HEALTH RISK ASSESSMENT

SEASIDE SENIOR LIVING PROJECT

CITY OF SEASIDE, CALIFORNIA

LSA

September 2015

HEALTH RISK ASSESSMENT

SEASIDE SENIOR LIVING PROJECT

CITY OF SEASIDE, CALIFORNIA

Submitted to:

City of Seaside
Resource Management Services
440 Harcourt Avenue
Seaside, California 93955

Prepared by:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614-4731
(949) 553-0666

LSA Project No. SEZ1402

LSA

September 2015

TABLE OF CONTENTS

TABLES

APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

AAQS	ambient air quality standards
AB	Assembly Bill
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
ARB	California Air Resources Board
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CCR	California Code of Regulations
City	City of Seaside
County	Monterey County
DPM	diesel particulate matter
EPA	United States Environmental Protection Agency
GHG	greenhouse gas
GVWR	gross vehicle weight rating
HARP2	Hotspots Analysis and Reporting Program, Version 2
HI	hazard index
HRA	Health Risk Assessment
LSA	LSA Associates, Inc.
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MEI	maximum exposed individual
MICR	maximum individual cancer risk
NCCAB	North Central Coast Air Basin
OEHHA	Office of Environmental Health Hazard Assessment
PM_{10}	particulate matter less than 10 microns in diameter
project	senior living project
SR-1	State Route 1
TACs	toxic air contaminants
T-BACT	toxics best available control technology

1.0 INTRODUCTION

1.1 INTRODUCTION

LSA Associates, Inc. (LSA) was retained by the City of Seaside (City), to prepare a Health Risk Assessment (HRA) for a proposed senior living facility project (proposed project) located in the City of Seaside in Monterey County (County), California.

An HRA is a process used to estimate the increased risk of health problems in people who are exposed to toxic air contaminants (TACs). An HRA combines results of studies on the health effects of various animal and human exposures to TACs with results of studies that estimate the level of people's exposures at different distances from the sources of the pollutants. The purpose of the HRA is to determine the increased cancer and non-cancer health risks from exposure to TACs from all sources near the proposed project.

The California Air Resources Board (ARB) has developed an *Air Quality and Land Use Handbook* (2005) that is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that are part of the land use decision-making process. According to the ARB Handbook, recent air pollution studies have shown an association between both respiratory and other noncancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The ARB Handbook recommends that planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses, such as homes, medical facilities, daycare centers, schools, and playgrounds.

This HRA follows the ARB Handbook recommendations and examines the short- and long-term potential health effects from emissions of TACs in the area surrounding the proposed project, primarily exhaust from traffic on the surrounding roadways.

1.2 PROJECT DESCRIPTION

The proposed project site is 5.47 acres and is situated within the boundaries of the former Fort Ord on Monterey Road at the terminus of Coe Avenue at 555 Monterey Road.

The senior living and memory care facility includes 111,237 square feet with 41 studio units, 36 one-bedroom units, 6 two-bedroom units, 13 co-habitation units, a commercial kitchen with a full service dining room, and related support services (e.g., spa, theater, hair salon). The building is separated into four neighborhoods with therapeutic kitchens, spas, and large dining and entertainment centers, in addition to standard staff offices, medical records room, and conference rooms. The facility also includes a food prep kitchen, housekeeping, storage space, and personal laundries. Outdoor spaces include courtyards and a walled-in memory garden for memory care residents. This HRA will focus on the potential health risks to any future residents and employees of the proposed facility.

1.3 EMISSIONS SOURCES

The principal source of TAC emissions for this HRA would be the exhaust from vehicles, particularly diesel-powered vehicles driven on nearby roadways. For this HRA, exhaust emissions from all gasoline- and diesel-powered traffic on State Route 1 (SR-1) are included.

2.0 SETTING

2.1 REGIONAL AIR QUALITY

The proposed project site is located in the City of Seaside, California, in the southern portion of the North Central Coast Air Basin (NCCAB), which encompasses the Counties of Santa Cruz, San Benito, and Monterey. The site is located within the jurisdiction of the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

2.1.1 Climate/Meteorology

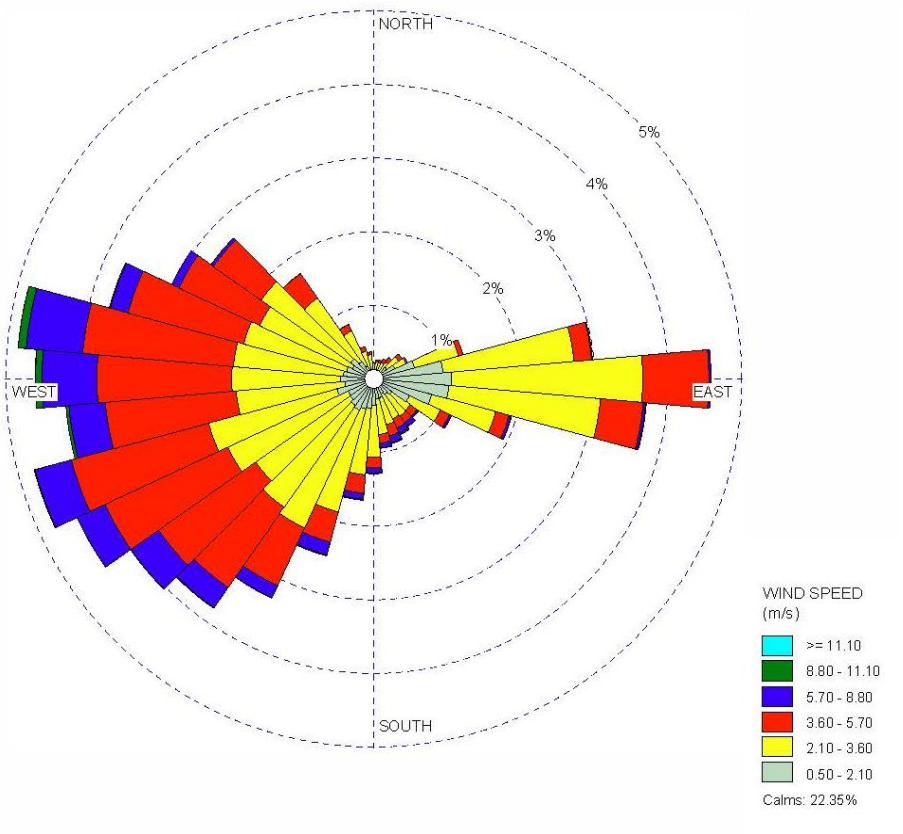
The NCCAB is generally bounded by the Diablo Range on the northeast with the southern portion of the Santa Cruz Mountains. This range forms the Santa Clara Valley, which extends into the northeastern tip of the NCCAB. Farther south, the Santa Clara Valley transitions into the San Benito Valley, which runs northwest-southeast and has the Gabilan Range as its western boundary. To the west of the Gabilan Range is Salinas Valley, which extends from Salinas at the northwest end to King City at the southeast end. The northwest portion of the NCCAB is dominated by the Santa Cruz Mountains.

The major source of air pollution in Monterey County is vehicular traffic and agricultural operations. On the Monterey Peninsula, where the City of Seaside is located, the major source of air pollution in the area is vehicles. The limited agricultural operations in the area have a minimal effect on air quality.

The following figure is the windrose from data measured at the Monterey Peninsula Airport Meteorological Station and shows the wind patterns for the proposed project area.

2.1.2 Toxic Air Contaminants

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



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

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

In December 2008, the ARB approved the Truck and Bus Regulations as part of their rulemaking authority and adopted in Title 13 (Motor Vehicles) of the California Code of Regulations (CCR).[1] These regulations are applicable to all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) of 14,000 pounds or more (Class 4 or greater) that are privately or federally owned

[1] California Air Resources Board. Statewide Truck and Bus Regulations. Website: http://www.arb.ca.gov/regact/2008/truckbus08/truckbus08.htm, accessed September 2015.

and for privately and publicly owned school buses.[1] These regulations are designed to reduce emissions of particulate matter and oxides of nitrogen from existing diesel vehicles operating in California. Compliance scheduling is phased for light and heavy vehicles depending on the age of the vehicle engine. Full compliance across vehicle ratings is set in 2023. Regulations affect the following areas:

- Auxiliary Power Units
- Port and Rail Yard Trucks
- Emissions Control Label Inspection
- Greenhouse Gas (GHG) Emissions Reductions
- Heavy-Duty Diesel Vehicle Inspection
- Idling Reduction
- Periodic Smoke Inspection
- Public and Utility Agencies
- Public Transit Agencies
- School Bus Fleets
- Solid Waste Collection Vehicles
- Transport Refrigeration Units

Starting in 2015, lighter trucks (between 14,000 and 26,000 GVWR) are required to replace the vehicle and/or engine if the engine manufacture date is from 1995 or earlier. Newer engines will be required to be replaced on a graduated scale until 2023 when all engines will be required to meet model year 2010 emissions or equivalent. Heavier truck operators (greater than 26,000 GVWR) have options for meeting the regulation requirements through 2023. Vehicles with engine years earlier than 1994 and 1995 will be required to be replaced in 2015 and 2016, respectively. Operators with engine years between 1996 and 2006 have the option to install a particulate filter before being required to replace the engine towards the compliance deadline. Later engines are considered compliant in 2023 when they demonstrate 2010 emissions levels or equivalent.

[1] California Air Resources Board. *Truck and Bus Regulation Compliance Requirements Summary*. Website: http://www.arb.ca.gov/msprog/onrdiesel/documents/FSRegSum.pdf, last updated August 29, 2014, accessed September 2015.

3.0 THRESHOLDS OF SIGNIFICANCE

Both the State and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered to be a prudent risk management level. If T-BACT has been applied, the individual cancer risk to the maximum exposed individual (MEI) must not exceed 10 in 1 million in order for an impact to be determined not to be significant.

Airborne impacts are also derived from materials considered to be a nuisance for which there may not be associated standards. Odors or the deposition of large diameter dust particles outside the particulate matter less than 10 microns in diameter (PM_{10}) size range would be included in this category.

The following limits for maximum individual cancer risk (MICR), and noncancer acute and chronic hazard index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of an MEI contracting cancer as a result of exposure to TACs over a period of 70 years for adult residents and 9 years for children. The MICR calculations include multipathway consideration, when applicable.
- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multipathway consideration, when applicable.
- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level.

4.0 IMPACTS

4.1 HEALTH RISK ASSESSMENT

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

This HRA has been conducted due to the close proximity of the proposed project to the existing SR-1, a source of TACs from vehicle exhaust. The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM.

Fortunately, improvements to diesel fuel and diesel engines have already reduced emissions of some of the contaminants. These improvements have already resulted in a 75 percent reduction in particle emissions from diesel-powered trucks and other equipment (as compared to 2000 levels), and by 2020, when fully implemented, they will result in an 85 percent reduction.[1] These improvements are anticipated to continue into the foreseeable future. However, to be conservative, other than what is built into the EMFAC2014[2] model, none of these anticipated improvements are included in this HRA. Appendix A provides the details of this emissions factor derivation and shows the development of the exhaust emission rates for vehicles driving on SR-1.

SR-1 vehicle emissions were characterized for the HRA analysis using California Department of Transportation (Caltrans) traffic volume and vehicle type data for 2002 through 2013 (the most recent data available) projected linearly to 2020. This year was chosen as a conservative representative for the 30-year residential exposure period (2015–2045). While the median year is 2030, using 2020 data better represents the higher emissions in the earlier portion of the 30-year residential exposure period. The data showed that an average of 67,630 vehicles (including 1,460 two-axle trucks, 426 three-axle trucks, 88 four-axle trucks, and 460 trucks with more than four axles) would travel the section of

1 CalEPA OEHHA and American Lung Association of California. 2002. *Health Effects of Diesel Exhaust.* April.

2 The ARB maintains the EMission FACtors (EMFAC) model, which is approved by the United States Environmental Protection Agency (EPA) for developing on-road motor vehicle emission inventories and conformity analyses in California. EMFAC models on-road mobile source emissions under multiple temporal and spatial scales. It produces composite emission factors for specific California geographic areas.

SR-1 near the proposed project site daily. The ARB model, EMFAC2014, was used to determine gasoline and diesel particulate emission factors (also referred to as PM_{10} emission factors) for the vehicles operating on SR-1.

4.2 EXPOSURE QUANTIFICATION

In order to assess the impact of TAC emissions on individuals who will live and work in the proposed senior living facility, air dispersion modeling utilizing the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was performed. The model is approved by the EPA when estimating the air quality impacts associated with point and fugitive sources in simple and complex terrain. The model was used to calculate the annual average and short-duration (e.g., 1-hour) pollutant concentrations resulting from vehicle exhaust from vehicles operating on the SR-1. Details of these inputs are shown in Appendix A.

For this HRA, a series of volume sources were used to represent on-road mobile source activity for each lane of SR-1. Vertical (sigma z) dispersion parameters were developed by approximating mixing zone residence time and quantifying the initial vertical term as described in the EPA guidance. Horizontal (sigma y) dispersion parameters were generated by dividing the source separation distance by a standard deviation of 2.15, again as described in the EPA guidance.

The model requires additional input parameters, including local meteorology. Due to the model's sensitivity to individual parameters such as wind speed, temperature, and direction, the EPA recommends that meteorological data used as input for dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. As such, the 5 years of meteorological data from the Monterey Peninsula Airport monitoring station (the nearest available) that were used in the modeling for this HRA represent local weather conditions and prevailing winds.

The modeling analysis also considered the spatial distribution of each source in relation to the proposed site boundary. Receptors were placed in a grid covering the proposed project site to characterize the risk levels throughout the proposed project site.

The ARB Hotspots Analysis and Reporting Program (HARP2) model is a tool that assists with the programmatic requirements of the Air Toxics Hot Spots Program. HARP2 was used to translate the TAC concentrations from AERMOD into long-term carcinogenic and chronic and short-term acute health risk levels.

Appendix A contains the HRA emissions worksheets, a list of the receptors that represent locations on the proposed project site, and select pages from the AERMOD output. Appendix B includes the HARP2 report files for this HRA.

4.2.1 Acute Project-Related Emission Impacts

While exposure to diesel exhaust can have immediate health effects, according to the rulemaking on *Identifying Particulate Emissions from Diesel-Fueled Engines as a Toxic Air Contaminant* (ARB 1998), the available data from studies of humans exposed to diesel exhaust are not sufficient for deriving an acute noncancer health risk guidance value. While there is no acute noncancer health risk

guidance value for diesel emissions, there is an acute noncancer health risk guidance value for emissions from gasoline-powered vehicles. The acute inhalation health risks from all sources to the future residents of the proposed project are shown in Table A. The acute HI for both residents and workers would be 0.032, which is less than the threshold of 1.0.

Table A: Health Risk Levels for Residents of the Proposed Project

Location	Maximum Cancer Risk (risk per million)	Maximum Noncancer Chronic Risk (Hazard Index)	Maximum Noncancer Acute Risk (Hazard Index)
30-year resident exposure	1.9	0.0081	0.032
25-Year Worker exposure	0.91		
MBUAPCD Significance Threshold	**10**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: Compiled by LSA Associates, Inc. (September 2015).
MBUAPCD = Monterey Bay Unified Air Pollution Control District

4.2.2 Carcinogenic and Chronic Project-Related Emission Impacts

The carcinogenic and chronic inhalation health risks at the proposed project are also shown in Table A. Any adult living at the proposed project for 30 years (considered a conservative period of time for an individual to live in any one residence) would be exposed to an unmitigated inhalation cancer risk of a maximum of 1.9 in 1 million, which is less than the threshold of 10 in 1 million. Similarly, any worker at the proposed project for 25 years would be exposed to an unmitigated inhalation cancer risk of a maximum of 0.91 in 1 million, which is also less than the threshold of 10 in 1 million. The chronic HI for both residents and workers would be 0.0081, which is less than the threshold of 1.0. The carcinogenic health risk levels would be less than significant for all residents and workers of this proposed project.

5.0 REFERENCES

California Air Resources Board. 2003a. *HotSpots Assessment and Reporting Program*. December 31.

———. 2003b. *Air Resources Board Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk*. October 9.

———. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April.

———. 1998. *Identifying Particulate Emissions from Diesel-Fueled Engines as a Toxic Air Contaminant*, August. Website: http://www.arb.ca.gov/regact/diesltac/diesltac.htm, accessed September 2015.

———. 2012–2014 Air Quality Data. Website: http://www.arb.ca.gov/adam/welcome.html, accessed September 2015.

———. California Air Toxics Program – Background. California Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). Website: http://www.arb.ca.gov/toxics/background.htm, accessed September 2015.

———. Statewide Truck and Bus Regulations. Website: http://www.arb.ca.gov/regact/2008/truckbus08/truckbus08.htm, accessed September 2015. (ARB last reviewed this webpage on January 8, 2014.)

———. Toxic Air Contaminant Identification List. Website: http://www.arb.ca.gov/toxics/id/taclist.htm, accessed September 2015.

———. Truck and Bus Regulation Compliance Requirements Summary. Website: http://www.arb.ca.gov/msprog/onrdiesel/documents/FSRegSum.pdf, last updated August 29, 2014, accessed September 2015

California Environmental Protection Agency (CalEPA), Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines.* February. Website: http://oehha.ca.gov/air/hot_spots/hotspots2015.html, accessed September 2015.

California Environmental Protection Agency (CalEPA), Office of Environmental Health Hazard Assessment (OEHHA) and the American Lung Association of California. 2002. *Health Effects of Diesel Exhaust*. April. Website: http://oehha.ca.gov/public_info/facts/dieselfacts.html, accessed September 2015.

South Coast Air Quality Management District (SCAQMD). 2011. *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act,* June. Website: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588_guidelines.pdf, accessed September 2015.

United States Code. 2010. Title 42, Section 7412(b), subsection (b) of Section 112. Website: http://www.gpo.gov/fdsys/pkg/USCODE-2010-title42/html/USCODE-2010-title42-chap85.htm, accessed September 2015.

United States Environmental Protection Agency (EPA). 1991. *Risk Assessment for Toxic Air Pollutants: A Citizen's Guide,* EPA #450/3-90-024. March.

———. 1999. *Integrated Urban Air Toxics Strategy.* July. Website: http://www2.epa.gov/urban-air-toxics/integrated-urban-air-toxics-strategy, accessed September 2015.

———. 2005. 40 CFR Part 51, Appendix W, *Revision to the Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions; Final Rule*. November 9. Website: http://www3.epa.gov/scram001/guidance/guide/appw_05.pdf, accessed September 2015.

Western Regional Climate Center. Website: http://www.wrcc.dri.edu, accessed September 2015.

APPENDIX A

EMISSIONS WORKSHEETS

Roadway Vehicle Exhaust Worksheet

Seaside Assisted Living Facility

State Route 1		AADT by Vehicle Category[1]			
		LDV[1]	**2-Axle[2]**	**3-Axle[3]**	**4+-Axle[4]**
		65,200	1,460	426	548
		% of Vehicles That Are Diesel-Powered[5]			
		2.3%	92.4%	92.4%	99.3%
Average		**Diesel Exhaust PM10 & PM2.5 Emissions at 65 mph (g/mi)6**			
Speed	PM_{10}	0.0018	5.01E-03	2.56E-04	1.44E-03
65 mph	$PM_{2.5}$	0.0017	4.80E-03	2.45E-04	1.38E-03
		% of Vehicles That Are Gasoline-Powered[5]			
		98%	8%	8%	0.7%
Total distance		**Gasoline Exhaust ROG Emissions at 65 mph (g/mi)7**			
covered by State	ROG	1.58E-02	3.78E-04	3.78E-04	3.51E-04
sources		**PM_{10}, $PM_{2.5}$ & ROG Exhaust Emissions (g/s)**			
	PM_{10}	8.15E-05	1.98E-04	2.95E-06	2.29E-05
4,069 meters	$PM_{2.5}$	7.73E-05	1.89E-04	2.82E-06	2.19E-05
	ROG	2.94E-02	1.22E-06	3.56E-07	3.89E-08

Number of Sources	Emission Rates per source		
	g/s	**lb/hr**	**lb/yr**
432	7.1E-07	5.6E-06	0.0492
432	6.7E-07	5.4E-06	0.0470
432	6.8E-05	5.4E-04	4.7307

[1] AADT from Caltrans website

[2] 2 axle trucks are assumed to be T6-Instate small (Medium-Heavy Duty Diesel Truck <= 26,000 lbs.)

[3] 3 axle trucks are assumed to be T6-Instate heavy (Medium-Heavy Duty Diesel Truck > 26,000 lbs.)

[4] 4+ axle trucks are assumed to be Heavy-Heavy Duty Diesel Truck (the emissions factor used is the highest of T7-Tractor, T7-OOS, and T7-POLA) trucks

[5] Source: EMFAC2014 fleet percentages.

[6] Source: EMFAC2014 emission factors for 2020 (model year aggregate)

Speciated Emissions Rates

		lb/hr	lb/yr
diesel part.	--	5.61E-06	4.92E-02
PM2.5	--	5.36E-06	4.70E-02
1,3-butadiene	0.0055	2.97E-06	2.60E-02
benzene	0.02636	1.42E-05	1.25E-01
ethylbenzene	0.01072	5.79E-06	5.07E-02
MEK	0.00019	1.03E-07	8.99E-04
naphthalene	0.00048	2.59E-07	2.27E-03
propylene	0.03128	1.69E-05	1.48E-01
styrene	0.00126	6.80E-07	5.96E-03
toluene	0.0588	3.17E-05	2.78E-01
m & p-xylene	0.0364	1.96E-05	1.72E-01

EMFAC2014 Emission Rates
Region Type: Air Basin
Region: South Coast
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Region	CalYr	Season	Veh_Class	Fuel	Speed (miles/hr)	VMT (miles/day)	ROG (gms/mile)	PM10 (gms/mile)	PM2.5 (gms/mile)	
South Coast	2020	Annual	Aggreg Light Vel	GAS	5	23,862	0.0010891	0.000134289	0.000123618	These EFs are derived by factoring EFs for LDA, LDT1, LDT2, LHD1, LHD2, MDV, MH, Motorcoach, and SBUS by VMT for each to get a weighted aggregate set of EFs.
South Coast	2020	Annual	Aggreg Light Vel	GAS	10	216,898	0.0061299	0.00076291	0.00070248	
South Coast	2020	Annual	Aggreg Light Vel	GAS	15	495,999	0.0095364	0.001165776	0.001073678	
South Coast	2020	Annual	Aggreg Light Vel	GAS	20	785,593	0.0107446	0.00131967	0.001215547	
South Coast	2020	Annual	Aggreg Light Vel	GAS	25	3,055,568	0.0313002	0.003841281	0.003538694	
South Coast	2020	Annual	Aggreg Light Vel	GAS	30	5,527,116	0.0446162	0.005473688	0.005043235	
South Coast	2020	Annual	Aggreg Light Vel	GAS	35	5,345,882	0.0357621	0.004383207	0.004039064	
South Coast	2020	Annual	Aggreg Light Vel	GAS	40	3,948,596	0.0228799	0.002813143	0.002592609	
South Coast	2020	Annual	Aggreg Light Vel	GAS	45	3,411,876	0.0180694	0.002208717	0.002035877	
South Coast	2020	Annual	Aggreg Light Vel	GAS	50	2,825,982	0.0144133	0.001757853	0.001620459	
South Coast	2020	Annual	Aggreg Light Vel	GAS	55	2,725,871	0.0141132	0.001726943	0.001591916	
South Coast	2020	Annual	Aggreg Light Vel	GAS	60	3,764,437	0.0206359	0.002566304	0.002366184	
South Coast	2020	Annual	Aggreg Light Vel	GAS	65	2,615,003	0.0157644	0.002027814	0.001869839	
South Coast	2020	Annual	Aggreg Light Vel	GAS	70	7,966	5.151E-05	6.70875E-06	6.18904E-06	
South Coast	2020	Annual	Aggreg Light Vel	DSL	5	626	0.0005268	6.6721E-05	6.21278E-05	These EFs are derived by factoring EFs for LDA, LDT1, LDT2, LHD1, LHD2, MDV, MH, Motorcoach, and SBUS by VMT for each to get a weighted aggregate set of EFs.
South Coast	2020	Annual	Aggreg Light Vel	DSL	10	5,521	0.0030111	0.000352859	0.000327537	
South Coast	2020	Annual	Aggreg Light Vel	DSL	15	12,679	0.0047077	0.000556913	0.000517531	
South Coast	2020	Annual	Aggreg Light Vel	DSL	20	17,049	0.0054492	0.000670535	0.000621496	
South Coast	2020	Annual	Aggreg Light Vel	DSL	25	54,943	0.0180632	0.002203965	0.002038889	
South Coast	2020	Annual	Aggreg Light Vel	DSL	30	90,688	0.0274969	0.003350979	0.003097857	
South Coast	2020	Annual	Aggreg Light Vel	DSL	35	87,800	0.0219832	0.002687764	0.00248533	
South Coast	2020	Annual	Aggreg Light Vel	DSL	40	70,638	0.0133861	0.001663491	0.001540793	
South Coast	2020	Annual	Aggreg Light Vel	DSL	45	72,276	0.0099662	0.001263662	0.001175115	
South Coast	2020	Annual	Aggreg Light Vel	DSL	50	66,551	0.0078251	0.001011783	0.000943591	
South Coast	2020	Annual	Aggreg Light Vel	DSL	55	62,827	0.007648	0.000986992	0.000919833	
South Coast	2020	Annual	Aggreg Light Vel	DSL	60	143,440	0.0115724	0.001834511	0.001732497	
South Coast	2020	Annual	Aggreg Light Vel	DSL	65	129,915	0.0102235	0.001826163	0.001733201	
South Coast	2020	Annual	Aggreg Light Vel	DSL	70	532	0.0003478	6.08347E-05	5.81505E-05	
South Coast	2020	Annual	T6 instate heavy	DSL	5	73.57583314	3.633E-05	1.84655E-06	1.76667E-06	
South Coast	2020	Annual	T6 instate heavy	DSL	10	1559.272577	0.0006195	3.49861E-05	3.34726E-05	
South Coast	2020	Annual	T6 instate heavy	DSL	15	2839.665728	0.0007758	5.34964E-05	5.11821E-05	
South Coast	2020	Annual	T6 instate heavy	DSL	20	3277.342223	0.0006335	5.37523E-05	5.1427E-05	
South Coast	2020	Annual	T6 instate heavy	DSL	25	10350.0653	0.0014684	0.000153437	0.0001468	
South Coast	2020	Annual	T6 instate heavy	DSL	30	17189.45347	0.0018089	0.000235091	0.000224921	
South Coast	2020	Annual	T6 instate heavy	DSL	35	19252.47386	0.0015046	0.000246316	0.00023566	
South Coast	2020	Annual	T6 instate heavy	DSL	40	16471.41849	0.0009578	0.000199779	0.000191136	
South Coast	2020	Annual	T6 instate heavy	DSL	45	23327.01612	0.0010127	0.000271777	0.00026002	
South Coast	2020	Annual	T6 instate heavy	DSL	50	24918.22072	0.0008122	0.000282564	0.000270341	
South Coast	2020	Annual	T6 instate heavy	DSL	55	23561.583	0.0005821	0.000263455	0.000252058	
South Coast	2020	Annual	T6 instate heavy	DSL	60	37051.4986	0.0008012	0.000413367	0.000395485	
South Coast	2020	Annual	T6 instate heavy	DSL	65	22948.47582	0.0004962	0.000256026	0.00024495	
South Coast	2020	Annual	T6 instate heavy	DSL	70	92.62203569	2.003E-06	1.03334E-06	9.88641E-07	
South Coast	2020	Annual	T6 instate small	DSL	5	190.9351499	0.0001886	1.4569E-05	1.39387E-05	
South Coast	2020	Annual	T6 instate small	DSL	10	4046.436588	0.0030708	0.000292257	0.000279614	
South Coast	2020	Annual	T6 instate small	DSL	15	7369.158845	0.0031749	0.000480808	0.000460008	
South Coast	2020	Annual	T6 instate small	DSL	20	8504.964224	0.0020929	0.000502219	0.000480494	
South Coast	2020	Annual	T6 instate small	DSL	25	26859.2442	0.0050208	0.001489078	0.001424661	
South Coast	2020	Annual	T6 instate small	DSL	30	44608.0015	0.0067527	0.002427698	0.002322676	
South Coast	2020	Annual	T6 instate small	DSL	35	49961.70382	0.0061681	0.002768962	0.002649178	
South Coast	2020	Annual	T6 instate small	DSL	40	42744.64351	0.0043426	0.002496408	0.002388415	
South Coast	2020	Annual	T6 instate small	DSL	45	60535.46564	0.0051234	0.00383465	0.003668764	
South Coast	2020	Annual	T6 instate small	DSL	50	64664.76839	0.0046384	0.004541784	0.004345308	
South Coast	2020	Annual	T6 instate small	DSL	55	61144.18539	0.0038063	0.004834311	0.004625181	
South Coast	2020	Annual	T6 instate small	DSL	60	96151.59134	0.005639	0.008096225	0.007745986	
South Coast	2020	Annual	T6 instate small	DSL	65	59553.1234	0.0034926	0.005014534	0.004797608	
South Coast	2020	Annual	T6 instate small	DSL	70	240.3615632	1.41E-05	2.02391E-05	1.93636E-05	
South Coast	2020	Annual	T6TS	GAS	5	30.86597986	1.885E-05	2.42115E-07	2.22616E-07	
South Coast	2020	Annual	T6TS	GAS	10	595.2733609	0.0002309	2.95205E-06	2.7143E-06	
South Coast	2020	Annual	T6TS	GAS	15	1212.573792	0.0003178	4.01083E-06	3.68781E-06	
South Coast	2020	Annual	T6TS	GAS	20	1317.737091	0.0002444	3.06686E-06	2.81986E-06	
South Coast	2020	Annual	T6TS	GAS	25	4071.007588	0.0005638	7.0322E-06	6.46585E-06	
South Coast	2020	Annual	T6TS	GAS	30	6343.640548	0.000691	8.57825E-06	7.88739E-06	
South Coast	2020	Annual	T6TS	GAS	35	6344.810579	0.0005742	7.08375E-06	6.51324E-06	
South Coast	2020	Annual	T6TS	GAS	40	5387.988556	0.0004265	5.23759E-06	4.81577E-06	
South Coast	2020	Annual	T6TS	GAS	45	7561.155961	0.0005536	6.74832E-06	6.20483E-06	
South Coast	2020	Annual	T6TS	GAS	50	7890.027105	0.0005618	6.81712E-06	6.26809E-06	
South Coast	2020	Annual	T6TS	GAS	55	7433.30631	0.0005407	6.55548E-06	6.02752E-06	
South Coast	2020	Annual	T6TS	GAS	60	9259.579834	0.0007218	8.78773E-06	8.07999E-06	
South Coast	2020	Annual	T6TS	GAS	65	4345.426296	0.000378	4.67874E-06	4.30193E-06	
South Coast	2020	Annual	T6TS	GAS	70	16.55920175	1.558E-06	1.93706E-08	1.78106E-08	
South Coast	2020	Annual	T7 NNOOS	DSL	5	113.1740559	7.667E-05	1.821E-06	1.74222E-06	
South Coast	2020	Annual	T7 NNOOS	DSL	10	2588.407031	0.0014169	3.76369E-05	3.60087E-05	
South Coast	2020	Annual	T7 NNOOS	DSL	15	3487.957171	0.0013334	4.37602E-05	4.18672E-05	
South Coast	2020	Annual	T7 NNOOS	DSL	20	4339.975135	0.0011914	4.86055E-05	4.65028E-05	
South Coast	2020	Annual	T7 NNOOS	DSL	25	13821.52927	0.0027833	0.00014125	0.00013514	

South Coast	2020	Annual	T7 NNOOS	DSL	30	24616.41011	0.0036633	0.000233272	0.00022318
South Coast	2020	Annual	T7 NNOOS	DSL	35	27347.60741	0.0030091	0.000243266	0.000232743
South Coast	2020	Annual	T7 NNOOS	DSL	40	23870.91091	0.0019434	0.000201505	0.000192788
South Coast	2020	Annual	T7 NNOOS	DSL	45	29806.62609	0.0017972	0.000241214	0.000230779
South Coast	2020	Annual	T7 NNOOS	DSL	50	31053.31225	0.0013889	0.000243278	0.000232754
South Coast	2020	Annual	T7 NNOOS	DSL	55	31800.36851	0.0010575	0.000243464	0.000232932
South Coast	2020	Annual	T7 NNOOS	DSL	60	65099.09642	0.0018691	0.000494402	0.000473015
South Coast	2020	Annual	T7 NNOOS	DSL	65	54847.08725	0.0015748	0.000416542	0.000398523
South Coast	2020	Annual	T7 NNOOS	DSL	70	232.5975389	6.678E-06	1.76649E-06	1.69007E-06
South Coast	2020	Annual	T7 NOOS	DSL	5	36.05134988	3.977E-05	1.33045E-06	1.2729E-06
South Coast	2020	Annual	T7 NOOS	DSL	10	824.5314419	0.0007329	2.72716E-05	2.60918E-05
South Coast	2020	Annual	T7 NOOS	DSL	15	1111.081187	0.0006827	3.10398E-05	2.96971E-05
South Coast	2020	Annual	T7 NOOS	DSL	20	1382.48966	0.0006041	3.38064E-05	3.23439E-05
South Coast	2020	Annual	T7 NOOS	DSL	25	4402.818151	0.0014117	9.75337E-05	9.33145E-05
South Coast	2020	Annual	T7 NOOS	DSL	30	7841.504014	0.0018625	0.0001605	0.000153557
South Coast	2020	Annual	T7 NOOS	DSL	35	8711.520986	0.0015342	0.000167037	0.000159811
South Coast	2020	Annual	T7 NOOS	DSL	40	7604.026862	0.0009944	0.00013838	0.000132394
South Coast	2020	Annual	T7 NOOS	DSL	45	9494.836051	0.0009244	0.000166109	0.000158924
South Coast	2020	Annual	T7 NOOS	DSL	50	9891.96522	0.0007201	0.000168494	0.000161205
South Coast	2020	Annual	T7 NOOS	DSL	55	10129.93837	0.0005554	0.000170114	0.000162755
South Coast	2020	Annual	T7 NOOS	DSL	60	20737.17587	0.0009907	0.000347371	0.000332344
South Coast	2020	Annual	T7 NOOS	DSL	65	17471.42061	0.0008347	0.000292666	0.000280005
South Coast	2020	Annual	T7 NOOS	DSL	70	74.09344118	3.54E-06	1.24115E-06	1.18746E-06
South Coast	2020	Annual	T7 POLA	DSL	5	8476.125947	0.0135193	0.000506817	0.000484892
South Coast	2020	Annual	T7 POLA	DSL	10	15153.05387	0.0195527	0.000815422	0.000780148
South Coast	2020	Annual	T7 POLA	DSL	15	17716.3412	0.0160365	0.000819629	0.000784172
South Coast	2020	Annual	T7 POLA	DSL	20	12866.99451	0.0083965	0.000531156	0.000508179
South Coast	2020	Annual	T7 POLA	DSL	25	14220.62559	0.0068039	0.000534207	0.000511097
South Coast	2020	Annual	T7 POLA	DSL	30	20435.13135	0.0072147	0.000707314	0.000676716
South Coast	2020	Annual	T7 POLA	DSL	35	19026.87126	0.0049582	0.000612048	0.000585571
South Coast	2020	Annual	T7 POLA	DSL	40	23529.58919	0.0045271	0.000707964	0.000677338
South Coast	2020	Annual	T7 POLA	DSL	45	28376.58363	0.004033	0.000802668	0.000767945
South Coast	2020	Annual	T7 POLA	DSL	50	20642.53334	0.0021687	0.000551214	0.000527369
South Coast	2020	Annual	T7 POLA	DSL	55	62877.70017	0.0048884	0.001590603	0.001521794
South Coast	2020	Annual	T7 POLA	DSL	60	71104.33263	0.0047583	0.001752766	0.001676942
South Coast	2020	Annual	T7 POLA	DSL	65	0	0	0	0
South Coast	2020	Annual	T7 POLA	DSL	70	0	0	0	0
South Coast	2020	Annual	T7 tractor	DSL	5	129.9186311	0.0001725	7.17392E-06	6.86358E-06
South Coast	2020	Annual	T7 tractor	DSL	10	2971.372683	0.0031745	0.000145751	0.000139445
South Coast	2020	Annual	T7 tractor	DSL	15	4004.015031	0.0029387	0.000162589	0.000155555
South Coast	2020	Annual	T7 tractor	DSL	20	4982.092619	0.0025833	0.000173939	0.000166415
South Coast	2020	Annual	T7 tractor	DSL	25	15866.48237	0.0060343	0.000497875	0.000476337
South Coast	2020	Annual	T7 tractor	DSL	30	28258.511	0.0079666	0.000814216	0.000778993
South Coast	2020	Annual	T7 tractor	DSL	35	31393.80037	0.0065678	0.000841893	0.000805473
South Coast	2020	Annual	T7 tractor	DSL	40	27402.71208	0.0042628	0.000692973	0.000662995
South Coast	2020	Annual	T7 tractor	DSL	45	34216.64116	0.0039726	0.000826805	0.000791038
South Coast	2020	Annual	T7 tractor	DSL	50	35647.77975	0.0031092	0.000834241	0.000798152
South Coast	2020	Annual	T7 tractor	DSL	55	36505.36611	0.0024189	0.000838769	0.000802484
South Coast	2020	Annual	T7 tractor	DSL	60	74730.78017	0.0043443	0.001709718	0.001635756
South Coast	2020	Annual	T7 tractor	DSL	65	62961.94335	0.0036601	0.001440466	0.001378152
South Coast	2020	Annual	T7 tractor	DSL	70	267.0113181	1.552E-05	6.10878E-06	5.84452E-06
South Coast	2020	Annual	T7IS	GAS	5	5.02023796	1.857E-05	2.66789E-08	2.45445E-08
South Coast	2020	Annual	T7IS	GAS	10	96.81902004	0.0002259	3.25998E-07	2.99934E-07
South Coast	2020	Annual	T7IS	GAS	15	197.2206619	0.0003085	4.43886E-07	4.0842E-07
South Coast	2020	Annual	T7IS	GAS	20	214.3250852	0.0002356	3.40145E-07	3.12985E-07
South Coast	2020	Annual	T7IS	GAS	25	662.1343926	0.0005398	7.81566E-07	7.19199E-07
South Coast	2020	Annual	T7IS	GAS	30	1031.769774	0.0006574	9.55287E-07	8.79104E-07
South Coast	2020	Annual	T7IS	GAS	35	1031.960076	0.0005429	7.90313E-07	7.27321E-07
South Coast	2020	Annual	T7IS	GAS	40	876.3364972	0.0004011	5.85322E-07	5.38692E-07
South Coast	2020	Annual	T7IS	GAS	45	1229.794173	0.0005179	7.55264E-07	6.95123E-07
South Coast	2020	Annual	T7IS	GAS	50	1283.283853	0.0005234	7.63914E-07	7.03106E-07
South Coast	2020	Annual	T7IS	GAS	55	1208.999898	0.0005022	7.35325E-07	6.7681E-07
South Coast	2020	Annual	T7IS	GAS	60	1506.036561	0.0006693	9.86427E-07	9.07947E-07
South Coast	2020	Annual	T7IS	GAS	65	706.7675848	0.0003508	5.2542E-07	4.83623E-07
South Coast	2020	Annual	T7IS	GAS	70	2.693293185	1.446E-06	2.17555E-09	2.00249E-09

APPENDIX B

MODELING REPORTS

**MODELOPTs: RegDFAULT CONC   ELEV

                                        ***   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   432 Source(s),
  for Total of   1 Urban Area(s):
  Urban Population =   34095.0 ; 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 for URBAN/Non-SO2.
        6. Urban Roughness Length of 1.0 Meter Assumed.

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

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: HAP

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

**This Run Includes: 432 Source(s);   433 Source Group(s); and   62 Receptor(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 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) =   50.30 ; 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 =   5.7 MB of RAM.

**File for Summary of Results: P:\RLP1501\SEPPLMS\SEPPLMS.SUM

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL1_01	0	0.10000E+01	604298.0	4054815.7	34.0	1.70	1.70	1.58	YES	
PCHL1_02	0	0.10000E+01	604292.3	4054807.9	34.0	1.70	1.70	1.58	YES	
PCHL1_03	0	0.10000E+01	604286.5	4054800.2	34.0	1.70	1.70	1.58	YES	
PCHL1_04	0	0.10000E+01	604280.8	4054792.4	34.0	1.70	1.70	1.58	YES	
PCHL1_05	0	0.10000E+01	604275.0	4054784.6	33.9	1.70	1.70	1.58	YES	
PCHL1_06	0	0.10000E+01	604269.3	4054776.9	33.7	1.70	1.70	1.58	YES	
PCHL1_07	0	0.10000E+01	604263.5	4054769.1	33.4	1.70	1.70	1.58	YES	
PCHL1_08	0	0.10000E+01	604257.8	4054761.3	33.2	1.70	1.70	1.58	YES	
PCHL1_09	0	0.10000E+01	604252.1	4054753.6	33.0	1.70	1.70	1.58	YES	
PCHL1_10	0	0.10000E+01	604246.3	4054745.8	32.9	1.70	1.70	1.58	YES	
PCHL1_11	0	0.10000E+01	604240.5	4054737.8	32.8	1.70	1.70	1.58	YES	
PCHL1_12	0	0.10000E+01	604234.7	4054730.0	32.5	1.70	1.70	1.58	YES	
PCHL1_13	0	0.10000E+01	604229.0	4054722.2	32.2	1.70	1.70	1.58	YES	
PCHL1_14	0	0.10000E+01	604223.2	4054714.5	32.0	1.70	1.70	1.58	YES	
PCHL1_15	0	0.10000E+01	604217.5	4054706.7	32.1	1.70	1.70	1.58	YES	
PCHL1_16	0	0.10000E+01	604211.7	4054698.9	32.0	1.70	1.70	1.58	YES	
PCHL1_17	0	0.10000E+01	604206.0	4054691.2	32.0	1.70	1.70	1.58	YES	
PCHL1_18	0	0.10000E+01	604200.2	4054683.4	32.0	1.70	1.70	1.58	YES	
PCHL1_19	0	0.10000E+01	604194.5	4054675.6	32.0	1.70	1.70	1.58	YES	
PCHL1_20	0	0.10000E+01	604188.8	4054667.9	31.9	1.70	1.70	1.58	YES	
PCHL1_21	0	0.10000E+01	604183.0	4054660.1	31.7	1.70	1.70	1.58	YES	
PCHL1_22	0	0.10000E+01	604177.3	4054652.3	31.5	1.70	1.70	1.58	YES	
PCHL1_23	0	0.10000E+01	604171.5	4054644.6	31.3	1.70	1.70	1.58	YES	
PCHL1_24	0	0.10000E+01	604165.8	4054636.8	31.1	1.70	1.70	1.58	YES	
PCHL1_25	0	0.10000E+01	604160.0	4054629.0	31.0	1.70	1.70	1.58	YES	
PCHL1_26	0	0.10000E+01	604154.3	4054621.3	31.0	1.70	1.70	1.58	YES	
PCHL1_27	0	0.10000E+01	604148.6	4054613.5	31.0	1.70	1.70	1.58	YES	
PCHL1_28	0	0.10000E+01	604142.8	4054605.8	31.0	1.70	1.70	1.58	YES	
PCHL1_29	0	0.10000E+01	604137.1	4054598.0	31.0	1.70	1.70	1.58	YES	
PCHL1_30	0	0.10000E+01	604131.3	4054590.2	31.0	1.70	1.70	1.58	YES	
PCHL1_31	0	0.10000E+01	604125.6	4054582.4	30.8	1.70	1.70	1.58	YES	
PCHL1_32	0	0.10000E+01	604119.8	4054574.7	30.6	1.70	1.70	1.58	YES	
PCHL1_33	0	0.10000E+01	604114.1	4054566.9	30.6	1.70	1.70	1.58	YES	
PCHL1_34	0	0.10000E+01	604108.3	4054559.2	30.7	1.70	1.70	1.58	YES	
PCHL1_35	0	0.10000E+01	604102.6	4054551.4	30.8	1.70	1.70	1.58	YES	
PCHL1_36	0	0.10000E+01	604096.8	4054543.6	30.7	1.70	1.70	1.58	YES	
PCHL1_37	0	0.10000E+01	604091.1	4054535.9	30.4	1.70	1.70	1.58	YES	
PCHL1_38	0	0.10000E+01	604085.4	4054528.1	30.2	1.70	1.70	1.58	YES	
PCHL1_39	0	0.10000E+01	604079.6	4054520.3	30.0	1.70	1.70	1.58	YES	
PCHL1_40	0	0.10000E+01	604073.9	4054512.6	30.0	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL1_41	0	0.10000E+01	604068.1	4054504.8	29.9	1.70	1.70	1.58	YES	
PCHL1_42	0	0.10000E+01	604062.4	4054497.0	29.9	1.70	1.70	1.58	YES	
PCHL1_43	0	0.10000E+01	604056.6	4054489.3	29.9	1.70	1.70	1.58	YES	
PCHL1_44	0	0.10000E+01	604050.9	4054481.5	30.1	1.70	1.70	1.58	YES	
PCHL1_45	0	0.10000E+01	604045.1	4054473.7	30.0	1.70	1.70	1.58	YES	
PCHL1_46	0	0.10000E+01	604039.4	4054466.0	29.9	1.70	1.70	1.58	YES	
PCHL1_47	0	0.10000E+01	604033.6	4054458.2	29.7	1.70	1.70	1.58	YES	
PCHL1_48	0	0.10000E+01	604027.9	4054450.4	29.5	1.70	1.70	1.58	YES	
PCHL1_49	0	0.10000E+01	604022.2	4054442.7	29.3	1.70	1.70	1.58	YES	
PCHL1_50	0	0.10000E+01	604016.4	4054434.9	29.1	1.70	1.70	1.58	YES	
PCHL1_51	0	0.10000E+01	604010.7	4054427.1	28.8	1.70	1.70	1.58	YES	
PCHL1_52	0	0.10000E+01	604004.9	4054419.4	28.1	1.70	1.70	1.58	YES	
PCHL1_53	0	0.10000E+01	603999.2	4054411.6	27.4	1.70	1.70	1.58	YES	
PCHL1_54	0	0.10000E+01	603993.4	4054403.8	26.8	1.70	1.70	1.58	YES	
PCHL1_55	0	0.10000E+01	603987.7	4054396.1	26.3	1.70	1.70	1.58	YES	
PCHL1_56	0	0.10000E+01	603981.9	4054388.3	26.0	1.70	1.70	1.58	YES	
PCHL1_57	0	0.10000E+01	603976.2	4054380.5	25.7	1.70	1.70	1.58	YES	
PCHL1_58	0	0.10000E+01	603970.4	4054372.8	25.5	1.70	1.70	1.58	YES	
PCHL1_59	0	0.10000E+01	603964.7	4054365.0	25.4	1.70	1.70	1.58	YES	
PCHL1_60	0	0.10000E+01	603959.1	4054357.2	24.9	1.70	1.70	1.58	YES	
PCHL1_61	0	0.10000E+01	603953.6	4054349.2	24.5	1.70	1.70	1.58	YES	
PCHL1_62	0	0.10000E+01	603948.2	4054341.2	24.0	1.70	1.70	1.58	YES	
PCHL1_63	0	0.10000E+01	603942.8	4054333.2	23.4	1.70	1.70	1.58	YES	
PCHL1_64	0	0.10000E+01	603937.4	4054325.2	22.7	1.70	1.70	1.58	YES	
PCHL1_65	0	0.10000E+01	603931.9	4054317.2	22.0	1.70	1.70	1.58	YES	
PCHL1_66	0	0.10000E+01	603926.5	4054309.2	21.3	1.70	1.70	1.58	YES	
PCHL1_67	0	0.10000E+01	603921.5	4054301.0	20.6	1.70	1.70	1.58	YES	
PCHL1_68	0	0.10000E+01	603916.8	4054292.5	19.9	1.70	1.70	1.58	YES	
PCHL1_69	0	0.10000E+01	603912.1	4054284.1	19.3	1.70	1.70	1.58	YES	
PCHL1_70	0	0.10000E+01	603907.4	4054275.6	19.0	1.70	1.70	1.58	YES	
PCHL1_71	0	0.10000E+01	603902.8	4054267.2	18.7	1.70	1.70	1.58	YES	
PCHL1_72	0	0.10000E+01	603898.1	4054258.7	18.4	1.70	1.70	1.58	YES	
PCHL2_01	0	0.10000E+01	604295.1	4054817.9	34.0	1.70	1.70	1.58	YES	
PCHL2_02	0	0.10000E+01	604289.3	4054810.1	34.0	1.70	1.70	1.58	YES	
PCHL2_03	0	0.10000E+01	604283.6	4054802.3	34.0	1.70	1.70	1.58	YES	
PCHL2_04	0	0.10000E+01	604277.8	4054794.6	34.0	1.70	1.70	1.58	YES	
PCHL2_05	0	0.10000E+01	604272.1	4054786.8	34.0	1.70	1.70	1.58	YES	
PCHL2_06	0	0.10000E+01	604266.3	4054779.0	33.8	1.70	1.70	1.58	YES	
PCHL2_07	0	0.10000E+01	604260.6	4054771.3	33.5	1.70	1.70	1.58	YES	
PCHL2_08	0	0.10000E+01	604254.9	4054763.5	33.2	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL2_09	0	0.10000E+01	604249.1	4054755.7	33.0	1.70	1.70	1.58	YES	
PCHL2_10	0	0.10000E+01	604243.4	4054748.0	32.9	1.70	1.70	1.58	YES	
PCHL2_11	0	0.10000E+01	604237.5	4054739.9	32.7	1.70	1.70	1.58	YES	
PCHL2_12	0	0.10000E+01	604231.8	4054732.2	32.4	1.70	1.70	1.58	YES	
PCHL2_13	0	0.10000E+01	604226.0	4054724.4	32.1	1.70	1.70	1.58	YES	
PCHL2_14	0	0.10000E+01	604220.3	4054716.6	32.0	1.70	1.70	1.58	YES	
PCHL2_15	0	0.10000E+01	604214.5	4054708.9	32.1	1.70	1.70	1.58	YES	
PCHL2_16	0	0.10000E+01	604208.8	4054701.1	32.1	1.70	1.70	1.58	YES	
PCHL2_17	0	0.10000E+01	604203.1	4054693.3	32.0	1.70	1.70	1.58	YES	
PCHL2_18	0	0.10000E+01	604197.3	4054685.6	32.0	1.70	1.70	1.58	YES	
PCHL2_19	0	0.10000E+01	604191.6	4054677.8	32.0	1.70	1.70	1.58	YES	
PCHL2_20	0	0.10000E+01	604185.8	4054670.1	31.8	1.70	1.70	1.58	YES	
PCHL2_21	0	0.10000E+01	604180.1	4054662.3	31.6	1.70	1.70	1.58	YES	
PCHL2_22	0	0.10000E+01	604174.3	4054654.5	31.4	1.70	1.70	1.58	YES	
PCHL2_23	0	0.10000E+01	604168.6	4054646.8	31.2	1.70	1.70	1.58	YES	
PCHL2_24	0	0.10000E+01	604162.8	4054639.0	31.0	1.70	1.70	1.58	YES	
PCHL2_25	0	0.10000E+01	604157.1	4054631.2	31.0	1.70	1.70	1.58	YES	
PCHL2_26	0	0.10000E+01	604151.3	4054623.5	31.0	1.70	1.70	1.58	YES	
PCHL2_27	0	0.10000E+01	604145.6	4054615.7	31.0	1.70	1.70	1.58	YES	
PCHL2_28	0	0.10000E+01	604139.9	4054607.9	31.0	1.70	1.70	1.58	YES	
PCHL2_29	0	0.10000E+01	604134.1	4054600.2	31.0	1.70	1.70	1.58	YES	
PCHL2_30	0	0.10000E+01	604128.4	4054592.4	30.9	1.70	1.70	1.58	YES	
PCHL2_31	0	0.10000E+01	604122.6	4054584.6	30.7	1.70	1.70	1.58	YES	
PCHL2_32	0	0.10000E+01	604116.9	4054576.9	30.5	1.70	1.70	1.58	YES	
PCHL2_33	0	0.10000E+01	604111.1	4054569.1	30.5	1.70	1.70	1.58	YES	
PCHL2_34	0	0.10000E+01	604105.4	4054561.3	30.6	1.70	1.70	1.58	YES	
PCHL2_35	0	0.10000E+01	604099.6	4054553.6	30.7	1.70	1.70	1.58	YES	
PCHL2_36	0	0.10000E+01	604093.9	4054545.8	30.7	1.70	1.70	1.58	YES	
PCHL2_37	0	0.10000E+01	604088.1	4054538.0	30.4	1.70	1.70	1.58	YES	
PCHL2_38	0	0.10000E+01	604082.4	4054530.3	30.2	1.70	1.70	1.58	YES	
PCHL2_39	0	0.10000E+01	604076.7	4054522.5	30.0	1.70	1.70	1.58	YES	
PCHL2_40	0	0.10000E+01	604070.9	4054514.7	29.9	1.70	1.70	1.58	YES	
PCHL2_41	0	0.10000E+01	604065.2	4054507.0	29.8	1.70	1.70	1.58	YES	
PCHL2_42	0	0.10000E+01	604059.4	4054499.2	29.8	1.70	1.70	1.58	YES	
PCHL2_43	0	0.10000E+01	604053.7	4054491.4	29.9	1.70	1.70	1.58	YES	
PCHL2_44	0	0.10000E+01	604047.9	4054483.7	30.0	1.70	1.70	1.58	YES	
PCHL2_45	0	0.10000E+01	604042.2	4054475.9	30.0	1.70	1.70	1.58	YES	
PCHL2_46	0	0.10000E+01	604036.4	4054468.1	29.8	1.70	1.70	1.58	YES	
PCHL2_47	0	0.10000E+01	604030.7	4054460.4	29.6	1.70	1.70	1.58	YES	
PCHL2_48	0	0.10000E+01	604024.9	4054452.6	29.4	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL2_49	0	0.10000E+01	604019.2	4054444.8	29.2	1.70	1.70	1.58	YES	
PCHL2_50	0	0.10000E+01	604013.5	4054437.1	29.0	1.70	1.70	1.58	YES	
PCHL2_51	0	0.10000E+01	604007.7	4054429.3	28.5	1.70	1.70	1.58	YES	
PCHL2_52	0	0.10000E+01	604002.0	4054421.5	27.8	1.70	1.70	1.58	YES	
PCHL2_53	0	0.10000E+01	603996.2	4054413.8	27.2	1.70	1.70	1.58	YES	
PCHL2_54	0	0.10000E+01	603990.5	4054406.0	26.6	1.70	1.70	1.58	YES	
PCHL2_55	0	0.10000E+01	603984.7	4054398.3	26.1	1.70	1.70	1.58	YES	
PCHL2_56	0	0.10000E+01	603979.0	4054390.5	25.8	1.70	1.70	1.58	YES	
PCHL2_57	0	0.10000E+01	603973.2	4054382.7	25.5	1.70	1.70	1.58	YES	
PCHL2_58	0	0.10000E+01	603967.5	4054375.0	25.4	1.70	1.70	1.58	YES	
PCHL2_59	0	0.10000E+01	603961.7	4054367.1	25.3	1.70	1.70	1.58	YES	
PCHL2_60	0	0.10000E+01	603956.0	4054359.2	24.9	1.70	1.70	1.58	YES	
PCHL2_61	0	0.10000E+01	603950.6	4054351.2	24.4	1.70	1.70	1.58	YES	
PCHL2_62	0	0.10000E+01	603945.2	4054343.2	24.0	1.70	1.70	1.58	YES	
PCHL2_63	0	0.10000E+01	603939.8	4054335.2	23.5	1.70	1.70	1.58	YES	
PCHL2_64	0	0.10000E+01	603934.3	4054327.3	22.8	1.70	1.70	1.58	YES	
PCHL2_65	0	0.10000E+01	603928.9	4054319.3	22.1	1.70	1.70	1.58	YES	
PCHL2_66	0	0.10000E+01	603923.4	4054311.1	21.3	1.70	1.70	1.58	YES	
PCHL2_67	0	0.10000E+01	603918.3	4054302.8	20.5	1.70	1.70	1.58	YES	
PCHL2_68	0	0.10000E+01	603913.6	4054294.3	19.8	1.70	1.70	1.58	YES	
PCHL2_69	0	0.10000E+01	603908.9	4054285.9	19.3	1.70	1.70	1.58	YES	
PCHL2_70	0	0.10000E+01	603904.2	4054277.4	19.0	1.70	1.70	1.58	YES	
PCHL2_71	0	0.10000E+01	603899.5	4054269.0	18.8	1.70	1.70	1.58	YES	
PCHL2_72	0	0.10000E+01	603894.9	4054260.5	18.5	1.70	1.70	1.58	YES	
PCHL3_01	0	0.10000E+01	604292.1	4054820.0	34.1	1.70	1.70	1.58	YES	
PCHL3_02	0	0.10000E+01	604286.4	4054812.3	34.0	1.70	1.70	1.58	YES	
PCHL3_03	0	0.10000E+01	604280.6	4054804.5	34.0	1.70	1.70	1.58	YES	
PCHL3_04	0	0.10000E+01	604274.9	4054796.7	34.0	1.70	1.70	1.58	YES	
PCHL3_05	0	0.10000E+01	604269.2	4054789.0	34.0	1.70	1.70	1.58	YES	
PCHL3_06	0	0.10000E+01	604263.4	4054781.2	33.8	1.70	1.70	1.58	YES	
PCHL3_07	0	0.10000E+01	604257.7	4054773.4	33.6	1.70	1.70	1.58	YES	
PCHL3_08	0	0.10000E+01	604251.9	4054765.7	33.3	1.70	1.70	1.58	YES	
PCHL3_09	0	0.10000E+01	604246.2	4054757.9	33.0	1.70	1.70	1.58	YES	
PCHL3_10	0	0.10000E+01	604240.4	4054750.1	32.9	1.70	1.70	1.58	YES	
PCHL3_11	0	0.10000E+01	604234.6	4054742.1	32.7	1.70	1.70	1.58	YES	
PCHL3_12	0	0.10000E+01	604228.8	4054734.4	32.4	1.70	1.70	1.58	YES	
PCHL3_13	0	0.10000E+01	604223.1	4054726.6	32.0	1.70	1.70	1.58	YES	
PCHL3_14	0	0.10000E+01	604217.3	4054718.8	32.1	1.70	1.70	1.58	YES	
PCHL3_15	0	0.10000E+01	604211.6	4054711.1	32.2	1.70	1.70	1.58	YES	
PCHL3_16	0	0.10000E+01	604205.9	4054703.3	32.1	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL3_17	0	0.10000E+01	604200.1	4054695.5	32.0	1.70	1.70	1.58	YES	
PCHL3_18	0	0.10000E+01	604194.4	4054687.8	32.0	1.70	1.70	1.58	YES	
PCHL3_19	0	0.10000E+01	604188.6	4054680.0	31.9	1.70	1.70	1.58	YES	
PCHL3_20	0	0.10000E+01	604182.9	4054672.2	31.7	1.70	1.70	1.58	YES	
PCHL3_21	0	0.10000E+01	604177.1	4054664.5	31.5	1.70	1.70	1.58	YES	
PCHL3_22	0	0.10000E+01	604171.4	4054656.7	31.3	1.70	1.70	1.58	YES	
PCHL3_23	0	0.10000E+01	604165.6	4054648.9	31.1	1.70	1.70	1.58	YES	
PCHL3_24	0	0.10000E+01	604159.9	4054641.2	31.0	1.70	1.70	1.58	YES	
PCHL3_25	0	0.10000E+01	604154.2	4054633.4	31.0	1.70	1.70	1.58	YES	
PCHL3_26	0	0.10000E+01	604148.4	4054625.6	31.0	1.70	1.70	1.58	YES	
PCHL3_27	0	0.10000E+01	604142.7	4054617.9	31.0	1.70	1.70	1.58	YES	
PCHL3_28	0	0.10000E+01	604136.9	4054610.1	31.0	1.70	1.70	1.58	YES	
PCHL3_29	0	0.10000E+01	604131.2	4054602.3	30.9	1.70	1.70	1.58	YES	
PCHL3_30	0	0.10000E+01	604125.4	4054594.6	30.8	1.70	1.70	1.58	YES	
PCHL3_31	0	0.10000E+01	604119.7	4054586.8	30.6	1.70	1.70	1.58	YES	
PCHL3_32	0	0.10000E+01	604113.9	4054579.0	30.4	1.70	1.70	1.58	YES	
PCHL3_33	0	0.10000E+01	604108.2	4054571.3	30.3	1.70	1.70	1.58	YES	
PCHL3_34	0	0.10000E+01	604102.4	4054563.5	30.4	1.70	1.70	1.58	YES	
PCHL3_35	0	0.10000E+01	604096.7	4054555.7	30.6	1.70	1.70	1.58	YES	
PCHL3_36	0	0.10000E+01	604091.0	4054548.0	30.6	1.70	1.70	1.58	YES	
PCHL3_37	0	0.10000E+01	604085.2	4054540.2	30.3	1.70	1.70	1.58	YES	
PCHL3_38	0	0.10000E+01	604079.5	4054532.4	30.1	1.70	1.70	1.58	YES	
PCHL3_39	0	0.10000E+01	604073.7	4054524.7	30.0	1.70	1.70	1.58	YES	
PCHL3_40	0	0.10000E+01	604068.0	4054516.9	29.9	1.70	1.70	1.58	YES	
PCHL3_41	0	0.10000E+01	604062.2	4054509.1	29.7	1.70	1.70	1.58	YES	
PCHL3_42	0	0.10000E+01	604056.5	4054501.4	29.7	1.70	1.70	1.58	YES	
PCHL3_43	0	0.10000E+01	604050.7	4054493.6	29.8	1.70	1.70	1.58	YES	
PCHL3_44	0	0.10000E+01	604045.0	4054485.9	30.0	1.70	1.70	1.58	YES	
PCHL3_45	0	0.10000E+01	604039.2	4054478.1	29.9	1.70	1.70	1.58	YES	
PCHL3_46	0	0.10000E+01	604033.5	4054470.3	29.7	1.70	1.70	1.58	YES	
PCHL3_47	0	0.10000E+01	604027.8	4054462.6	29.5	1.70	1.70	1.58	YES	
PCHL3_48	0	0.10000E+01	604022.0	4054454.8	29.3	1.70	1.70	1.58	YES	
PCHL3_49	0	0.10000E+01	604016.3	4054447.0	29.1	1.70	1.70	1.58	YES	
PCHL3_50	0	0.10000E+01	604010.5	4054439.3	28.9	1.70	1.70	1.58	YES	
PCHL3_51	0	0.10000E+01	604004.8	4054431.5	28.3	1.70	1.70	1.58	YES	
PCHL3_52	0	0.10000E+01	603999.0	4054423.7	27.6	1.70	1.70	1.58	YES	
PCHL3_53	0	0.10000E+01	603993.3	4054416.0	26.9	1.70	1.70	1.58	YES	
PCHL3_54	0	0.10000E+01	603987.5	4054408.2	26.4	1.70	1.70	1.58	YES	
PCHL3_55	0	0.10000E+01	603981.8	4054400.4	25.9	1.70	1.70	1.58	YES	
PCHL3_56	0	0.10000E+01	603976.0	4054392.7	25.6	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL3_57	0	0.10000E+01	603970.3	4054384.9	25.3	1.70	1.70	1.58	YES	
PCHL3_58	0	0.10000E+01	603964.6	4054377.1	25.2	1.70	1.70	1.58	YES	
PCHL3_59	0	0.10000E+01	603958.8	4054369.3	25.1	1.70	1.70	1.58	YES	
PCHL3_60	0	0.10000E+01	603953.0	4054361.3	24.8	1.70	1.70	1.58	YES	
PCHL3_61	0	0.10000E+01	603947.6	4054353.3	24.4	1.70	1.70	1.58	YES	
PCHL3_62	0	0.10000E+01	603942.2	4054345.3	23.9	1.70	1.70	1.58	YES	
PCHL3_63	0	0.10000E+01	603936.7	4054337.3	23.5	1.70	1.70	1.58	YES	
PCHL3_64	0	0.10000E+01	603931.3	4054329.3	22.8	1.70	1.70	1.58	YES	
PCHL3_65	0	0.10000E+01	603925.9	4054321.3	22.1	1.70	1.70	1.58	YES	
PCHL3_66	0	0.10000E+01	603920.3	4054313.0	21.3	1.70	1.70	1.58	YES	
PCHL3_67	0	0.10000E+01	603915.1	4054304.5	20.4	1.70	1.70	1.58	YES	
PCHL3_68	0	0.10000E+01	603910.4	4054296.1	19.8	1.70	1.70	1.58	YES	
PCHL3_69	0	0.10000E+01	603905.7	4054287.6	19.3	1.70	1.70	1.58	YES	
PCHL3_70	0	0.10000E+01	603901.0	4054279.2	19.1	1.70	1.70	1.58	YES	
PCHL3_71	0	0.10000E+01	603896.3	4054270.7	18.8	1.70	1.70	1.58	YES	
PCHL3_72	0	0.10000E+01	603891.7	4054262.3	18.5	1.70	1.70	1.58	YES	
PCHL4_01	0	0.10000E+01	604279.1	4054830.0	34.4	1.70	1.70	1.58	YES	
PCHL4_02	0	0.10000E+01	604273.3	4054822.3	34.1	1.70	1.70	1.58	YES	
PCHL4_03	0	0.10000E+01	604267.6	4054814.5	34.0	1.70	1.70	1.58	YES	
PCHL4_04	0	0.10000E+01	604261.8	4054806.7	34.0	1.70	1.70	1.58	YES	
PCHL4_05	0	0.10000E+01	604256.1	4054799.0	34.0	1.70	1.70	1.58	YES	
PCHL4_06	0	0.10000E+01	604250.3	4054791.2	33.9	1.70	1.70	1.58	YES	
PCHL4_07	0	0.10000E+01	604244.6	4054783.5	33.7	1.70	1.70	1.58	YES	
PCHL4_08	0	0.10000E+01	604238.8	4054775.7	33.3	1.70	1.70	1.58	YES	
PCHL4_09	0	0.10000E+01	604233.1	4054767.9	33.1	1.70	1.70	1.58	YES	
PCHL4_10	0	0.10000E+01	604227.3	4054760.1	33.0	1.70	1.70	1.58	YES	
PCHL4_11	0	0.10000E+01	604221.5	4054752.1	32.9	1.70	1.70	1.58	YES	
PCHL4_12	0	0.10000E+01	604215.8	4054744.4	32.7	1.70	1.70	1.58	YES	
PCHL4_13	0	0.10000E+01	604210.0	4054736.6	32.6	1.70	1.70	1.58	YES	
PCHL4_14	0	0.10000E+01	604204.3	4054728.8	32.6	1.70	1.70	1.58	YES	
PCHL4_15	0	0.10000E+01	604198.5	4054721.1	32.7	1.70	1.70	1.58	YES	
PCHL4_16	0	0.10000E+01	604192.8	4054713.3	32.6	1.70	1.70	1.58	YES	
PCHL4_17	0	0.10000E+01	604187.1	4054705.5	32.1	1.70	1.70	1.58	YES	
PCHL4_18	0	0.10000E+01	604181.3	4054697.8	31.7	1.70	1.70	1.58	YES	
PCHL4_19	0	0.10000E+01	604175.6	4054690.0	31.4	1.70	1.70	1.58	YES	
PCHL4_20	0	0.10000E+01	604169.8	4054682.2	31.2	1.70	1.70	1.58	YES	
PCHL4_21	0	0.10000E+01	604164.1	4054674.5	31.1	1.70	1.70	1.58	YES	
PCHL4_22	0	0.10000E+01	604158.3	4054666.7	31.0	1.70	1.70	1.58	YES	
PCHL4_23	0	0.10000E+01	604152.6	4054658.9	31.0	1.70	1.70	1.58	YES	
PCHL4_24	0	0.10000E+01	604146.8	4054651.2	31.0	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL4_25	0	0.10000E+01	604141.1	4054643.4	31.0	1.70	1.70	1.58	YES	
PCHL4_26	0	0.10000E+01	604135.3	4054635.6	31.0	1.70	1.70	1.58	YES	
PCHL4_27	0	0.10000E+01	604129.6	4054627.9	30.9	1.70	1.70	1.58	YES	
PCHL4_28	0	0.10000E+01	604123.8	4054620.1	30.7	1.70	1.70	1.58	YES	
PCHL4_29	0	0.10000E+01	604118.1	4054612.4	30.5	1.70	1.70	1.58	YES	
PCHL4_30	0	0.10000E+01	604112.4	4054604.6	30.3	1.70	1.70	1.58	YES	
PCHL4_31	0	0.10000E+01	604106.6	4054596.8	30.1	1.70	1.70	1.58	YES	
PCHL4_32	0	0.10000E+01	604100.9	4054589.1	30.0	1.70	1.70	1.58	YES	
PCHL4_33	0	0.10000E+01	604095.1	4054581.3	30.0	1.70	1.70	1.58	YES	
PCHL4_34	0	0.10000E+01	604089.4	4054573.5	30.1	1.70	1.70	1.58	YES	
PCHL4_35	0	0.10000E+01	604083.6	4054565.7	30.1	1.70	1.70	1.58	YES	
PCHL4_36	0	0.10000E+01	604077.9	4054558.0	30.1	1.70	1.70	1.58	YES	
PCHL4_37	0	0.10000E+01	604072.1	4054550.2	30.0	1.70	1.70	1.58	YES	
PCHL4_38	0	0.10000E+01	604066.4	4054542.5	30.0	1.70	1.70	1.58	YES	
PCHL4_39	0	0.10000E+01	604060.6	4054534.7	29.8	1.70	1.70	1.58	YES	
PCHL4_40	0	0.10000E+01	604054.9	4054526.9	29.6	1.70	1.70	1.58	YES	
PCHL4_41	0	0.10000E+01	604049.1	4054519.1	29.3	1.70	1.70	1.58	YES	
PCHL4_42	0	0.10000E+01	604043.4	4054511.4	29.2	1.70	1.70	1.58	YES	
PCHL4_43	0	0.10000E+01	604037.7	4054503.6	29.4	1.70	1.70	1.58	YES	
PCHL4_44	0	0.10000E+01	604031.9	4054495.9	29.4	1.70	1.70	1.58	YES	
PCHL4_45	0	0.10000E+01	604026.2	4054488.1	29.4	1.70	1.70	1.58	YES	
PCHL4_46	0	0.10000E+01	604020.4	4054480.3	29.3	1.70	1.70	1.58	YES	
PCHL4_47	0	0.10000E+01	604014.7	4054472.6	29.1	1.70	1.70	1.58	YES	
PCHL4_48	0	0.10000E+01	604008.9	4054464.8	28.9	1.70	1.70	1.58	YES	
PCHL4_49	0	0.10000E+01	604003.2	4054457.0	28.7	1.70	1.70	1.58	YES	
PCHL4_50	0	0.10000E+01	603997.4	4054449.3	28.2	1.70	1.70	1.58	YES	
PCHL4_51	0	0.10000E+01	603991.7	4054441.5	27.6	1.70	1.70	1.58	YES	
PCHL4_52	0	0.10000E+01	603986.0	4054433.7	26.8	1.70	1.70	1.58	YES	
PCHL4_53	0	0.10000E+01	603980.2	4054426.0	26.0	1.70	1.70	1.58	YES	
PCHL4_54	0	0.10000E+01	603974.5	4054418.2	25.9	1.70	1.70	1.58	YES	
PCHL4_55	0	0.10000E+01	603968.7	4054410.4	25.5	1.70	1.70	1.58	YES	
PCHL4_56	0	0.10000E+01	603963.0	4054402.7	25.0	1.70	1.70	1.58	YES	
PCHL4_57	0	0.10000E+01	603957.2	4054394.9	24.4	1.70	1.70	1.58	YES	
PCHL4_58	0	0.10000E+01	603951.5	4054387.1	24.3	1.70	1.70	1.58	YES	
PCHL4_59	0	0.10000E+01	603945.6	4054379.1	24.5	1.70	1.70	1.58	YES	
PCHL4_60	0	0.10000E+01	603939.6	4054370.8	24.6	1.70	1.70	1.58	YES	
PCHL4_61	0	0.10000E+01	603934.2	4054362.8	24.3	1.70	1.70	1.58	YES	
PCHL4_62	0	0.10000E+01	603928.8	4054354.8	23.8	1.70	1.70	1.58	YES	
PCHL4_63	0	0.10000E+01	603923.3	4054346.8	23.4	1.70	1.70	1.58	YES	
PCHL4_64	0	0.10000E+01	603917.9	4054338.8	23.1	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL4_65	0	0.10000E+01	603912.5	4054330.8	22.5	1.70	1.70	1.58	YES	
PCHL4_66	0	0.10000E+01	603906.5	4054322.0	21.5	1.70	1.70	1.58	YES	
PCHL4_67	0	0.10000E+01	603901.0	4054312.9	20.3	1.70	1.70	1.58	YES	
PCHL4_68	0	0.10000E+01	603896.3	4054304.5	19.2	1.70	1.70	1.58	YES	
PCHL4_69	0	0.10000E+01	603891.6	4054296.0	19.0	1.70	1.70	1.58	YES	
PCHL4_70	0	0.10000E+01	603886.9	4054287.6	18.9	1.70	1.70	1.58	YES	
PCHL4_71	0	0.10000E+01	603882.2	4054279.1	18.7	1.70	1.70	1.58	YES	
PCHL4_72	0	0.10000E+01	603877.6	4054270.7	18.4	1.70	1.70	1.58	YES	
PCHL5_01	0	0.10000E+01	604276.1	4054832.2	34.4	1.70	1.70	1.58	YES	
PCHL5_02	0	0.10000E+01	604270.4	4054824.5	34.2	1.70	1.70	1.58	YES	
PCHL5_03	0	0.10000E+01	604264.6	4054816.7	34.0	1.70	1.70	1.58	YES	
PCHL5_04	0	0.10000E+01	604258.9	4054808.9	34.0	1.70	1.70	1.58	YES	
PCHL5_05	0	0.10000E+01	604253.1	4054801.2	34.0	1.70	1.70	1.58	YES	
PCHL5_06	0	0.10000E+01	604247.4	4054793.4	33.9	1.70	1.70	1.58	YES	
PCHL5_07	0	0.10000E+01	604241.7	4054785.6	33.6	1.70	1.70	1.58	YES	
PCHL5_08	0	0.10000E+01	604235.9	4054777.8	33.3	1.70	1.70	1.58	YES	
PCHL5_09	0	0.10000E+01	604230.2	4054770.1	33.1	1.70	1.70	1.58	YES	
PCHL5_10	0	0.10000E+01	604224.4	4054762.3	33.0	1.70	1.70	1.58	YES	
PCHL5_11	0	0.10000E+01	604218.6	4054754.3	32.9	1.70	1.70	1.58	YES	
PCHL5_12	0	0.10000E+01	604212.8	4054746.6	32.8	1.70	1.70	1.58	YES	
PCHL5_13	0	0.10000E+01	604207.1	4054738.8	32.7	1.70	1.70	1.58	YES	
PCHL5_14	0	0.10000E+01	604201.3	4054731.0	32.8	1.70	1.70	1.58	YES	
PCHL5_15	0	0.10000E+01	604195.6	4054723.2	32.8	1.70	1.70	1.58	YES	
PCHL5_16	0	0.10000E+01	604189.8	4054715.5	32.5	1.70	1.70	1.58	YES	
PCHL5_17	0	0.10000E+01	604184.1	4054707.7	32.1	1.70	1.70	1.58	YES	
PCHL5_18	0	0.10000E+01	604178.3	4054699.9	31.6	1.70	1.70	1.58	YES	
PCHL5_19	0	0.10000E+01	604172.6	4054692.2	31.3	1.70	1.70	1.58	YES	
PCHL5_20	0	0.10000E+01	604166.9	4054684.4	31.1	1.70	1.70	1.58	YES	
PCHL5_21	0	0.10000E+01	604161.1	4054676.7	31.0	1.70	1.70	1.58	YES	
PCHL5_22	0	0.10000E+01	604155.4	4054668.9	31.0	1.70	1.70	1.58	YES	
PCHL5_23	0	0.10000E+01	604149.6	4054661.1	31.0	1.70	1.70	1.58	YES	
PCHL5_24	0	0.10000E+01	604143.9	4054653.3	31.0	1.70	1.70	1.58	YES	
PCHL5_25	0	0.10000E+01	604138.1	4054645.6	31.0	1.70	1.70	1.58	YES	
PCHL5_26	0	0.10000E+01	604132.4	4054637.8	31.0	1.70	1.70	1.58	YES	
PCHL5_27	0	0.10000E+01	604126.7	4054630.1	30.8	1.70	1.70	1.58	YES	
PCHL5_28	0	0.10000E+01	604120.9	4054622.3	30.6	1.70	1.70	1.58	YES	
PCHL5_29	0	0.10000E+01	604115.2	4054614.5	30.4	1.70	1.70	1.58	YES	
PCHL5_30	0	0.10000E+01	604109.4	4054606.8	30.2	1.70	1.70	1.58	YES	
PCHL5_31	0	0.10000E+01	604103.7	4054599.0	30.0	1.70	1.70	1.58	YES	
PCHL5_32	0	0.10000E+01	604097.9	4054591.2	30.0	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL5_33	0	0.10000E+01	604092.2	4054583.5	30.0	1.70	1.70	1.58	YES	
PCHL5_34	0	0.10000E+01	604086.4	4054575.7	30.0	1.70	1.70	1.58	YES	
PCHL5_35	0	0.10000E+01	604080.7	4054567.9	30.1	1.70	1.70	1.58	YES	
PCHL5_36	0	0.10000E+01	604075.0	4054560.2	30.0	1.70	1.70	1.58	YES	
PCHL5_37	0	0.10000E+01	604069.2	4054552.4	30.0	1.70	1.70	1.58	YES	
PCHL5_38	0	0.10000E+01	604063.5	4054544.6	30.0	1.70	1.70	1.58	YES	
PCHL5_39	0	0.10000E+01	604057.7	4054536.9	29.8	1.70	1.70	1.58	YES	
PCHL5_40	0	0.10000E+01	604052.0	4054529.1	29.6	1.70	1.70	1.58	YES	
PCHL5_41	0	0.10000E+01	604046.2	4054521.3	29.3	1.70	1.70	1.58	YES	
PCHL5_42	0	0.10000E+01	604040.5	4054513.6	29.1	1.70	1.70	1.58	YES	
PCHL5_43	0	0.10000E+01	604034.7	4054505.8	29.3	1.70	1.70	1.58	YES	
PCHL5_44	0	0.10000E+01	604029.0	4054498.0	29.3	1.70	1.70	1.58	YES	
PCHL5_45	0	0.10000E+01	604023.2	4054490.3	29.3	1.70	1.70	1.58	YES	
PCHL5_46	0	0.10000E+01	604017.5	4054482.5	29.2	1.70	1.70	1.58	YES	
PCHL5_47	0	0.10000E+01	604011.8	4054474.8	29.0	1.70	1.70	1.58	YES	
PCHL5_48	0	0.10000E+01	604006.0	4054467.0	28.9	1.70	1.70	1.58	YES	
PCHL5_49	0	0.10000E+01	604000.3	4054459.2	28.6	1.70	1.70	1.58	YES	
PCHL5_50	0	0.10000E+01	603994.5	4054451.4	28.2	1.70	1.70	1.58	YES	
PCHL5_51	0	0.10000E+01	603988.8	4054443.7	27.5	1.70	1.70	1.58	YES	
PCHL5_52	0	0.10000E+01	603983.0	4054435.9	26.7	1.70	1.70	1.58	YES	
PCHL5_53	0	0.10000E+01	603977.3	4054428.1	26.1	1.70	1.70	1.58	YES	
PCHL5_54	0	0.10000E+01	603971.5	4054420.4	25.9	1.70	1.70	1.58	YES	
PCHL5_55	0	0.10000E+01	603965.8	4054412.6	25.5	1.70	1.70	1.58	YES	
PCHL5_56	0	0.10000E+01	603960.0	4054404.8	24.9	1.70	1.70	1.58	YES	
PCHL5_57	0	0.10000E+01	603954.3	4054397.1	24.2	1.70	1.70	1.58	YES	
PCHL5_58	0	0.10000E+01	603948.5	4054389.3	24.3	1.70	1.70	1.58	YES	
PCHL5_59	0	0.10000E+01	603942.6	4054381.2	24.5	1.70	1.70	1.58	YES	
PCHL5_60	0	0.10000E+01	603936.6	4054372.9	24.5	1.70	1.70	1.58	YES	
PCHL5_61	0	0.10000E+01	603931.1	4054364.9	24.2	1.70	1.70	1.58	YES	
PCHL5_62	0	0.10000E+01	603925.7	4054356.9	23.8	1.70	1.70	1.58	YES	
PCHL5_63	0	0.10000E+01	603920.3	4054348.9	23.4	1.70	1.70	1.58	YES	
PCHL5_64	0	0.10000E+01	603914.8	4054340.9	23.2	1.70	1.70	1.58	YES	
PCHL5_65	0	0.10000E+01	603909.4	4054332.9	22.7	1.70	1.70	1.58	YES	
PCHL5_66	0	0.10000E+01	603903.3	4054323.9	21.6	1.70	1.70	1.58	YES	
PCHL5_67	0	0.10000E+01	603897.8	4054314.7	20.3	1.70	1.70	1.58	YES	
PCHL5_68	0	0.10000E+01	603893.1	4054306.3	19.0	1.70	1.70	1.58	YES	
PCHL5_69	0	0.10000E+01	603888.4	4054297.8	19.1	1.70	1.70	1.58	YES	
PCHL5_70	0	0.10000E+01	603883.7	4054289.3	19.0	1.70	1.70	1.58	YES	
PCHL5_71	0	0.10000E+01	603879.0	4054280.9	18.7	1.70	1.70	1.58	YES	
PCHL5_72	0	0.10000E+01	603874.4	4054272.4	18.3	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL6_01	0	0.10000E+01	604273.2	4054834.4	34.4	1.70	1.70	1.58	YES	
PCHL6_02	0	0.10000E+01	604267.4	4054826.6	34.2	1.70	1.70	1.58	YES	
PCHL6_03	0	0.10000E+01	604261.7	4054818.9	34.0	1.70	1.70	1.58	YES	
PCHL6_04	0	0.10000E+01	604255.9	4054811.1	34.0	1.70	1.70	1.58	YES	
PCHL6_05	0	0.10000E+01	604250.2	4054803.3	34.0	1.70	1.70	1.58	YES	
PCHL6_06	0	0.10000E+01	604244.4	4054795.5	33.8	1.70	1.70	1.58	YES	
PCHL6_07	0	0.10000E+01	604238.7	4054787.8	33.6	1.70	1.70	1.58	YES	
PCHL6_08	0	0.10000E+01	604232.9	4054780.0	33.3	1.70	1.70	1.58	YES	
PCHL6_09	0	0.10000E+01	604227.2	4054772.3	33.1	1.70	1.70	1.58	YES	
PCHL6_10	0	0.10000E+01	604221.5	4054764.5	33.0	1.70	1.70	1.58	YES	
PCHL6_11	0	0.10000E+01	604215.6	4054756.5	33.0	1.70	1.70	1.58	YES	
PCHL6_12	0	0.10000E+01	604209.9	4054748.7	32.8	1.70	1.70	1.58	YES	
PCHL6_13	0	0.10000E+01	604204.1	4054741.0	32.8	1.70	1.70	1.58	YES	
PCHL6_14	0	0.10000E+01	604198.4	4054733.2	32.8	1.70	1.70	1.58	YES	
PCHL6_15	0	0.10000E+01	604192.7	4054725.4	33.0	1.70	1.70	1.58	YES	
PCHL6_16	0	0.10000E+01	604186.9	4054717.6	32.5	1.70	1.70	1.58	YES	
PCHL6_17	0	0.10000E+01	604181.2	4054709.9	32.1	1.70	1.70	1.58	YES	
PCHL6_18	0	0.10000E+01	604175.4	4054702.1	31.6	1.70	1.70	1.58	YES	
PCHL6_19	0	0.10000E+01	604169.7	4054694.4	31.2	1.70	1.70	1.58	YES	
PCHL6_20	0	0.10000E+01	604163.9	4054686.6	31.0	1.70	1.70	1.58	YES	
PCHL6_21	0	0.10000E+01	604158.2	4054678.8	31.0	1.70	1.70	1.58	YES	
PCHL6_22	0	0.10000E+01	604152.4	4054671.0	31.0	1.70	1.70	1.58	YES	
PCHL6_23	0	0.10000E+01	604146.7	4054663.3	31.0	1.70	1.70	1.58	YES	
PCHL6_24	0	0.10000E+01	604140.9	4054655.5	31.0	1.70	1.70	1.58	YES	
PCHL6_25	0	0.10000E+01	604135.2	4054647.8	31.0	1.70	1.70	1.58	YES	
PCHL6_26	0	0.10000E+01	604129.5	4054640.0	30.9	1.70	1.70	1.58	YES	
PCHL6_27	0	0.10000E+01	604123.7	4054632.2	30.7	1.70	1.70	1.58	YES	
PCHL6_28	0	0.10000E+01	604118.0	4054624.5	30.5	1.70	1.70	1.58	YES	
PCHL6_29	0	0.10000E+01	604112.2	4054616.7	30.3	1.70	1.70	1.58	YES	
PCHL6_30	0	0.10000E+01	604106.5	4054608.9	30.1	1.70	1.70	1.58	YES	
PCHL6_31	0	0.10000E+01	604100.7	4054601.2	30.0	1.70	1.70	1.58	YES	
PCHL6_32	0	0.10000E+01	604095.0	4054593.4	30.0	1.70	1.70	1.58	YES	
PCHL6_33	0	0.10000E+01	604089.2	4054585.6	30.0	1.70	1.70	1.58	YES	
PCHL6_34	0	0.10000E+01	604083.5	4054577.9	30.0	1.70	1.70	1.58	YES	
PCHL6_35	0	0.10000E+01	604077.7	4054570.1	30.0	1.70	1.70	1.58	YES	
PCHL6_36	0	0.10000E+01	604072.0	4054562.4	30.0	1.70	1.70	1.58	YES	
PCHL6_37	0	0.10000E+01	604066.2	4054554.6	30.0	1.70	1.70	1.58	YES	
PCHL6_38	0	0.10000E+01	604060.5	4054546.8	30.0	1.70	1.70	1.58	YES	
PCHL6_39	0	0.10000E+01	604054.7	4054539.0	29.9	1.70	1.70	1.58	YES	
PCHL6_40	0	0.10000E+01	604049.0	4054531.3	29.6	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

*** 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
PCHL6_41	0	0.10000E+01	604043.3	4054523.5	29.2	1.70	1.70	1.58	YES	
PCHL6_42	0	0.10000E+01	604037.5	4054515.7	29.0	1.70	1.70	1.58	YES	
PCHL6_43	0	0.10000E+01	604031.8	4054508.0	29.2	1.70	1.70	1.58	YES	
PCHL6_44	0	0.10000E+01	604026.0	4054500.2	29.2	1.70	1.70	1.58	YES	
PCHL6_45	0	0.10000E+01	604020.3	4054492.4	29.2	1.70	1.70	1.58	YES	
PCHL6_46	0	0.10000E+01	604014.6	4054484.7	29.1	1.70	1.70	1.58	YES	
PCHL6_47	0	0.10000E+01	604008.8	4054476.9	29.0	1.70	1.70	1.58	YES	
PCHL6_48	0	0.10000E+01	604003.0	4054469.1	28.8	1.70	1.70	1.58	YES	
PCHL6_49	0	0.10000E+01	603997.3	4054461.4	28.6	1.70	1.70	1.58	YES	
PCHL6_50	0	0.10000E+01	603991.6	4054453.6	28.2	1.70	1.70	1.58	YES	
PCHL6_51	0	0.10000E+01	603985.8	4054445.9	27.5	1.70	1.70	1.58	YES	
PCHL6_52	0	0.10000E+01	603980.1	4054438.1	26.8	1.70	1.70	1.58	YES	
PCHL6_53	0	0.10000E+01	603974.3	4054430.3	26.3	1.70	1.70	1.58	YES	
PCHL6_54	0	0.10000E+01	603968.6	4054422.6	25.9	1.70	1.70	1.58	YES	
PCHL6_55	0	0.10000E+01	603962.8	4054414.8	25.5	1.70	1.70	1.58	YES	
PCHL6_56	0	0.10000E+01	603957.1	4054407.0	24.9	1.70	1.70	1.58	YES	
PCHL6_57	0	0.10000E+01	603951.4	4054399.3	24.2	1.70	1.70	1.58	YES	
PCHL6_58	0	0.10000E+01	603945.6	4054391.5	24.3	1.70	1.70	1.58	YES	
PCHL6_59	0	0.10000E+01	603939.6	4054383.4	24.5	1.70	1.70	1.58	YES	
PCHL6_60	0	0.10000E+01	603933.6	4054374.9	24.4	1.70	1.70	1.58	YES	
PCHL6_61	0	0.10000E+01	603928.1	4054366.9	24.2	1.70	1.70	1.58	YES	
PCHL6_62	0	0.10000E+01	603922.7	4054358.9	23.8	1.70	1.70	1.58	YES	
PCHL6_63	0	0.10000E+01	603917.3	4054350.9	23.5	1.70	1.70	1.58	YES	
PCHL6_64	0	0.10000E+01	603911.8	4054342.9	23.2	1.70	1.70	1.58	YES	
PCHL6_65	0	0.10000E+01	603906.4	4054334.9	22.8	1.70	1.70	1.58	YES	
PCHL6_66	0	0.10000E+01	603900.2	4054325.8	21.8	1.70	1.70	1.58	YES	
PCHL6_67	0	0.10000E+01	603894.6	4054316.5	20.4	1.70	1.70	1.58	YES	
PCHL6_68	0	0.10000E+01	603889.9	4054308.0	19.3	1.70	1.70	1.58	YES	
PCHL6_69	0	0.10000E+01	603885.2	4054299.6	19.1	1.70	1.70	1.58	YES	
PCHL6_70	0	0.10000E+01	603880.5	4054291.1	19.0	1.70	1.70	1.58	YES	
PCHL6_71	0	0.10000E+01	603875.8	4054282.7	18.7	1.70	1.70	1.58	YES	
PCHL6_72	0	0.10000E+01	603871.2	4054274.2	18.3	1.70	1.70	1.58	YES	

**MODELOPTs: RegDFAULT CONC ELEV

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

(	604204.8,	4054580.2,	32.0,	32.0,	0.0);	(604197.0,	4054570.2,	32.2,	32.2,	0.0);
(	604189.9,	4054560.1,	32.4,	32.4,	0.0);	(604180.6,	4054548.6,	32.5,	32.5,	0.0);
(	604172.8,	4054537.5,	32.3,	32.3,	0.0);	(604165.0,	4054527.1,	32.1,	32.1,	0.0);
(	604156.5,	4054515.6,	31.8,	31.8,	0.0);	(604146.8,	4054503.7,	31.7,	31.7,	0.0);
(	604137.2,	4054490.7,	31.3,	31.3,	0.0);	(604127.9,	4054477.7,	31.3,	31.3,	0.0);
(	604117.9,	4054465.4,	31.7,	31.7,	0.0);	(604107.5,	4054451.3,	32.0,	32.0,	0.0);
(	604096.0,	4054437.2,	31.8,	31.8,	0.0);	(604217.0,	4054572.4,	32.1,	32.1,	0.0);
(	604210.0,	4054562.4,	32.5,	32.5,	0.0);	(604201.8,	4054552.7,	32.8,	32.8,	0.0);
(	604192.1,	4054541.6,	33.0,	33.0,	0.0);	(604184.7,	4054530.4,	32.7,	32.7,	0.0);
(	604178.0,	4054519.3,	32.5,	32.5,	0.0);	(604171.0,	4054508.5,	32.6,	32.6,	0.0);
(	604160.9,	4054494.4,	32.6,	32.6,	0.0);	(604151.3,	4054482.1,	32.4,	32.4,	0.0);
(	604142.4,	4054468.0,	32.3,	32.3,	0.0);	(604133.8,	4054455.8,	32.1,	32.1,	0.0);
(	604124.2,	4054441.3,	32.4,	32.4,	0.0);	(604113.4,	4054425.3,	32.4,	32.4,	0.0);
(	604230.8,	4054564.6,	32.6,	32.6,	0.0);	(604223.3,	4054553.8,	32.8,	32.8,	0.0);
(	604217.0,	4054543.1,	33.1,	33.1,	0.0);	(604208.9,	4054531.9,	33.3,	33.3,	0.0);
(	604199.9,	4054521.5,	33.2,	33.2,	0.0);	(604192.5,	4054511.1,	33.3,	33.3,	0.0);
(	604185.1,	4054500.7,	33.7,	33.7,	0.0);	(604175.8,	4054487.7,	33.8,	33.8,	0.0);
(	604166.9,	4054472.5,	33.8,	33.8,	0.0);	(604156.9,	4054460.6,	33.5,	33.5,	0.0);
(	604147.2,	4054446.5,	33.3,	33.3,	0.0);	(604247.5,	4054554.2,	33.0,	33.0,	0.0);
(	604238.2,	4054544.2,	33.1,	33.1,	0.0);	(604230.4,	4054535.6,	33.5,	33.5,	0.0);
(	604223.7,	4054524.5,	33.8,	33.8,	0.0);	(604214.8,	4054513.7,	33.9,	33.9,	0.0);
(	604207.0,	4054502.9,	34.2,	34.2,	0.0);	(604198.1,	4054492.2,	34.6,	34.6,	0.0);
(	604189.9,	4054480.7,	35.0,	35.0,	0.0);	(604180.6,	4054466.9,	34.8,	34.8,	0.0);
(	604172.1,	4054452.1,	34.7,	34.7,	0.0);	(604260.8,	4054544.9,	33.4,	33.4,	0.0);
(	604253.0,	4054535.3,	33.8,	33.8,	0.0);	(604245.6,	4054526.0,	34.2,	34.2,	0.0);
(	604237.1,	4054515.6,	34.5,	34.5,	0.0);	(604227.4,	4054504.8,	34.5,	34.5,	0.0);
(	604218.9,	4054494.4,	34.7,	34.7,	0.0);	(604210.3,	4054483.3,	35.2,	35.2,	0.0);
(	604200.3,	4054470.6,	35.7,	35.7,	0.0);	(604192.1,	4054458.8,	35.9,	35.9,	0.0);
(	604275.3,	4054534.9,	34.2,	34.2,	0.0);	(604267.9,	4054524.9,	34.6,	34.6,	0.0);
(	604259.4,	4054514.5,	35.1,	35.1,	0.0);	(604250.4,	4054504.1,	35.3,	35.3,	0.0);
(	604241.2,	4054495.5,	35.3,	35.3,	0.0);	(604231.1,	4054485.5,	35.3,	35.3,	0.0);

**MODELOPTs: RegDFAULT CONC   ELEV

*** 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 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

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

Surface file: 724915.SFC Met Version: 14134
Profile file: 724915.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 23259 Upper air station no.: 23230
Name: MONTEREY_PENINSULA_AIRPORT Name: OAKLAND/WSO_AP
Year: 2009 Year: 2009

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
09	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	1.00	0.00	0.	10.0	279.9	2.0
09	01	01	1	02	-6.2	0.081	-9.000	-9.000	-999.	55.	7.7	0.13	0.83	1.00	1.76	98.	10.0	279.2	2.0
09	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	1.00	0.00	0.	10.0	279.2	2.0
09	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	1.00	0.00	0.	10.0	279.9	2.0
09	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	1.00	0.00	0.	10.0	279.9	2.0
09	01	01	1	06	-10.0	0.176	-9.000	-9.000	-999.	177.	48.8	0.13	0.83	1.00	2.36	92.	10.0	279.2	2.0
09	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	1.00	0.00	0.	10.0	278.8	2.0
09	01	01	1	08	-4.4	0.081	-9.000	-9.000	-999.	55.	10.9	0.13	0.83	0.70	1.76	63.	10.0	279.2	2.0
09	01	01	1	09	1.8	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	0.36	0.00	0.	10.0	279.2	2.0
09	01	01	1	10	8.0	-9.000	-9.000	-9.000	117.	-999.	-99999.0	0.12	0.83	0.25	0.00	0.	10.0	278.8	2.0
09	01	01	1	11	80.8	0.389	0.923	0.014	352.	582.	-65.8	0.13	0.83	0.21	3.86	94.	10.0	281.4	2.0
09	01	01	1	12	100.9	0.264	1.082	0.016	454.	335.	-16.4	0.12	0.83	0.19	2.36	999.	10.0	285.9	2.0
09	01	01	1	13	103.6	0.448	1.117	0.017	486.	720.	-78.4	0.15	0.83	0.19	4.36	293.	10.0	285.4	2.0
09	01	01	1	14	92.2	0.316	1.093	0.015	512.	439.	-30.9	0.15	0.83	0.20	2.86	289.	10.0	283.8	2.0
09	01	01	1	15	61.6	-9.000	-9.000	-9.000	530.	-999.	-99999.0	0.12	0.83	0.23	0.00	0.	10.0	285.4	2.0
09	01	01	1	16	19.6	0.265	0.663	0.014	535.	328.	-85.5	0.10	0.83	0.31	2.86	304.	10.0	284.9	2.0
09	01	01	1	17	-5.3	0.079	-9.000	-9.000	-999.	102.	8.4	0.12	0.83	0.54	1.76	999.	10.0	283.8	2.0
09	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	1.00	0.00	0.	10.0	283.1	2.0
09	01	01	1	19	-6.0	0.083	-9.000	-9.000	-999.	57.	8.6	0.14	0.83	1.00	1.76	184.	10.0	283.1	2.0
09	01	01	1	20	-5.7	0.078	-9.000	-9.000	-999.	53.	7.6	0.11	0.83	1.00	1.76	167.	10.0	282.5	2.0
09	01	01	1	21	-5.8	0.078	-9.000	-9.000	-999.	53.	7.4	0.11	0.83	1.00	1.76	170.	10.0	283.1	2.0
09	01	01	1	22	-5.8	0.078	-9.000	-9.000	-999.	53.	7.4	0.11	0.83	1.00	1.76	152.	10.0	282.0	2.0
09	01	01	1	23	-11.1	0.109	-9.000	-9.000	-999.	86.	10.4	0.13	0.83	1.00	2.36	90.	10.0	281.4	2.0
09	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.12	0.83	1.00	0.00	0.	10.0	280.9	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
09	01	01	01	10.0	1	-999.	-99.00	279.9	99.0	-99.00	-99.00

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

**MODELOPTs: RegDFAULT CONC ELEV

*** THE SUMMARY OF MAXIMUM PERIOD (43872 HRS) RESULTS ***

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	13544.22886 AT	604196.96,	4054570.17,	32.21,	32.21,	0.00)	DC	
	2ND HIGHEST VALUE IS	13526.04443 AT	604204.76,	4054580.20,	32.00,	32.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	13485.20709 AT	604180.62,	4054548.63,	32.53,	32.53,	0.00)	DC	
	4TH HIGHEST VALUE IS	13437.77113 AT	604189.91,	4054560.14,	32.45,	32.45,	0.00)	DC	
	5TH HIGHEST VALUE IS	13389.09467 AT	604172.82,	4054537.49,	32.34,	32.34,	0.00)	DC	
	6TH HIGHEST VALUE IS	13376.81988 AT	604146.83,	4054503.69,	31.68,	31.68,	0.00)	DC	
	7TH HIGHEST VALUE IS	13373.04178 AT	604165.02,	4054527.09,	32.08,	32.08,	0.00)	DC	
	8TH HIGHEST VALUE IS	13329.99597 AT	604156.48,	4054515.58,	31.82,	31.82,	0.00)	DC	
	9TH HIGHEST VALUE IS	13314.45468 AT	604137.17,	4054490.69,	31.28,	31.28,	0.00)	DC	
	10TH HIGHEST VALUE IS	13150.48252 AT	604127.89,	4054477.69,	31.29,	31.29,	0.00)	DC	

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

**MODELOPTs: RegDFAULT CONC   ELEV

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

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

A Total of   0 Fatal Error Message(s)
A Total of   796 Warning Message(s)
A Total of   11597 Informational Message(s)

A Total of   43872 Hours Were Processed

A Total of   9805 Calm Hours Identified

A Total of   1792 Missing Hours Identified (4.08 Percent)

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

   ********   WARNING MESSAGES   ********
OU W565   1500   OUPLOT: Possible Conflict With Dynamically Allocated FUNIT   PLOTFILE

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