.00236	2.84E-02
416439.9	3743948	0.03658	0.00239	3.02E-02
416459.9	3743948	0.03827	0.00242	3.15E-02
416307.1	3743967	0.02394	0.002	1.91E-02
416319.9	3743968	0.02473	0.00202	1.98E-02
416339.9	3743968	0.02620	0.00206	2.10E-02
416359.9	3743968	0.02776	0.0021	2.24E-02
416379.9	3743968	0.02959	0.00214	2.40E-02
416399.9	3743968	0.03116	0.00217	2.51E-02
416419.9	3743968	0.03263	0.0022	2.69E-02
416439.9	3743968	0.03397	0.00223	2.77E-02
416319.9	3743988	0.02292	0.0019	1.83E-02

416339.9	3743988	0.02393	0.00194	1.91E-02
416359.9	3743988	0.02570	0.00197	2.06E-02
416379.9	3743988	0.02733	0.00201	2.20E-02
416399.9	3743988	0.02909	0.00204	2.35E-02
416419.9	3743988	0.03042	0.00206	2.47E-02
416439.9	3743988	0.03166	0.00209	2.57E-02
416379.9	3744008	0.02552	0.00189	2.06E-02
416399.9	3744008	0.02708	0.00191	2.20E-02
416419.9	3744008	0.02816	0.00194	2.28E-02
416439.9	3744008	0.02941	0.00196	2.39E-02
416436.8	3744021	0.02774	0.00187	2.25E-02
416510.3	3743748	0.12422	0.00699	7.81E-02
416297.6	3743967	0.02359	0.00198	1.89E-02
416305.1	3743986	0.02239	0.00189	1.79E-02
416291.3	3743986	0.02194	0.00187	1.76E-02
416358.9	3744003	0.02416	0.00188	1.93E-02
416339	3743999	0.02289	0.00187	1.82E-02
416319	3743996	0.02201	0.00185	1.75E-02

Estimation of Maximum 1-hour Average TAC Concentrations from Permitted Stationary Source Facility ID#2825

X	Y	1-Hour Concentration Unit Emissions From AERMOD	TAC Concentrations Using Actual Emission Rates										
(m)	(m)	(ug/m^3)	Ammonia (ug/m^3)	Acrolein (ug/m^3)	Benzene (ug/m^3)	Formadehyde (ug/m^3)	1,3-butadiene (ug/m^3)	Acetaldehyde (ug/m^3)	Chlorine (ug/m^3)	Methanol (ug/m^3)	Styrene (ug/m^3)	Toluene (ug/m^3)	Xylenes (ug/m^3)
416414	3743528	37.222	1.73E-01	1.06E-04	3.47E-04	7.36E-04	7.50E-06	2.45E-02	2.14E-06	3.75E-06	5.36E-07	1.18E-03	8.50E-04
416426.4	3743529	37.228	1.73E-01	1.06E-04	3.47E-04	7.36E-04	7.50E-06	2.45E-02	2.14E-06	3.75E-06	5.36E-07	1.18E-03	8.51E-04
416409.3	3743546	38.837	1.80E-01	1.11E-04	3.62E-04	7.68E-04	7.83E-06	2.55E-02	2.24E-06	3.91E-06	5.59E-07	1.24E-03	8.87E-04
416419.9	3743548	38.846	1.80E-01	1.11E-04	3.62E-04	7.68E-04	7.83E-06	2.55E-02	2.24E-06	3.91E-06	5.59E-07	1.24E-03	8.88E-04
416439.9	3743548	37.929	1.76E-01	1.08E-04	3.53E-04	7.50E-04	7.64E-06	2.49E-02	2.18E-06	3.82E-06	5.46E-07	1.21E-03	8.67E-04
416459.9	3743548	36.484	1.69E-01	1.04E-04	3.40E-04	7.21E-04	7.35E-06	2.40E-02	2.10E-06	3.68E-06	5.25E-07	1.16E-03	8.34E-04
416479.9	3743548	34.768	1.61E-01	9.91E-05	3.24E-04	6.87E-04	7.01E-06	2.29E-02	2.00E-06	3.50E-06	5.01E-07	1.11E-03	7.94E-04
416499.9	3743548	34.096	1.58E-01	9.72E-05	3.18E-04	6.74E-04	6.87E-06	2.24E-02	1.96E-06	3.44E-06	4.91E-07	1.09E-03	7.79E-04
416403.3	3743566	40.291	1.87E-01	1.15E-04	3.75E-04	7.96E-04	8.12E-06	2.65E-02	2.32E-06	4.06E-06	5.80E-07	1.28E-03	9.21E-04
416419.9	3743568	40.615	1.89E-01	1.16E-04	3.78E-04	8.03E-04	8.19E-06	2.67E-02	2.34E-06	4.09E-06	5.85E-07	1.29E-03	9.28E-04
416439.9	3743568	39.742	1.85E-01	1.13E-04	3.70E-04	7.86E-04	8.01E-06	2.61E-02	2.29E-06	4.00E-06	5.72E-07	1.26E-03	9.08E-04
416459.9	3743568	37.399	1.74E-01	1.07E-04	3.48E-04	7.39E-04	7.54E-06	2.46E-02	2.15E-06	3.77E-06	5.38E-07	1.19E-03	8.54E-04
416479.9	3743568	36.385	1.69E-01	1.04E-04	3.39E-04	7.19E-04	7.33E-06	2.39E-02	2.10E-06	3.67E-06	5.24E-07	1.16E-03	8.31E-04
416499.9	3743568	35.372	1.64E-01	1.01E-04	3.29E-04	6.99E-04	7.13E-06	2.33E-02	2.04E-06	3.56E-06	5.09E-07	1.13E-03	8.08E-04
416519.9	3743568	34.383	1.60E-01	9.80E-05	3.20E-04	6.80E-04	6.93E-06	2.26E-02	1.98E-06	3.46E-06	4.95E-07	1.09E-03	7.86E-04
416539.9	3743568	33.934	1.58E-01	9.67E-05	3.16E-04	6.71E-04	6.84E-06	2.23E-02	1.95E-06	3.42E-06	4.89E-07	1.08E-03	7.75E-04
416399.9	3743588	41.787	1.94E-01	1.19E-04	3.89E-04	8.26E-04	8.42E-06	2.75E-02	2.41E-06	4.21E-06	6.02E-07	1.33E-03	9.55E-04
416419.9	3743588	42.454	1.97E-01	1.21E-04	3.95E-04	8.39E-04	8.56E-06	2.79E-02	2.44E-06	4.28E-06	6.11E-07	1.35E-03	9.70E-04
416439.9	3743588	41.509	1.93E-01	1.18E-04	3.87E-04	8.20E-04	8.37E-06	2.73E-02	2.39E-06	4.18E-06	5.98E-07	1.32E-03	9.48E-04
416459.9	3743588	39.326	1.83E-01	1.12E-04	3.66E-04	7.77E-04	7.93E-06	2.59E-02	2.26E-06	3.96E-06	5.66E-07	1.25E-03	8.98E-04
416479.9	3743588	37.853	1.76E-01	1.08E-04	3.53E-04	7.48E-04	7.63E-06	2.49E-02	2.18E-06	3.81E-06	5.45E-07	1.20E-03	8.65E-04
416499.9	3743588	36.380	1.69E-01	1.04E-04	3.39E-04	7.19E-04	7.33E-06	2.39E-02	2.09E-06	3.67E-06	5.24E-07	1.16E-03	8.31E-04
416519.9	3743588	35.648	1.66E-01	1.02E-04	3.32E-04	7.05E-04	7.18E-06	2.34E-02	2.05E-06	3.59E-06	5.13E-07	1.13E-03	8.14E-04
416539.9	3743588	35.052	1.63E-01	9.99E-05	3.26E-04	6.93E-04	7.06E-06	2.30E-02	2.02E-06	3.53E-06	5.05E-07	1.12E-03	8.01E-04
416393.6	3743607	42.908	1.99E-01	1.22E-04	4.00E-04	8.48E-04	8.65E-06	2.82E-02	2.47E-06	4.32E-06	6.18E-07	1.37E-03	9.80E-04
416419.9	3743608	44.532	2.07E-01	1.27E-04	4.15E-04	8.80E-04	8.98E-06	2.93E-02	2.56E-06	4.49E-06	6.41E-07	1.42E-03	1.02E-03
416439.9	3743608	43.415	2.02E-01	1.24E-04	4.04E-04	8.58E-04	8.75E-06	2.85E-02	2.50E-06	4.38E-06	6.25E-07	1.38E-03	9.92E-04
416459.9	3743608	41.680	1.94E-01	1.19E-04	3.88E-04	8.24E-04	8.40E-06	2.74E-02	2.40E-06	4.20E-06	6.00E-07	1.33E-03	9.52E-04
416479.9	3743608	39.159	1.82E-01	1.12E-04	3.65E-04	7.74E-04	7.89E-06	2.57E-02	2.25E-06	3.95E-06	5.64E-07	1.25E-03	8.95E-04
416499.9	3743608	37.505	1.74E-01	1.07E-04	3.49E-04	7.41E-04	7.56E-06	2.47E-02	2.16E-06	3.78E-06	5.40E-07	1.19E-03	8.57E-04
416519.9	3743608	36.331	1.69E-01	1.04E-04	3.38E-04	7.18E-04	7.32E-06	2.39E-02	2.09E-06	3.66E-06	5.23E-07	1.16E-03	8.30E-04
416539.9	3743608	36.012	1.67E-01	1.03E-04	3.35E-04	7.12E-04	7.26E-06	2.37E-02	2.07E-06	3.63E-06	5.18E-07	1.15E-03	8.23E-04
416387.8	3743628	43.054	2.00E-01	1.23E-04	4.01E-04	8.51E-04	8.68E-06	2.83E-02	2.48E-06	4.34E-06	6.20E-07	1.37E-03	9.84E-04
416399.9	3743628	44.202	2.05E-01	1.26E-04	4.12E-04	8.74E-04	8.91E-06	2.91E-02	2.55E-06	4.45E-06	6.36E-07	1.41E-03	1.01E-03
416419.9	3743628	44.269	2.06E-01	1.26E-04	4.12E-04	8.75E-04	8.92E-06	2.91E-02	2.55E-06	4.46E-06	6.37E-07	1.41E-03	1.01E-03
416439.9	3743628	44.499	2.07E-01	1.27E-04	4.14E-04	8.80E-04	8.97E-06	2.93E-02	2.56E-06	4.48E-06	6.41E-07	1.42E-03	1.02E-03

416459.9	3743628	43.242	2.01E-01	1.23E-04	4.03E-04	8.55E-04	8.72E-06	2.84E-02	2.49E-06	4.36E-06	6.23E-07	1.38E-03	9.88E-04
416479.9	3743628	40.908	1.90E-01	1.17E-04	3.81E-04	8.09E-04	8.24E-06	2.69E-02	2.36E-06	4.12E-06	5.89E-07	1.30E-03	9.35E-04
416499.9	3743628	38.979	1.81E-01	1.11E-04	3.63E-04	7.70E-04	7.86E-06	2.56E-02	2.24E-06	3.93E-06	5.61E-07	1.24E-03	8.91E-04
416519.9	3743628	37.424	1.74E-01	1.07E-04	3.49E-04	7.40E-04	7.54E-06	2.46E-02	2.16E-06	3.77E-06	5.39E-07	1.19E-03	8.55E-04
416381.5	3743648	43.539	2.02E-01	1.24E-04	4.06E-04	8.61E-04	8.78E-06	2.86E-02	2.51E-06	4.39E-06	6.27E-07	1.39E-03	9.95E-04
416399.9	3743648	44.906	2.09E-01	1.28E-04	4.18E-04	8.88E-04	9.05E-06	2.95E-02	2.59E-06	4.53E-06	6.46E-07	1.43E-03	1.03E-03
416419.9	3743648	45.363	2.11E-01	1.29E-04	4.23E-04	8.97E-04	9.14E-06	2.98E-02	2.61E-06	4.57E-06	6.53E-07	1.44E-03	1.04E-03
416439.9	3743648	45.198	2.10E-01	1.29E-04	4.21E-04	8.93E-04	9.11E-06	2.97E-02	2.60E-06	4.55E-06	6.51E-07	1.44E-03	1.03E-03
416459.9	3743648	44.121	2.05E-01	1.26E-04	4.11E-04	8.72E-04	8.89E-06	2.90E-02	2.54E-06	4.45E-06	6.35E-07	1.40E-03	1.01E-03
416479.9	3743648	42.381	1.97E-01	1.21E-04	3.95E-04	8.38E-04	8.54E-06	2.79E-02	2.44E-06	4.27E-06	6.10E-07	1.35E-03	9.68E-04
416499.9	3743648	40.429	1.88E-01	1.15E-04	3.77E-04	7.99E-04	8.15E-06	2.66E-02	2.33E-06	4.07E-06	5.82E-07	1.29E-03	9.24E-04
416519.9	3743648	38.563	1.79E-01	1.10E-04	3.59E-04	7.62E-04	7.77E-06	2.54E-02	2.22E-06	3.89E-06	5.55E-07	1.23E-03	8.81E-04
416379.9	3743668	45.106	2.09E-01	1.29E-04	4.20E-04	8.92E-04	9.09E-06	2.97E-02	2.60E-06	4.55E-06	6.49E-07	1.44E-03	1.03E-03
416399.9	3743668	46.442	2.16E-01	1.32E-04	4.33E-04	9.18E-04	9.36E-06	3.05E-02	2.67E-06	4.68E-06	6.69E-07	1.48E-03	1.06E-03
416419.9	3743668	46.450	2.16E-01	1.32E-04	4.33E-04	9.18E-04	9.36E-06	3.05E-02	2.67E-06	4.68E-06	6.69E-07	1.48E-03	1.06E-03
416439.9	3743668	45.388	2.11E-01	1.29E-04	4.23E-04	8.97E-04	9.15E-06	2.98E-02	2.61E-06	4.57E-06	6.53E-07	1.44E-03	1.04E-03
416459.9	3743668	44.482	2.07E-01	1.27E-04	4.14E-04	8.79E-04	8.97E-06	2.92E-02	2.56E-06	4.48E-06	6.40E-07	1.42E-03	1.02E-03
416479.9	3743668	43.435	2.02E-01	1.24E-04	4.05E-04	8.59E-04	8.75E-06	2.86E-02	2.50E-06	4.38E-06	6.25E-07	1.38E-03	9.92E-04
416499.9	3743668	41.773	1.94E-01	1.19E-04	3.89E-04	8.26E-04	8.42E-06	2.75E-02	2.41E-06	4.21E-06	6.01E-07	1.33E-03	9.54E-04
416519.9	3743668	39.356	1.83E-01	1.12E-04	3.67E-04	7.78E-04	7.93E-06	2.59E-02	2.27E-06	3.97E-06	5.67E-07	1.25E-03	8.99E-04
416371.8	3743687	45.724	2.12E-01	1.30E-04	4.26E-04	9.04E-04	9.22E-06	3.01E-02	2.63E-06	4.61E-06	6.58E-07	1.46E-03	1.04E-03
416379.9	3743688	45.433	2.11E-01	1.30E-04	4.23E-04	8.98E-04	9.16E-06	2.99E-02	2.62E-06	4.58E-06	6.54E-07	1.45E-03	1.04E-03
416399.9	3743688	45.870	2.13E-01	1.31E-04	4.27E-04	9.07E-04	9.24E-06	3.02E-02	2.64E-06	4.62E-06	6.60E-07	1.46E-03	1.05E-03
416419.9	3743688	45.082	2.09E-01	1.29E-04	4.20E-04	8.91E-04	9.09E-06	2.96E-02	2.60E-06	4.54E-06	6.49E-07	1.43E-03	1.03E-03
416439.9	3743688	44.724	2.08E-01	1.27E-04	4.17E-04	8.84E-04	9.01E-06	2.94E-02	2.58E-06	4.51E-06	6.44E-07	1.42E-03	1.02E-03
416459.9	3743688	44.679	2.07E-01	1.27E-04	4.16E-04	8.83E-04	9.00E-06	2.94E-02	2.57E-06	4.50E-06	6.43E-07	1.42E-03	1.02E-03
416479.9	3743688	43.541	2.02E-01	1.24E-04	4.06E-04	8.61E-04	8.78E-06	2.86E-02	2.51E-06	4.39E-06	6.27E-07	1.39E-03	9.95E-04
416499.9	3743688	41.988	1.95E-01	1.20E-04	3.91E-04	8.30E-04	8.46E-06	2.76E-02	2.42E-06	4.23E-06	6.04E-07	1.34E-03	9.59E-04
416519.9	3743688	40.274	1.87E-01	1.15E-04	3.75E-04	7.96E-04	8.12E-06	2.65E-02	2.32E-06	4.06E-06	5.80E-07	1.28E-03	9.20E-04
416366.2	3743708	46.136	2.14E-01	1.32E-04	4.30E-04	9.12E-04	9.30E-06	3.03E-02	2.66E-06	4.65E-06	6.64E-07	1.47E-03	1.05E-03
416379.9	3743708	45.969	2.13E-01	1.31E-04	4.28E-04	9.09E-04	9.26E-06	3.02E-02	2.65E-06	4.63E-06	6.62E-07	1.46E-03	1.05E-03
416399.9	3743708	44.764	2.08E-01	1.28E-04	4.17E-04	8.85E-04	9.02E-06	2.94E-02	2.58E-06	4.51E-06	6.44E-07	1.42E-03	1.02E-03
416419.9	3743708	44.142	2.05E-01	1.26E-04	4.11E-04	8.73E-04	8.90E-06	2.90E-02	2.54E-06	4.45E-06	6.35E-07	1.41E-03	1.01E-03
416439.9	3743708	44.027	2.04E-01	1.25E-04	4.10E-04	8.70E-04	8.87E-06	2.89E-02	2.54E-06	4.44E-06	6.34E-07	1.40E-03	1.01E-03
416459.9	3743708	44.622	2.07E-01	1.27E-04	4.16E-04	8.82E-04	8.99E-06	2.93E-02	2.57E-06	4.50E-06	6.42E-07	1.42E-03	1.02E-03
416479.9	3743708	43.371	2.01E-01	1.24E-04	4.04E-04	8.57E-04	8.74E-06	2.85E-02	2.50E-06	4.37E-06	6.24E-07	1.38E-03	9.91E-04
416499.9	3743708	42.073	1.95E-01	1.20E-04	3.92E-04	8.32E-04	8.48E-06	2.77E-02	2.42E-06	4.24E-06	6.06E-07	1.34E-03	9.61E-04
416519.9	3743708	40.215	1.87E-01	1.15E-04	3.75E-04	7.95E-04	8.11E-06	2.64E-02	2.32E-06	4.05E-06	5.79E-07	1.28E-03	9.19E-04
416360.4	3743728	45.807	2.13E-01	1.31E-04	4.27E-04	9.05E-04	9.23E-06	3.01E-02	2.64E-06	4.62E-06	6.59E-07	1.46E-03	1.05E-03
416379.9	3743728	45.880	2.13E-01	1.31E-04	4.27E-04	9.07E-04	9.25E-06	3.02E-02	2.64E-06	4.62E-06	6.60E-07	1.46E-03	1.05E-03
416399.9	3743728	44.574	2.07E-01	1.27E-04	4.15E-04	8.81E-04	8.98E-06	2.93E-02	2.57E-06	4.49E-06	6.42E-07	1.42E-03	1.02E-03
416419.9	3743728	43.991	2.04E-01	1.25E-04	4.10E-04	8.70E-04	8.87E-06	2.89E-02	2.53E-06	4.43E-06	6.33E-07	1.40E-03	1.01E-03
416439.9	3743728	43.797	2.03E-01	1.25E-04	4.08E-04	8.66E-04	8.83E-06	2.88E-02	2.52E-06	4.41E-06	6.31E-07	1.39E-03	1.00E-03
416459.9	3743728	43.974	2.04E-01	1.25E-04	4.10E-04	8.69E-04	8.86E-06	2.89E-02	2.53E-06	4.43E-06	6.33E-07	1.40E-03	1.00E-03
416479.9	3743728	43.306	2.01E-01	1.23E-04	4.03E-04	8.56E-04	8.73E-06	2.85E-02	2.49E-06	4.36E-06	6.23E-07	1.38E-03	9.89E-04

416499.9	3743728	41.603	1.93E-01	1.19E-04	3.88E-04	8.22E-04	8.38E-06	2.74E-02	2.40E-06	4.19E-06	5.99E-07	1.32E-03	9.50E-04
416516.3	3743728	40.058	1.86E-01	1.14E-04	3.73E-04	7.92E-04	8.07E-06	2.63E-02	2.31E-06	4.04E-06	5.77E-07	1.28E-03	9.15E-04
416355.5	3743747	46.934	2.18E-01	1.34E-04	4.37E-04	9.28E-04	9.46E-06	3.09E-02	2.70E-06	4.73E-06	6.76E-07	1.49E-03	1.07E-03
416364.6	3743748	47.389	2.20E-01	1.35E-04	4.41E-04	9.37E-04	9.55E-06	3.12E-02	2.73E-06	4.78E-06	6.82E-07	1.51E-03	1.08E-03
416379.9	3743748	46.832	2.17E-01	1.33E-04	4.36E-04	9.26E-04	9.44E-06	3.08E-02	2.70E-06	4.72E-06	6.74E-07	1.49E-03	1.07E-03
416399.9	3743748	45.580	2.12E-01	1.30E-04	4.25E-04	9.01E-04	9.19E-06	3.00E-02	2.62E-06	4.59E-06	6.56E-07	1.45E-03	1.04E-03
416419.9	3743748	44.644	2.07E-01	1.27E-04	4.16E-04	8.82E-04	9.00E-06	2.94E-02	2.57E-06	4.50E-06	6.43E-07	1.42E-03	1.02E-03
416439.9	3743748	44.124	2.05E-01	1.26E-04	4.11E-04	8.72E-04	8.89E-06	2.90E-02	2.54E-06	4.45E-06	6.35E-07	1.40E-03	1.01E-03
416459.9	3743748	43.873	2.04E-01	1.25E-04	4.09E-04	8.67E-04	8.84E-06	2.88E-02	2.53E-06	4.42E-06	6.32E-07	1.40E-03	1.00E-03
416479.9	3743748	42.936	1.99E-01	1.22E-04	4.00E-04	8.49E-04	8.65E-06	2.82E-02	2.47E-06	4.33E-06	6.18E-07	1.37E-03	9.81E-04
416499.9	3743748	41.748	1.94E-01	1.19E-04	3.89E-04	8.25E-04	8.41E-06	2.74E-02	2.40E-06	4.21E-06	6.01E-07	1.33E-03	9.54E-04
416349.8	3743768	47.683	2.21E-01	1.36E-04	4.44E-04	9.42E-04	9.61E-06	3.13E-02	2.75E-06	4.81E-06	6.86E-07	1.52E-03	1.09E-03
416363.3	3743768	48.659	2.26E-01	1.39E-04	4.53E-04	9.62E-04	9.81E-06	3.20E-02	2.80E-06	4.90E-06	7.01E-07	1.55E-03	1.11E-03
416379.9	3743768	48.448	2.25E-01	1.38E-04	4.51E-04	9.58E-04	9.76E-06	3.19E-02	2.79E-06	4.88E-06	6.97E-07	1.54E-03	1.11E-03
416399.9	3743768	47.136	2.19E-01	1.34E-04	4.39E-04	9.32E-04	9.50E-06	3.10E-02	2.71E-06	4.75E-06	6.79E-07	1.50E-03	1.08E-03
416419.9	3743768	45.714	2.12E-01	1.30E-04	4.26E-04	9.04E-04	9.21E-06	3.01E-02	2.63E-06	4.61E-06	6.58E-07	1.46E-03	1.04E-03
416439.9	3743768	44.753	2.08E-01	1.28E-04	4.17E-04	8.85E-04	9.02E-06	2.94E-02	2.58E-06	4.51E-06	6.44E-07	1.42E-03	1.02E-03
416459.9	3743768	44.010	2.04E-01	1.25E-04	4.10E-04	8.70E-04	8.87E-06	2.89E-02	2.53E-06	4.44E-06	6.34E-07	1.40E-03	1.01E-03
416479.9	3743768	43.025	2.00E-01	1.23E-04	4.01E-04	8.50E-04	8.67E-06	2.83E-02	2.48E-06	4.34E-06	6.19E-07	1.37E-03	9.83E-04
416499.9	3743768	41.911	1.95E-01	1.19E-04	3.90E-04	8.28E-04	8.45E-06	2.76E-02	2.41E-06	4.22E-06	6.03E-07	1.33E-03	9.58E-04
416344.2	3743787	46.974	2.18E-01	1.34E-04	4.38E-04	9.28E-04	9.47E-06	3.09E-02	2.71E-06	4.73E-06	6.76E-07	1.50E-03	1.07E-03
416359.9	3743788	49.841	2.31E-01	1.42E-04	4.64E-04	9.85E-04	1.00E-05	3.28E-02	2.87E-06	5.02E-06	7.18E-07	1.59E-03	1.14E-03
416379.9	3743788	50.960	2.37E-01	1.45E-04	4.75E-04	1.01E-03	1.03E-05	3.35E-02	2.93E-06	5.14E-06	7.34E-07	1.62E-03	1.16E-03
416399.9	3743788	49.563	2.30E-01	1.41E-04	4.62E-04	9.80E-04	9.99E-06	3.26E-02	2.85E-06	4.99E-06	7.14E-07	1.58E-03	1.13E-03
416419.9	3743788	47.181	2.19E-01	1.34E-04	4.39E-04	9.33E-04	9.51E-06	3.10E-02	2.72E-06	4.75E-06	6.79E-07	1.50E-03	1.08E-03
416439.9	3743788	45.834	2.13E-01	1.31E-04	4.27E-04	9.06E-04	9.24E-06	3.01E-02	2.64E-06	4.62E-06	6.60E-07	1.46E-03	1.05E-03
416459.9	3743788	45.230	2.10E-01	1.29E-04	4.21E-04	8.94E-04	9.12E-06	2.97E-02	2.60E-06	4.56E-06	6.51E-07	1.44E-03	1.03E-03
416479.9	3743788	43.280	2.01E-01	1.23E-04	4.03E-04	8.55E-04	8.72E-06	2.85E-02	2.49E-06	4.36E-06	6.23E-07	1.38E-03	9.89E-04
416499.9	3743788	42.462	1.97E-01	1.21E-04	3.96E-04	8.39E-04	8.56E-06	2.79E-02	2.45E-06	4.28E-06	6.11E-07	1.35E-03	9.70E-04
416340.7	3743806	44.356	2.06E-01	1.26E-04	4.13E-04	8.77E-04	8.94E-06	2.92E-02	2.55E-06	4.47E-06	6.39E-07	1.41E-03	1.01E-03
416359.9	3743808	48.274	2.24E-01	1.38E-04	4.50E-04	9.54E-04	9.73E-06	3.17E-02	2.78E-06	4.86E-06	6.95E-07	1.54E-03	1.10E-03
416379.9	3743808	50.191	2.33E-01	1.43E-04	4.67E-04	9.92E-04	1.01E-05	3.30E-02	2.89E-06	5.06E-06	7.23E-07	1.60E-03	1.15E-03
416399.9	3743808	48.926	2.27E-01	1.39E-04	4.56E-04	9.67E-04	9.86E-06	3.22E-02	2.82E-06	4.93E-06	7.04E-07	1.56E-03	1.12E-03
416419.9	3743808	47.862	2.22E-01	1.36E-04	4.46E-04	9.46E-04	9.65E-06	3.15E-02	2.76E-06	4.82E-06	6.89E-07	1.52E-03	1.09E-03
416439.9	3743808	46.742	2.17E-01	1.33E-04	4.35E-04	9.24E-04	9.42E-06	3.07E-02	2.69E-06	4.71E-06	6.73E-07	1.49E-03	1.07E-03
416459.9	3743808	45.948	2.13E-01	1.31E-04	4.28E-04	9.08E-04	9.26E-06	3.02E-02	2.65E-06	4.63E-06	6.61E-07	1.46E-03	1.05E-03
416479.9	3743808	44.612	2.07E-01	1.27E-04	4.16E-04	8.82E-04	8.99E-06	2.93E-02	2.57E-06	4.50E-06	6.42E-07	1.42E-03	1.02E-03
416495.3	3743808	43.349	2.01E-01	1.24E-04	4.04E-04	8.57E-04	8.74E-06	2.85E-02	2.50E-06	4.37E-06	6.24E-07	1.38E-03	9.90E-04
416333.5	3743827	39.474	1.83E-01	1.13E-04	3.68E-04	7.80E-04	7.96E-06	2.60E-02	2.27E-06	3.98E-06	5.68E-07	1.26E-03	9.02E-04
416343.9	3743828	41.654	1.93E-01	1.19E-04	3.88E-04	8.23E-04	8.40E-06	2.74E-02	2.40E-06	4.20E-06	6.00E-07	1.33E-03	9.52E-04
416359.9	3743828	45.652	2.12E-01	1.30E-04	4.25E-04	9.02E-04	9.20E-06	3.00E-02	2.63E-06	4.60E-06	6.57E-07	1.45E-03	1.04E-03
416379.9	3743828	48.044	2.23E-01	1.37E-04	4.48E-04	9.50E-04	9.68E-06	3.16E-02	2.77E-06	4.84E-06	6.92E-07	1.53E-03	1.10E-03
416399.9	3743828	47.839	2.22E-01	1.36E-04	4.46E-04	9.46E-04	9.64E-06	3.15E-02	2.75E-06	4.82E-06	6.89E-07	1.52E-03	1.09E-03
416419.9	3743828	47.560	2.21E-01	1.36E-04	4.43E-04	9.40E-04	9.59E-06	3.13E-02	2.74E-06	4.79E-06	6.85E-07	1.51E-03	1.09E-03
416439.9	3743828	47.198	2.19E-01	1.35E-04	4.40E-04	9.33E-04	9.51E-06	3.10E-02	2.72E-06	4.76E-06	6.79E-07	1.50E-03	1.08E-03

416459.9	3743828	46.155	2.14E-01	1.32E-04	4.30E-04	9.12E-04	9.30E-06	3.03E-02	2.66E-06	4.65E-06	6.64E-07	1.47E-03	1.05E-03
416479.9	3743828	44.835	2.08E-01	1.28E-04	4.18E-04	8.86E-04	9.04E-06	2.95E-02	2.58E-06	4.52E-06	6.45E-07	1.43E-03	1.02E-03
416327.7	3743848	34.865	1.62E-01	9.94E-05	3.25E-04	6.89E-04	7.03E-06	2.29E-02	2.01E-06	3.51E-06	5.02E-07	1.11E-03	7.97E-04
416339.9	3743848	37.910	1.76E-01	1.08E-04	3.53E-04	7.49E-04	7.64E-06	2.49E-02	2.18E-06	3.82E-06	5.46E-07	1.21E-03	8.66E-04
416359.9	3743848	41.638	1.93E-01	1.19E-04	3.88E-04	8.23E-04	8.39E-06	2.74E-02	2.40E-06	4.20E-06	5.99E-07	1.33E-03	9.51E-04
416379.9	3743848	45.109	2.09E-01	1.29E-04	4.20E-04	8.92E-04	9.09E-06	2.97E-02	2.60E-06	4.55E-06	6.49E-07	1.44E-03	1.03E-03
416399.9	3743848	46.399	2.15E-01	1.32E-04	4.32E-04	9.17E-04	9.35E-06	3.05E-02	2.67E-06	4.68E-06	6.68E-07	1.48E-03	1.06E-03
416419.9	3743848	46.261	2.15E-01	1.32E-04	4.31E-04	9.14E-04	9.32E-06	3.04E-02	2.66E-06	4.66E-06	6.66E-07	1.47E-03	1.06E-03
416439.9	3743848	45.664	2.12E-01	1.30E-04	4.25E-04	9.03E-04	9.20E-06	3.00E-02	2.63E-06	4.60E-06	6.57E-07	1.45E-03	1.04E-03
416459.9	3743848	45.501	2.11E-01	1.30E-04	4.24E-04	8.99E-04	9.17E-06	2.99E-02	2.62E-06	4.59E-06	6.55E-07	1.45E-03	1.04E-03
416479.9	3743848	44.853	2.08E-01	1.28E-04	4.18E-04	8.87E-04	9.04E-06	2.95E-02	2.58E-06	4.52E-06	6.46E-07	1.43E-03	1.02E-03
416323	3743868	32.716	1.52E-01	9.33E-05	3.05E-04	6.47E-04	6.59E-06	2.15E-02	1.88E-06	3.30E-06	4.71E-07	1.04E-03	7.47E-04
416339.9	3743868	33.151	1.54E-01	9.45E-05	3.09E-04	6.55E-04	6.68E-06	2.18E-02	1.91E-06	3.34E-06	4.77E-07	1.06E-03	7.57E-04
416359.9	3743868	37.855	1.76E-01	1.08E-04	3.53E-04	7.48E-04	7.63E-06	2.49E-02	2.18E-06	3.81E-06	5.45E-07	1.20E-03	8.65E-04
416379.9	3743868	41.483	1.93E-01	1.18E-04	3.86E-04	8.20E-04	8.36E-06	2.73E-02	2.39E-06	4.18E-06	5.97E-07	1.32E-03	9.48E-04
416399.9	3743868	43.168	2.00E-01	1.23E-04	4.02E-04	8.53E-04	8.70E-06	2.84E-02	2.49E-06	4.35E-06	6.21E-07	1.37E-03	9.86E-04
416419.9	3743868	44.144	2.05E-01	1.26E-04	4.11E-04	8.73E-04	8.90E-06	2.90E-02	2.54E-06	4.45E-06	6.36E-07	1.41E-03	1.01E-03
416439.9	3743868	44.417	2.06E-01	1.27E-04	4.14E-04	8.78E-04	8.95E-06	2.92E-02	2.56E-06	4.48E-06	6.39E-07	1.41E-03	1.01E-03
416459.9	3743868	44.651	2.07E-01	1.27E-04	4.16E-04	8.83E-04	9.00E-06	2.94E-02	2.57E-06	4.50E-06	6.43E-07	1.42E-03	1.02E-03
416479.9	3743868	44.852	2.08E-01	1.28E-04	4.18E-04	8.87E-04	9.04E-06	2.95E-02	2.58E-06	4.52E-06	6.46E-07	1.43E-03	1.02E-03
416319.9	3743888	35.345	1.64E-01	1.01E-04	3.29E-04	6.99E-04	7.12E-06	2.32E-02	2.04E-06	3.56E-06	5.09E-07	1.13E-03	8.08E-04
416339.9	3743888	36.674	1.70E-01	1.05E-04	3.42E-04	7.25E-04	7.39E-06	2.41E-02	2.11E-06	3.70E-06	5.28E-07	1.17E-03	8.38E-04
416359.9	3743888	36.840	1.71E-01	1.05E-04	3.43E-04	7.28E-04	7.43E-06	2.42E-02	2.12E-06	3.71E-06	5.30E-07	1.17E-03	8.42E-04
416379.9	3743888	38.045	1.77E-01	1.08E-04	3.54E-04	7.52E-04	7.67E-06	2.50E-02	2.19E-06	3.83E-06	5.48E-07	1.21E-03	8.69E-04
416399.9	3743888	40.991	1.90E-01	1.17E-04	3.82E-04	8.10E-04	8.26E-06	2.69E-02	2.36E-06	4.13E-06	5.90E-07	1.30E-03	9.37E-04
416419.9	3743888	42.674	1.98E-01	1.22E-04	3.97E-04	8.43E-04	8.60E-06	2.81E-02	2.46E-06	4.30E-06	6.14E-07	1.36E-03	9.75E-04
416439.9	3743888	43.639	2.03E-01	1.24E-04	4.06E-04	8.63E-04	8.80E-06	2.87E-02	2.51E-06	4.40E-06	6.28E-07	1.39E-03	9.97E-04
416459.9	3743888	44.126	2.05E-01	1.26E-04	4.11E-04	8.72E-04	8.89E-06	2.90E-02	2.54E-06	4.45E-06	6.35E-07	1.40E-03	1.01E-03
416474.9	3743887	44.517	2.07E-01	1.27E-04	4.15E-04	8.80E-04	8.97E-06	2.93E-02	2.56E-06	4.49E-06	6.41E-07	1.42E-03	1.02E-03
416312.3	3743907	41.625	1.93E-01	1.19E-04	3.88E-04	8.23E-04	8.39E-06	2.74E-02	2.40E-06	4.19E-06	5.99E-07	1.32E-03	9.51E-04
416324.4	3743908	43.271	2.01E-01	1.23E-04	4.03E-04	8.55E-04	8.72E-06	2.84E-02	2.49E-06	4.36E-06	6.23E-07	1.38E-03	9.89E-04
416339.9	3743908	43.245	2.01E-01	1.23E-04	4.03E-04	8.55E-04	8.72E-06	2.84E-02	2.49E-06	4.36E-06	6.23E-07	1.38E-03	9.88E-04
416359.9	3743908	40.746	1.89E-01	1.16E-04	3.80E-04	8.05E-04	8.21E-06	2.68E-02	2.35E-06	4.11E-06	5.87E-07	1.30E-03	9.31E-04
416379.9	3743908	37.099	1.72E-01	1.06E-04	3.46E-04	7.33E-04	7.48E-06	2.44E-02	2.14E-06	3.74E-06	5.34E-07	1.18E-03	8.48E-04
416399.9	3743908	39.501	1.83E-01	1.13E-04	3.68E-04	7.81E-04	7.96E-06	2.60E-02	2.27E-06	3.98E-06	5.69E-07	1.26E-03	9.02E-04
416419.9	3743908	41.978	1.95E-01	1.20E-04	3.91E-04	8.30E-04	8.46E-06	2.76E-02	2.42E-06	4.23E-06	6.04E-07	1.34E-03	9.59E-04
416439.9	3743908	43.250	2.01E-01	1.23E-04	4.03E-04	8.55E-04	8.72E-06	2.84E-02	2.49E-06	4.36E-06	6.23E-07	1.38E-03	9.88E-04
416459.9	3743908	43.468	2.02E-01	1.24E-04	4.05E-04	8.59E-04	8.76E-06	2.86E-02	2.50E-06	4.38E-06	6.26E-07	1.38E-03	9.93E-04

416306.6	3743928	50.376	2.34E-01	1.44E-04	4.69E-04	9.96E-04	1.02E-05	3.31E-02	2.90E-06	5.08E-06	7.25E-07	1.60E-03	1.15E-03
416322.2	3743928	50.142	2.33E-01	1.43E-04	4.67E-04	9.91E-04	1.01E-05	3.30E-02	2.89E-06	5.05E-06	7.22E-07	1.60E-03	1.15E-03
416339.9	3743928	47.815	2.22E-01	1.36E-04	4.45E-04	9.45E-04	9.64E-06	3.14E-02	2.75E-06	4.82E-06	6.88E-07	1.52E-03	1.09E-03
416359.9	3743928	43.448	2.02E-01	1.24E-04	4.05E-04	8.59E-04	8.76E-06	2.86E-02	2.50E-06	4.38E-06	6.25E-07	1.38E-03	9.93E-04
416379.9	3743928	38.707	1.80E-01	1.10E-04	3.61E-04	7.65E-04	7.80E-06	2.54E-02	2.23E-06	3.90E-06	5.57E-07	1.23E-03	8.84E-04
416399.9	3743928	38.730	1.80E-01	1.10E-04	3.61E-04	7.66E-04	7.81E-06	2.55E-02	2.23E-06	3.90E-06	5.58E-07	1.23E-03	8.85E-04
416419.9	3743928	41.496	1.93E-01	1.18E-04	3.87E-04	8.20E-04	8.36E-06	2.73E-02	2.39E-06	4.18E-06	5.97E-07	1.32E-03	9.48E-04
416439.9	3743928	42.968	2.00E-01	1.22E-04	4.00E-04	8.49E-04	8.66E-06	2.82E-02	2.47E-06	4.33E-06	6.19E-07	1.37E-03	9.82E-04
416459.9	3743928	43.371	2.01E-01	1.24E-04	4.04E-04	8.57E-04	8.74E-06	2.85E-02	2.50E-06	4.37E-06	6.24E-07	1.38E-03	9.91E-04
416301.9	3743948	56.950	2.64E-01	1.62E-04	5.30E-04	1.13E-03	1.15E-05	3.74E-02	3.28E-06	5.74E-06	8.20E-07	1.81E-03	1.30E-03
416319.9	3743948	54.255	2.52E-01	1.55E-04	5.05E-04	1.07E-03	1.09E-05	3.57E-02	3.12E-06	5.47E-06	7.81E-07	1.73E-03	1.24E-03
416339.9	3743948	49.422	2.29E-01	1.41E-04	4.60E-04	9.77E-04	9.96E-06	3.25E-02	2.85E-06	4.98E-06	7.11E-07	1.57E-03	1.13E-03
416359.9	3743948	45.148	2.10E-01	1.29E-04	4.21E-04	8.92E-04	9.10E-06	2.97E-02	2.60E-06	4.55E-06	6.50E-07	1.44E-03	1.03E-03
416379.9	3743948	44.187	2.05E-01	1.26E-04	4.12E-04	8.73E-04	8.91E-06	2.91E-02	2.54E-06	4.45E-06	6.36E-07	1.41E-03	1.01E-03
416399.9	3743948	42.211	1.96E-01	1.20E-04	3.93E-04	8.34E-04	8.51E-06	2.78E-02	2.43E-06	4.25E-06	6.08E-07	1.34E-03	9.64E-04
416419.9	3743948	40.960	1.90E-01	1.17E-04	3.82E-04	8.10E-04	8.26E-06	2.69E-02	2.36E-06	4.13E-06	5.90E-07	1.30E-03	9.36E-04
416439.9	3743948	42.756	1.99E-01	1.22E-04	3.98E-04	8.45E-04	8.62E-06	2.81E-02	2.46E-06	4.31E-06	6.16E-07	1.36E-03	9.77E-04
416459.9	3743948	43.410	2.02E-01	1.24E-04	4.04E-04	8.58E-04	8.75E-06	2.85E-02	2.50E-06	4.37E-06	6.25E-07	1.38E-03	9.92E-04
416307.1	3743967	55.167	2.56E-01	1.57E-04	5.14E-04	1.09E-03	1.11E-05	3.63E-02	3.18E-06	5.56E-06	7.94E-07	1.76E-03	1.26E-03
416319.9	3743968	55.220	2.56E-01	1.57E-04	5.14E-04	1.09E-03	1.11E-05	3.63E-02	3.18E-06	5.56E-06	7.95E-07	1.76E-03	1.26E-03
416339.9	3743968	53.896	2.50E-01	1.54E-04	5.02E-04	1.07E-03	1.09E-05	3.54E-02	3.10E-06	5.43E-06	7.76E-07	1.72E-03	1.23E-03
416359.9	3743968	53.889	2.50E-01	1.54E-04	5.02E-04	1.07E-03	1.09E-05	3.54E-02	3.10E-06	5.43E-06	7.76E-07	1.72E-03	1.23E-03
416379.9	3743968	51.661	2.40E-01	1.47E-04	4.81E-04	1.02E-03	1.04E-05	3.40E-02	2.97E-06	5.21E-06	7.44E-07	1.64E-03	1.18E-03
416399.9	3743968	48.246	2.24E-01	1.38E-04	4.49E-04	9.54E-04	9.72E-06	3.17E-02	2.78E-06	4.86E-06	6.95E-07	1.54E-03	1.10E-03
416419.9	3743968	44.520	2.07E-01	1.27E-04	4.15E-04	8.80E-04	8.97E-06	2.93E-02	2.56E-06	4.49E-06	6.41E-07	1.42E-03	1.02E-03
416439.9	3743968	42.898	1.99E-01	1.22E-04	4.00E-04	8.48E-04	8.65E-06	2.82E-02	2.47E-06	4.32E-06	6.18E-07	1.37E-03	9.80E-04
416319.9	3743988	63.427	2.94E-01	1.81E-04	5.91E-04	1.25E-03	1.28E-05	4.17E-02	3.65E-06	6.39E-06	9.13E-07	2.02E-03	1.45E-03
416339.9	3743988	58.413	2.71E-01	1.67E-04	5.44E-04	1.15E-03	1.18E-05	3.84E-02	3.36E-06	5.89E-06	8.41E-07	1.86E-03	1.33E-03
416359.9	3743988	55.487	2.58E-01	1.58E-04	5.17E-04	1.10E-03	1.12E-05	3.65E-02	3.20E-06	5.59E-06	7.99E-07	1.77E-03	1.27E-03
416379.9	3743988	52.625	2.44E-01	1.50E-04	4.90E-04	1.04E-03	1.06E-05	3.46E-02	3.03E-06	5.30E-06	7.58E-07	1.68E-03	1.20E-03
416399.9	3743988	49.194	2.28E-01	1.40E-04	4.58E-04	9.72E-04	9.91E-06	3.23E-02	2.83E-06	4.96E-06	7.08E-07	1.57E-03	1.12E-03
416419.9	3743988	45.630	2.12E-01	1.30E-04	4.25E-04	9.02E-04	9.20E-06	3.00E-02	2.63E-06	4.60E-06	6.57E-07	1.45E-03	1.04E-03
416439.9	3743988	42.932	1.99E-01	1.22E-04	4.00E-04	8.49E-04	8.65E-06	2.82E-02	2.47E-06	4.33E-06	6.18E-07	1.37E-03	9.81E-04
416379.9	3744008	56.853	2.64E-01	1.62E-04	5.30E-04	1.12E-03	1.15E-05	3.74E-02	3.27E-06	5.73E-06	8.18E-07	1.81E-03	1.30E-03
416399.9	3744008	53.808	2.50E-01	1.53E-04	5.01E-04	1.06E-03	1.08E-05	3.54E-02	3.10E-06	5.42E-06	7.75E-07	1.71E-03	1.23E-03
416419.9	3744008	49.375	2.29E-01	1.41E-04	4.60E-04	9.76E-04	9.95E-06	3.25E-02	2.84E-06	4.98E-06	7.11E-07	1.57E-03	1.13E-03
416439.9	3744008	45.200	2.10E-01	1.29E-04	4.21E-04	8.93E-04	9.11E-06	2.97E-02	2.60E-06	4.55E-06	6.51E-07	1.44E-03	1.03E-03
416436.8	3744021	45.188	2.10E-01	1.29E-04	4.21E-04	8.93E-04	9.11E-06	2.97E-02	2.60E-06	4.55E-06	6.51E-07	1.44E-03	1.03E-03
416510.3	3743748	40.914	1.90E-01	1.17E-04	3.81E-04	8.09E-04	8.25E-06	2.69E-02	2.36E-06	4.12E-06	5.89E-07	1.30E-03	9.35E-04
416297.6	3743967	56.262	2.61E-01	1.60E-04	5.24E-04	1.11E-03	1.13E-05	3.70E-02	3.24E-06	5.67E-06	8.10E-07	1.79E-03	1.29E-03
416305.1	3743986	65.655	3.05E-01	1.87E-04	6.12E-04	1.30E-03	1.32E-05	4.32E-02	3.78E-06	6.62E-06	9.45E-07	2.09E-03	1.50E-03
416291.3	3743986	66.503	3.09E-01	1.90E-04	6.19E-04	1.31E-03	1.34E-05	4.37E-02	3.83E-06	6.70E-06	9.57E-07	2.12E-03	1.52E-03
416358.9	3744003	58.530	2.72E-01	1.67E-04	5.45E-04	1.16E-03	1.18E-05	3.85E-02	3.37E-06	5.90E-06	8.43E-07	1.86E-03	1.34E-03
416339	3743999	59.180	2.75E-01	1.69E-04	5.51E-04	1.17E-03	1.19E-05	3.89E-02	3.41E-06	5.96E-06	8.52E-07	1.88E-03	1.35E-03
416319	3743996	64.622	3.00E-01	1.84E-04	6.02E-04	1.28E-03	1.30E-05	4.25E-02	3.72E-06	6.51E-06	9.30E-07	2.06E-03	1.48E-03

901East South Street Project

Estimation of Cancer Risk at the Maximum Impacted Sensitive Receptor

UTMX (m) 416381.51
UTMy (m) 3743647.54

Cancer Risk = C_{TAC} x CPF_{TAC} x DBR x ED x EF x ASF x TAH / AT

Maximum Cancer Risk **22.5 /million)**

C_{TAC} = annual average of TAC (ug/m3)
CPF_{TAC} = cancer potency factor for TAC (mg/kg-day)
DBR = daily breathing rate (l/kg-day)
ED = exposure duration (years)
EF = exposure frequency (days/year)
ASF = age sensitivity factors
TAH = time at factors (%)
AT = averaging time (days)

Cancer Potency Factors	
TAC	**CPF**
Benzene	0.1
Formadehyde	0.021
Naphthalene	0.12
PAH, total	3.9
1,3-butadiene	0.6
Acetaldehyde	0.01
Ethylbenzene	0.0087
MTBE	0.0018
DPM	1.1

Inhalation Factors							
Age Group	**DBR**	**ASF**	**ED**	**TAH**	**EF**	**AT**	**Unit Risk Factor**
3rd Trimester	361	10	0.25	1	350	25550	12.36
0 to 2 years	1090	10	2	1	350	25550	298.63
3 to 16 years	571	3	14	1	350	25550	328.52
>16 years	261	1	14	0.73	350	25550	36.54
						Total	676.05

		Rail Line and Recycle Facility DPM Concentration	Rail Line and Recycle Facility Cancer Risk from DPM	Stationary Source															
Year	**Year**	**(ug/m3)**	**(/million)**	**Benzene Concentration (ug/m3)**	**Cancer Risk from Benzene (/million)**	**Formaldehyde Concentration (ug/m3)**	**Cancer Risk from Formaldehyde (/million)**	**Naphthalene Concentration (ug/m3)**	**Cancer Risk from Naphthalene (/million)**	**PAH, Total Concentration (ug/m3)**	**Cancer Risk from PAH, Total (/million)**	**1,3 Butadiene Concentration (ug/m3)**	**Cancer Risk from 1,3 Butadiene (/million)**	**Acetaldehyde Conentration (ug/m3)**	**Cancer Risk from Acetaldehyde (/million)**	**Ethylbenzene Concentration (ug/m3)**	**Cancer Risk from Ethylbenzene (/million)**	**MTBE Concentration (ug/m3)**	**Cancer Risk from MTBE (/million)**
3rd Trimester	2019	0.0543	0.7	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
1	2019	0.0543	8.9	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
2	2020	0.0270	4.4	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
3	2021	0.0256	0.7	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
4	2022	0.0242	0.6	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
5	2023	0.0229	0.6	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
6	2024	0.0215	0.6	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
7	2025	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
8	2026	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
9	2027	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
10	2028	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
11	2029	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
12	2030	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
13	2031	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
14	2032	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
15	2033	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
16	2034	0.0201	0.5	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
17	2035	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
18	2036	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
19	2037	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
20	2038	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
21	2039	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
22	2040	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
23	2041	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
24	2042	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
25	2043	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
26	2044	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
27	2045	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
28	2046	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
29	2047	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
30	2048	0.0202	0.1	0.000016	3.69E-05	3.48E-05	1.64E-05	7.59E-07	2.05E-06	2.53E-07	2.22E-05	3.54E-07	4.79E-06	1.16E-03	2.60E-04	1.45E-05	2.84E-06	5.06E-07	2.05E-08
			2.25E+01		1.14E-03		5.10E-04		6.37E-05		6.90E-04		1.49E-04		8.07E-03		8.80E-05		6.37E-07

Health Risk Factors for Non-Cancer Reference Exposure Levels

Non-Cancer Reference Exposure Levels (REL)

CAS#	Pollutant	Chronic Non-Cancer REL (ug/m^3)
7664417	Ammonia	200
71432	Benzene	3
50000	Formadehyde	9
91203	Naphthalene	9
106990	1,3-butadiene	2
75070	Acetaldehyde	140
107028	Acrolein	0.35
7664417	Arsenic	0.015
7440439	Cadmium	0.02
7782505	Chlorine	0.2
18540299	Chromium VI	0.2
100414	Ethylbenzene	2000
110543	hexane	7000
7439965	Manganese	0.09
7439976	Mercury	0.03
67561	Methanol	4000
7440020	Nickel	0.014
7782492	Selenium	20
100425	Styrene	900
108883	Toluene	300
1330207	Xylenes	700
1634044	MTBE	8000

CAS#	Pollutant	Acute Non-Cancer REL (ug/m^3)
7664417	Ammonia	3200
71432	Benzene	27
50000	Formadehyde	55
106990	1,3-butadiene	660
75070	Acetaldehyde	470
107028	Acrolein	2.5
7664417	Arsenic	0.2
7782505	Chlorine	210
744-5-8	Copper	100
7439976	Mercury	0.6
67561	Methanol	28000
7440020	Nickel	0.2
100425	Styrene	21000
108883	Toluene	37000
1330207	Xylenes	22000
78-93-3	MEK	13000

901 East South Street Project

Estimation of Chronic Non-Cancer Hazard Index

Receptor Location at the Maximum Impacted Residence

UTMx (m)	416381.51
UTMy (m)	3743647.54

TAC	Chronic Non-Cancer Hazard Index
DPM	1.40E-02
Ammonia	4.08E-05
Acrolein	1.43E-05
Benzene	5.46E-06
Chlorine	5.06E-07
Formaldehyde	3.86E-06
Hexane	1.39E-09
Methanol	4.43E-11
Naphthalene	8.44E-08
1,3-Butadiene	1.77E-07
Acetaldehyde	8.26E-06
Ethylbenzene	7.24E-09
Styrene	2.81E-11
Toluene	1.87E-07
Xylenes	5.74E-08
MTBE	6.33E-11
Total	**1.40E-02**

901 East South Street Project

Estimation of Acute Non-Cancer Hazard Index

Receptor Location at the Maximum Impacted Residence

UTMx (m)	416381.51
UTMy (m)	3743647.54

TAC	Acute Non-Cancer Hazard Index
Rail Line	3.83E-03
Recycle Facility	2.08E-04
Stationary Source	
Ammonia	6.63E-05
Acrolein	5.21E-05
Benzene	1.58E-05
Formadehyde	1.64E-05
1,3-butadiene	1.40E-08
Acetaldehyde	6.40E-05
Chlorine	1.25E-08
Methanol	1.65E-10
Styrene	3.13E-11
Toluene	3.93E-08
Xylenes	4.75E-08
Total	4.25E-03