APPENDIX D:
HEALTH RISK ASSESSMENT

1. Health Risk Assessment

1.1 CONSTRUCTION HEALTH RISK ASSESSMENT

The proposed project would demolish approximately 31,500 square feet of the existing senior facilities and develop the 51.5-acre site with approximately 278,000 square feet of new congregate care facilities, independent living villas, community space, and parking. In addition, approximately 42,300 square feet of existing senior care facilities would be renovated under the proposed project.

The latest version of the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines requires projects to evaluate the impacts of construction activities on sensitive receptors (BAAQMD, 2012). Project construction is anticipated to take place beginning of January 2018 and continue to August 2020 (approximately 694 workdays, 32 months). Although phase 2 of the construction process may occur beyond 2020, earlier dates were used to create a more conservative emissions estimate, as construction equipment and techniques are expected to increase in efficiency in the future. The nearest off-site sensitive receptors proximate to the project site include the abutting single-family residences to the south and west along Black Oak Way and Oak Valley Road. On-site sensitive receptors include existing senior living facilities at The Forum. The BAAQMD has developed *Screening Tables for Air Toxics Evaluation During Construction* (2010) that evaluate construction-related health risks associated with residential, commercial, and industrial projects. According to the screening tables, the residences are closer than the distance of 200 meters (656 feet) that would screen out potential health risks and therefore could be potentially impacted from the proposed construction activities. As a result, a site-specific construction health risk assessment (HRA) has been prepared for the proposed project. This HRA considers the health impact to off-site sensitive receptors (adults and children in the nearby residences) and to on-site sensitive receptors (existing senior living residents) from construction emissions at the project site, including diesel equipment exhaust (diesel particulate matter or DPM) and particulate matter less than 2.5 microns ($PM_{2.5}$).

It should be noted that these health impacts are based on conservative (i.e., health protective) assumptions. The United States Environmental Protection Agency (USEPA, 2005) and the Office of Environmental Health Hazard Assessment (OEHHA, 2015) note that conservative assumptions used in a risk assessment are intended to ensure that the estimated risks do not underestimate the actual risks. Therefore, the estimated risks may not necessarily represent actual risks experienced by populations at or near a site. The use of conservative assumptions tends to produce upper-bound estimates of exposure and thus risk.

For this residential-based risk assessment, the following conservative assumptions were used:

- It was assumed that maximum-exposed off-site residential receptors (both children and adults) and on-site residential receptors (senior living adults) stood outdoors and are subject to DPM at their residence for 8 hours per day, and approximately 260 construction days per year. In reality, California residents

typically will spend on average 2 hours per day outdoors at their residences (USEPA, 2011). This would result in lower exposures to construction related DPM emissions and lower estimated risk values.

- The calculated risk for infants from third trimester to age 2 and children aged 2 to 9 years are multiplied by age sensitivity factors of 10 and 3, respectively, to account for early life exposure and uncertainty in child versus adult exposure impacts (OEHHA 2015).

1.2 METHODOLOGY AND SIGNIFICANCE THRESHOLDS

For this HRA, the BAAQMD significance thresholds were deemed to be appropriate and the thresholds that were used for this project are shown below:

- Excess cancer risk of more than 10 in a million
- Non-cancer hazard index (chronic or acute) greater than 1.0
- Incremental increase in average annual $PM_{2.5}$ concentration of greater than 0.3 $\mu g/m^3$

The methodology used in this HRA is consistent with the following BAAQMD and the OEHHA guidance documents:

- BAAQMD, 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017.
- BAAQMD, 2010. *Screening Tables for Air Toxics Evaluation During Construction.* May 2010.
- BAAQMD, 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. Version 3.0. May 2012.
- OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments.* February, 2015.

Potential exposures to DPM and $PM_{2.5}$ from proposed project construction were evaluated for off-site sensitive receptors in close proximity to the site and for on-site sensitive receptors at the existing senior living facilities. Pollutant concentrations were estimated using an air dispersion model, and excess lifetime cancer risks and chronic and acute non-cancer hazard indexes were calculated. These risks were then compared to the significance thresholds adopted for this HRA.

1.3 CONSTRUCTION EMISSIONS

Construction emissions were calculated as average daily emissions in pounds per day, using the proposed construction schedule and the latest version of California Emissions Estimation Model, known as CalEEMod Version 2016.3.1 (CAPCOA, 2016). DPM emissions were based on the CalEEMod construction runs, using annual exhaust PM_{10} construction emissions in tons per year (tons/yr). The project was assumed to take place over 32 months (970 calendar days or 694 work days) from the start of January 2018 through August 2020. The average daily emission rates from construction equipment used during the proposed project were determined by dividing the annual average emissions (tons/yr) for each construction year (i.e., 2018, 2019, and 2020) by the number of construction days per year (on average 260 construction days per year). As the calculated hauling emissions used the CalEEMod default 20-mile haul length, the off-site hauling emission rates were adjusted to evaluate localized emissions from the 0.93-mile haul route within 1,000 feet

of the project site. The CalEEMod construction emissions output and emission rate calculations are provided in Appendix A.

1.4 AIR DISPERSION MODELING

To assess the impact of emitted compounds on sensitive receptors near the project, air quality modeling using the AERMOD atmospheric dispersion model was performed. The model is a steady state Gaussian plume model and is an approved model by BAAQMD for estimating flag-pole level impacts from point and fugitive sources in simple and complex terrain. The on-site construction emissions for the project were modeled as poly-area sources. The off-site mobile sources were modeled as adjacent line volume sources. The model requires additional input parameters, including chemical emission data and local meteorology. Inputs for the construction emission rates are those described in Section 1.3. Meteorological data obtained from the BAAQMD for the nearest representative meteorological station (Palo Alto Airport of Santa Clara County) with the latest available years (2009-2013) of record were used to represent local weather conditions and prevailing winds.

The modeling analysis also considered the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. To accommodate the model's Cartesian grid format, direction-dependent calculations were obtained by identifying the Universal Transverse Mercator (UTM) coordinates for each source location. In addition, digital elevation model (DEM) data for the area were obtained and included in the model runs to account for complex terrain. An emission release height of 4.15 meters was used as representative of the stack exhaust height for off-road construction equipment and diesel truck traffic, and an initial vertical dispersion parameter of 1.93 m was used, per California Air Resources Board (CARB) guidance (2000).

To determine contaminant impacts during construction hours, the model's Season-Hour-Day (HRDOW) scalar option was invoked to predict flagpole-level concentrations (1.5 m for ground-floor receptors and 6.1 for second-floor receptors) for construction emissions generated between the hours of 7:00 AM and 4:00 PM with a 1-hour lunch break (assumed between noon and 1:00 PM). In addition, a scalar factor was applied to the risk calculations to account for the number of days residents are exposed to construction emissions per year.

For all modeling runs, a unit emission rate of 1 gram per second was used. The unit emission rates were proportioned over the poly-area sources for on-site construction emissions, and divided between the volume sources for off-site hauling emissions. The AERMOD concentrations from the output files were then multiplied by the emission rates calculated in Appendix A to obtain the maximum flagpole-level concentrations at the off-site and on-site MER's. The off-site residential MER is a single family residence on Black Oak Way, southwest of the project site. The on-site senior living MER is a residence on Via Venture, south of the proposed multipurpose room and fitness facility. The MER location for both the off-site resident and on-site senior resident is the receptor location associated with the maximum predicted AERMOD concentrations from the on-site emission source. The calculated on-site emission rates are approximately 2 to 3 orders of magnitude higher than the calculated off-site emission rates (see Appendix A). Therefore, the maximum concentrations associated with the on-site emission sources produce the highest overall ground-level MER concentrations and, consequently, higher calculated health risks.

The air dispersion model output for the emission sources is presented in Appendix B. The model output DPM and $PM_{2.5}$ concentrations for the on-site and off-site construction sources are provided in Appendix C.

1.5 RISK CHARACTERIZATION

1.5.1 Carcinogenic Chemical Risk

A threshold of ten in a million ($10E^{-06}$) has been established as a level posing no significant risk for exposures to carcinogens. Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The cancer risk probability is determined by multiplying the chemical's annual concentration by its cancer potency factor (CPF), a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It is an upper-limit estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu g/m^3$) over a lifetime of 70 years.

Recent guidance from OEHHA recommends a refinement to the standard point estimate approach with the use of age-specific breathing rates and age sensitivity factors (ASFs) to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day $(mg/kg/day)^{-1}$ to derive the cancer risk estimate. Therefore, to accommodate the unique exposures associated with the residential receptors, the following dose algorithm was used.

$$\text{Dose}_{\text{AIR,per age group}} = \left(C_{air} \times EF \times \left[\frac{BR}{BW}\right] \times A \times CF\right)$$

Where:

$Dose_{AIR}$	=	dose by inhalation (mg/kg-day), per age group
C_{air}	=	concentration of contaminant in air ($\mu g/m^3$)
EF	=	exposure frequency (number of days/365 days)
BR/BW	=	daily breathing rate normalized to body weight (L/kg-day)
A	=	inhalation absorption factor (default = 1)
CF	=	conversion factor ($1x10^{-6}$, µg to mg, L to m^3)

The inhalation absorption factor (A) is a unitless factor that is only used if the cancer potency factor included a correction for absorption across the lung. For this assessment, the default value of 1 was used. For residential receptors, the exposure frequency (EF) of 0.96 is used to represent 350 days per year to allow for a two week period away from home each year (OEHHA, 2015). The 95th percentile daily breathing rates (BR/BW), exposure duration (ED), age sensitivity factors (ASFs), and fraction of time at home (FAH) for the various age groups are provided herein:

Age Groups	BR/BW (L/kg-day)	ED	ASF	FAH
Third trimester	361	0.25	10	0.85
0-2 age group	1,090	2	10	0.85
2-9 age group	861	7	3	0.72
2-16 age group	745	14	3	0.72
16-30 age group	335	14	1	0.73
16-70 age group	290	54	1	0.73

For construction analysis, the exposure duration spans the length of construction (e.g. 694 work days). As the length of construction is 2.63 years (32 months), only the third trimester, 0-2, and 2-9 age bins apply to the construction analysis for the off-site residential receptors. The 16-70 age bin was applied to on-site senior residents.

To calculate the overall cancer risk, the risk for each appropriate age group is calculated per the following equation:

$$\text{Cancer Risk}_{\text{AIR}} = \text{Dose}_{\text{AIR}} \times \text{CPF} \times \text{ASF} \times \text{FAH} \times \frac{\text{ED}}{AT}$$

Where:

Dose_{AIR}	=	dose by inhalation (mg/kg-day), per age group
CPF	=	cancer potency factor, chemical-specific $(\text{mg/kg-day})^{-1}$
ASF	=	age sensitivity factor, per age group
FAH	=	fraction of time at home, per age group (for residential receptors only)
ED	=	exposure duration (years)
AT	=	averaging time period over which exposure duration is averaged (70 years)

The CPFs used in the assessment were obtained from OEHHA guidance. The excess lifetime cancer risks during the construction period to the maximally exposed resident were calculated based on the factors provided above. The cancer risks for each age group are summed to estimate the total cancer risk for each toxic chemical species. For purposes of this assessment and as stated, the calculated off-site residential cancer risks associated with construction activities are based on the 3rd trimester, 0-2, and 2-9 year old age groups. The final step converts the cancer risk in scientific notation to a whole number that expresses the cancer risk in "chances per million" by multiplying the cancer risk by a factor of $1x10^6$ (i.e. 1 million).

The calculated results are provided in Appendix C.

1.5.2 Non-Carcinogenic Hazards

An evaluation of the potential non-cancer effects of chronic and acute chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor level (flagpole) concentration of each chemical compound with the appropriate reference exposure limit (REL). Available RELs promulgated by OEHHA were considered in the assessment.

To quantify non-carcinogenic impacts, the hazard index approach was used. The hazard index assumes that chronic and acute sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity value. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds one, a health hazard is presumed to exist.

The chronic hazard analysis for DPM is provided in Appendix C. The calculations contain the relevant exposure concentrations and corresponding reference dose values used in the evaluation of non-carcinogenic exposures.

1.5.3 Criteria Pollutants

The BAAQMD has recently incorporated $PM_{2.5}$ into the District's CEQA significance thresholds due to recent studies that show adverse health impacts from exposure to this pollutant. An incremental increase of greater than 0.3 $\mu g/m^3$ for the annual average $PM_{2.5}$ concentration is considered to be a significant impact.

1.6 CONSTRUCTION HRA RESULTS

The calculated results are provided in Appendix C and the results are summarized in Table 1.

TABLE 1. CONSTRUCTION RISK SUMMARY – UNMITIGATED

Receptor	Cancer Risk (per million)	Chronic Hazards	$PM_{2.5}$ ($\mu g/m^3$)[a]
Off-site Residence	19.7	0.06	0.10
On-site Resident	2.1	0.18	0.63
BAAQMD Threshold	10	1.0	0.3
Exceeds Threshold?	Yes	No	Yes

Note: Cancer risk calculated using 2015 OEHHA HRA guidance.
a. From year 2020, which represents the highest maximum annual $PM_{2.5}$ concentration.

Cancer risk for the maximum exposed off-site resident (MER) from project-related construction emissions was calculated to be 19.7 in a million, which would exceed the 10 in a million significance threshold. In accordance with the latest 2015 OEHHA guidance, the calculated total cancer risk conservatively assumes that the risk for the MER consists of a pregnant woman in the third trimester that subsequently gives birth to an infant during the approximately 32-month construction period; therefore, all calculated risk values were multiplied by a factor of 10. In addition, it was conservatively assumed that the residents were outdoors 24 hours a day, 260 construction days per year and exposed to all of the daily construction emissions. The calculated cancer risks of 2.1 in a million for existing seniors at The Forum are below the 10 in a million significance threshold.

For non-carcinogenic effects, the chronic hazard index identified for each toxicological endpoint totaled less than one for all off-site and on-site sensitive receptors. Therefore, chronic non-carcinogenic hazards are within acceptable limits. The highest $PM_{2.5}$ annual concentration of 0.63 $\mu g/m^3$ for on-site residences at The

Forum, which would be above the BAAQMD significance threshold of 0.3 μg/m^3. The determined $PM_{2.5}$ annual concentrations at the off-site residences are below the 0.3 μg/m^3 significance threshold.

Because cancer risk for residential receptors and $PM_{2.5}$ annual concentrations for on-site residents at The Forum would exceed BAAQMD's significance thresholds due to construction activities associated with the proposed project, the following mitigation measure is proposed:

> **Mitigation Measure AQ-4:** During construction, the construction contractor(s) shall use construction equipment fitted with Level 3 Diesel Particulate Filters (DPF) for all equipment of 50 horsepower or more.
>
> The construction contractor shall maintain a list of all operating equipment in use on the project site for verification by the City of Cupertino Building Division official or his/her designee. The construction equipment list shall state the makes, models, and number of construction equipment on-site. Equipment shall be properly serviced and maintained in accordance with manufacturer recommendations. The construction contractor shall ensure that all non-essential idling of construction equipment is restricted to five minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9. Prior to issuance of any construction permit, the construction contractor shall ensure that all construction plans submitted to the City of Cupertino Planning Division and/or Building Division clearly show the requirement for Level 3 DPF for construction equipment over 50 horsepower.

Mitigation Measure AQ-4 would reduce the project's localized construction emissions, as shown in Table 2. The results indicate that, with mitigation, cancer risk and $PM_{2.5}$ annual concentrations would be less than the BAAQMD's significance threshold for off-site and on-site receptors. Therefore, the project would not expose sensitive receptors to substantial concentrations of air pollutant emissions during construction and impacts would be *less than significant with mitigation*.

TABLE 2 CONSTRUCTION RISK SUMMARY – MITIGATED

Receptor	Cancer Risk (per million)	Chronic Hazards	$PM_{2.5}$ (μg/m^3)[a]
Off-site Residence	6.6	0.02	0.03
On-site Resident	0.46	0.04	0.10
BAAQMD Threshold	10	1.0	0.3
Exceeds Threshold?	No	No	No

Notes: Cancer risk calculated using 2015 OEHHA HRA guidance.
Risks incorporate Mitigation Measure AQ-4, which includes using construction equipment with Level 3 Diesel Particulate Filters for equipment over 50 horsepower.
a. From year 2020, which represents the highest maximum annual $PM_{2.5}$ concentration.

2. References

Bay Area Air Quality Management District. 2017. *California Environmental Quality Act Air Quality Guidelines.*

———. 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards.* Version 3.0. Dated May 2012.

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California Air Pollution Control Officers Association (CAPCOA). 2016. California Emissions Estimator Model (CalEEMod). Version 2016.3.1. Prepared by: Trinity Consultants and the California Air Districts.

———. 2009-2013. Meteorological Data Set for Palo Alto Airport of Santa Clara County Meteorological Station. https://www.arb.ca.gov/toxics/harp/metfiles2.htm (accessed May 29, 2017).

California Air Resources Board (CARB). 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.*

Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments.* Dated February, 2015.

United States Environmental Protection Agency (USEPA). 2011. *Exposure Factors Handbook 2011 Edition (Final).* EPA/600/R-09/052F, 2011.

_____. 2005. *Guideline on Air Quality Models* (Revised). EPA-450/2-78-027R.

Appendix A. Emission Rate Calculations

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Construction Emissions - DPM and PM2.5
Input to Risk Tables

Onsite Construction Emissions		DPM [1]	$PM_{2.5}$ [2]
2018 Onsite Emissions Phase 1	Average Daily Emissions (lbs/day)	0.87	0.81
	Average Daily Emissions (lbs/hr)	1.08E-01	1.01E-01
	Emission Rate (g/s)	1.37E-02	1.28E-02
2019 Onsite Emissions Phase 1	Average Daily Emissions (lbs/day)	0.24	0.24
	Average Daily Emissions (lbs/hr)	3.06E-02	2.94E-02
	Emission Rate (g/s)	3.85E-03	3.71E-03
2020 Onsite Emissions Phase 1	Average Daily Emissions (lbs/day)	0.46	0.43
	Average Daily Emissions (lbs/hr)	5.72E-02	5.40E-02
	Emission Rate (g/s)	7.21E-03	6.80E-03
2020 Onsite Emissions Phase 2	Average Daily Emissions (lbs/day)	0.53	0.49
	Average Daily Emissions (lbs/hr)	6.58E-02	6.09E-02
	Emission Rate (g/s)	8.29E-03	7.67E-03

Note: Emissions assumed to be evenly distributed over entire construction phase area.

Offsite Construction Emissions		DPM [1]	$PM_{2.5}$ [2]
2018 Offsite Emissions Phase 1	Haul Length Daily Emissions (lbs/day)	0.027	0.025
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	1.24E-03	1.18E-03
	Emission Rate (lbs/hr)	1.56E-04	1.48E-04
	Emission Rate (g/s)	1.96E-05	1.86E-05
2019 Offsite Emissions Phase 1	Haul Length Daily Emissions (lbs/day)	0.019	0.018
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	8.73E-04	8.26E-04
	Emission Rate (lbs/hr)	1.09E-04	1.03E-04
	Emission Rate (g/s)	1.37E-05	1.30E-05
2020 Offsite Emissions Phase 1	Haul Length Daily Emissions (lbs/day)	0.015	0.013
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	6.90E-04	6.29E-04
	Emission Rate (lbs/hr)	8.62E-05	7.86E-05
	Emission Rate (g/s)	1.09E-05	9.91E-06
2020 Offsite Emissions Phase 2	Haul Length Daily Emissions (lbs/day)	0.003	0.002
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	1.18E-04	1.02E-04
	Emission Rate (lbs/hr)	1.47E-05	1.27E-05
	Emission Rate (g/s)	1.85E-06	1.61E-06

Note: Emissions evenly distributed over 247 modeled volume sources.

Hours per work day (7:00 AM to 4:00 PM, 1-hour of breaks) [4] 8 hours

	Year		Risk Scalar [5]
Total construction days per year	2018	261	1.00
	2019	261	1.00
	2020 phase 1	46	0.18
	2020 phase 2	119	0.46

Hauling Length (miles)	20.0
Haul Length within 1,000 ft of Site (mile) [3]	0.93

[1] DPM emissions taken as PM_{10} exhaust emissions from CalEEMod average daily emissions.

[2] $PM_{2.5}$ emissions taken as $PM_{2.5}$ exhaust emissions from CalEEMod average daily emissions.

[3] Emissions from CalEEMod offsite average daily emissions, which is based on proportioned haul truck trip distance of 20 miles (CalEEMod Default), are adjusted to evaluate emissions from the **0.93-**mile route within 1,000 of the project site.

[4] Work hours applied in By Hour/Day (HRDOW) variable emissions module in air dispersion model (see App B - Air Dispersion Model Output Files).

[5] Risk scalars determined for each year of construction to adjust receptor exposures to the exposure durations for each construction year (see App C - Risk Calculations).

Construction Emissions - DPM and PM2.5
Input to Risk Tables
Mitigation - Level 3 DPFs for Equipment > 50 hp

Onsite Construction Emissions		DPM [1]	$PM_{2.5}$ [2]
2018 Onsite Emissions Phase 1	Average Daily Emissions (lbs/day)	0.24	0.23
	Average Daily Emissions (lbs/hr)	3.04E-02	2.94E-02
	Emission Rate (g/s)	3.83E-03	3.70E-03
2019 Onsite Emissions Phase 1	Average Daily Emissions (lbs/day)	0.15	0.14
	Average Daily Emissions (lbs/hr)	1.83E-02	1.81E-02
	Emission Rate (g/s)	2.30E-03	2.28E-03
2020 Onsite Emissions Phase 1	Average Daily Emissions (lbs/day)	0.15	0.15
	Average Daily Emissions (lbs/hr)	1.87E-02	1.82E-02
	Emission Rate (g/s)	2.36E-03	2.29E-03
2020 Onsite Emissions Phase 2	Average Daily Emissions (lbs/day)	0.08	0.07
	Average Daily Emissions (lbs/hr)	1.01E-02	9.33E-03
	Emission Rate (g/s)	1.27E-03	1.18E-03

Note: Emissions assumed to be evenly distributed over entire construction phase area.

Offsite Construction Emissions		DPM [1]	$PM_{2.5}$ [2]
2018 Offsite Emissions Phase 1	Haul Length Daily Emissions (lbs/day)	0.027	0.025
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	1.24E-03	1.18E-03
	Emission Rate (lbs/hr)	1.56E-04	1.48E-04
	Emission Rate (g/s)	1.96E-05	1.86E-05
2019 Offsite Emissions Phase 1	Haul Length Daily Emissions (lbs/day)	0.019	0.018
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	8.73E-04	8.26E-04
	Emission Rate (lbs/hr)	1.09E-04	1.03E-04
	Emission Rate (g/s)	1.37E-05	1.30E-05
2020 Offsite Emissions Phase 1	Haul Length Daily Emissions (lbs/day)	0.015	0.013
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	6.90E-04	6.29E-04
	Emission Rate (lbs/hr)	8.62E-05	7.86E-05
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2020 Offsite Emissions Phase 2	Haul Length Daily Emissions (lbs/day)	0.003	0.002
	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	1.18E-04	1.02E-04
	Emission Rate (lbs/hr)	1.47E-05	1.27E-05
	Emission Rate (g/s)	1.85E-06	1.61E-06

Note: Emissions evenly distributed over 247 modeled volume sources.

Hours per work day (7:00 AM to 4:00 PM, 1-hour of breaks) [4] 8 hours

	Year		Risk Scalar [5]
Total construction days per year	2018	261	1.00
	2019	261	1.00
	2020 phase 1	46	0.18
	2020 phase 2	119	0.46

Hauling Length (miles)	20.0
Haul Length within 1,000 ft of Site (mile) [3]	0.93

[1] DPM emissions taken as PM_{10} exhaust emissions from CalEEMod average daily emissions.

[2] $PM_{2.5}$ emissions taken as $PM_{2.5}$ exhaust emissions from CalEEMod average daily emissions.

[3] Emissions from CalEEMod offsite average daily emissions, which is based on proportioned haul truck trip distance of 20 miles (CalEEMod Default), are adjusted to evaluate emissions from the **0.93-**mile route within 1,000 of the project site.

[4] Work hours applied in By Hour/Day (HRDOW) variable emissions module in air dispersion model (see App B - Air Dispersion Model Output Files).

[5] Risk scalars determined for each year of construction to adjust receptor exposures to the exposure durations for each construction year (see App C - Risk Calculations).

Appendix B. Air Dispersion Model Output

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Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

```
*** AERMOD - VERSION 16216r ***   *** Phase 1 Residential Receptors                                  ***        05/24/17
*** AERMET - VERSION  14134 ***   ***                                                               ***        13:52:56
                                                                                                              PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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   254 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =     60572.0 ;  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:
       CCVR_Sub - Meteorological data includes CCVR substitutions
       TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates PERIOD Averages Only

**This Run Includes:    254 Source(s);       2 Source Group(s); and     172 Receptor(s)

              with:      0 POINT(s), including
                         0 POINTCAP(s) and      0 POINTHOR(s)
               and:    247 VOLUME source(s)
               and:      7 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.
```

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

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**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) =     2.10 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                              ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      4.4 MB of RAM.

**Detailed Error/Message File:   Forum_P1_Offsite.err
**File for Summary of Results:   Forum_P1_Offsite.sum
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Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0000989	0	0.40265E-02	581191.8	4132151.1	129.8	4.15	2.84	0.45	YES	SHRDOW
L0000990	0	0.40265E-02	581191.0	4132157.2	129.8	4.15	2.84	0.45	YES	SHRDOW
L0000991	0	0.40265E-02	581190.2	4132163.2	130.0	4.15	2.84	0.45	YES	SHRDOW
L0000992	0	0.40265E-02	581189.5	4132169.3	130.2	4.15	2.84	0.45	YES	SHRDOW
L0000993	0	0.40265E-02	581188.7	4132175.3	130.3	4.15	2.84	0.45	YES	SHRDOW
L0000994	0	0.40265E-02	581187.9	4132181.4	130.5	4.15	2.84	0.45	YES	SHRDOW
L0000995	0	0.40265E-02	581187.1	4132187.4	130.6	4.15	2.84	0.45	YES	SHRDOW
L0000996	0	0.40265E-02	581186.3	4132193.5	130.7	4.15	2.84	0.45	YES	SHRDOW
L0000997	0	0.40265E-02	581185.5	4132199.5	130.8	4.15	2.84	0.45	YES	SHRDOW
L0000998	0	0.40265E-02	581184.8	4132205.5	130.9	4.15	2.84	0.45	YES	SHRDOW
L0000999	0	0.40265E-02	581184.0	4132211.6	131.0	4.15	2.84	0.45	YES	SHRDOW
L0001000	0	0.40265E-02	581183.2	4132217.6	131.1	4.15	2.84	0.45	YES	SHRDOW
L0001001	0	0.40265E-02	581182.4	4132223.7	131.2	4.15	2.84	0.45	YES	SHRDOW
L0001002	0	0.40265E-02	581181.6	4132229.7	131.3	4.15	2.84	0.45	YES	SHRDOW
L0001003	0	0.40265E-02	581180.8	4132235.8	131.5	4.15	2.84	0.45	YES	SHRDOW
L0001004	0	0.40265E-02	581180.1	4132241.8	131.6	4.15	2.84	0.45	YES	SHRDOW
L0001005	0	0.40265E-02	581179.3	4132247.9	131.6	4.15	2.84	0.45	YES	SHRDOW
L0001006	0	0.40265E-02	581178.5	4132253.9	131.2	4.15	2.84	0.45	YES	SHRDOW
L0001007	0	0.40265E-02	581177.7	4132260.0	130.8	4.15	2.84	0.45	YES	SHRDOW
L0001008	0	0.40265E-02	581176.9	4132266.0	130.5	4.15	2.84	0.45	YES	SHRDOW
L0001009	0	0.40265E-02	581176.1	4132272.0	130.2	4.15	2.84	0.45	YES	SHRDOW
L0001010	0	0.40265E-02	581174.7	4132277.9	130.0	4.15	2.84	0.45	YES	SHRDOW
L0001011	0	0.40265E-02	581172.2	4132283.5	129.8	4.15	2.84	0.45	YES	SHRDOW
L0001012	0	0.40265E-02	581169.7	4132289.1	129.6	4.15	2.84	0.45	YES	SHRDOW
L0001013	0	0.40265E-02	581167.3	4132294.6	129.4	4.15	2.84	0.45	YES	SHRDOW
L0001014	0	0.40265E-02	581164.8	4132300.2	129.1	4.15	2.84	0.45	YES	SHRDOW
L0001015	0	0.40265E-02	581162.4	4132305.8	128.7	4.15	2.84	0.45	YES	SHRDOW
L0001016	0	0.40265E-02	581159.9	4132311.4	128.4	4.15	2.84	0.45	YES	SHRDOW
L0001017	0	0.40265E-02	581157.4	4132316.9	128.2	4.15	2.84	0.45	YES	SHRDOW
L0001018	0	0.40265E-02	581155.0	4132322.5	128.1	4.15	2.84	0.45	YES	SHRDOW
L0001019	0	0.40265E-02	581152.5	4132328.1	128.0	4.15	2.84	0.45	YES	SHRDOW
L0001020	0	0.40265E-02	581147.3	4132331.1	127.7	4.15	2.84	0.45	YES	SHRDOW
L0001021	0	0.40265E-02	581141.9	4132333.7	127.3	4.15	2.84	0.45	YES	SHRDOW
L0001022	0	0.40265E-02	581136.4	4132336.4	126.9	4.15	2.84	0.45	YES	SHRDOW
L0001023	0	0.40265E-02	581130.9	4132339.1	126.5	4.15	2.84	0.45	YES	SHRDOW
L0001024	0	0.40265E-02	581125.4	4132341.7	126.1	4.15	2.84	0.45	YES	SHRDOW
L0001025	0	0.40265E-02	581119.9	4132344.4	125.9	4.15	2.84	0.45	YES	SHRDOW
L0001026	0	0.40265E-02	581114.4	4132347.0	125.7	4.15	2.84	0.45	YES	SHRDOW

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

L0001027	0	0.40265E-02	581109.0	4132349.7	125.5	4.15	2.84	0.45	YES	SHRDOW
L0001028	0	0.40265E-02	581103.5	4132352.5	125.3	4.15	2.84	0.45	YES	SHRDOW
L0001029	0	0.40265E-02	581098.5	4132356.0	125.2	4.15	2.84	0.45	YES	SHRDOW
L0001030	0	0.40265E-02	581093.6	4132359.5	125.0	4.15	2.84	0.45	YES	SHRDOW
L0001031	0	0.40265E-02	581088.6	4132363.0	124.6	4.15	2.84	0.45	YES	SHRDOW
L0001032	0	0.40265E-02	581083.6	4132366.5	124.1	4.15	2.84	0.45	YES	SHRDOW
L0001033	0	0.40265E-02	581078.6	4132370.0	123.4	4.15	2.84	0.45	YES	SHRDOW
L0001034	0	0.40265E-02	581073.6	4132373.5	122.8	4.15	2.84	0.45	YES	SHRDOW
L0001035	0	0.40265E-02	581068.6	4132377.0	122.2	4.15	2.84	0.45	YES	SHRDOW
L0001036	0	0.40265E-02	581063.7	4132380.5	121.6	4.15	2.84	0.45	YES	SHRDOW
L0001037	0	0.40265E-02	581059.6	4132385.0	121.3	4.15	2.84	0.45	YES	SHRDOW
L0001038	0	0.40265E-02	581056.0	4132389.9	121.0	4.15	2.84	0.45	YES	SHRDOW
L0001039	0	0.40265E-02	581052.4	4132394.9	120.7	4.15	2.84	0.45	YES	SHRDOW
L0001040	0	0.40265E-02	581048.9	4132399.8	120.5	4.15	2.84	0.45	YES	SHRDOW
L0001041	0	0.40265E-02	581045.3	4132404.7	120.4	4.15	2.84	0.45	YES	SHRDOW
L0001042	0	0.40265E-02	581041.7	4132409.7	120.3	4.15	2.84	0.45	YES	SHRDOW
L0001043	0	0.40265E-02	581038.1	4132414.6	120.2	4.15	2.84	0.45	YES	SHRDOW
L0001044	0	0.40265E-02	581034.6	4132419.5	120.0	4.15	2.84	0.45	YES	SHRDOW
L0001045	0	0.40265E-02	581031.0	4132424.5	119.9	4.15	2.84	0.45	YES	SHRDOW
L0001046	0	0.40265E-02	581027.4	4132429.4	119.7	4.15	2.84	0.45	YES	SHRDOW
L0001047	0	0.40265E-02	581023.8	4132434.4	119.5	4.15	2.84	0.45	YES	SHRDOW
L0001048	0	0.40265E-02	581020.2	4132439.3	119.3	4.15	2.84	0.45	YES	SHRDOW
L0001049	0	0.40265E-02	581016.7	4132444.2	119.2	4.15	2.84	0.45	YES	SHRDOW
L0001050	0	0.40265E-02	581013.1	4132449.2	119.1	4.15	2.84	0.45	YES	SHRDOW
L0001051	0	0.40265E-02	581009.5	4132454.1	119.0	4.15	2.84	0.45	YES	SHRDOW
L0001052	0	0.40265E-02	581005.4	4132458.5	118.7	4.15	2.84	0.45	YES	SHRDOW
L0001053	0	0.40265E-02	581000.5	4132462.1	117.9	4.15	2.84	0.45	YES	SHRDOW
L0001054	0	0.40265E-02	580995.6	4132465.8	116.9	4.15	2.84	0.45	YES	SHRDOW
L0001055	0	0.40265E-02	580990.7	4132469.4	116.0	4.15	2.84	0.45	YES	SHRDOW
L0001056	0	0.40265E-02	580985.8	4132473.1	115.2	4.15	2.84	0.45	YES	SHRDOW
L0001057	0	0.40265E-02	580980.9	4132476.7	114.4	4.15	2.84	0.45	YES	SHRDOW
L0001058	0	0.40265E-02	580976.1	4132480.4	113.8	4.15	2.84	0.45	YES	SHRDOW
L0001059	0	0.40265E-02	580971.2	4132484.0	113.3	4.15	2.84	0.45	YES	SHRDOW
L0001060	0	0.40265E-02	580966.3	4132487.6	113.1	4.15	2.84	0.45	YES	SHRDOW
L0001061	0	0.40265E-02	580961.4	4132491.3	112.9	4.15	2.84	0.45	YES	SHRDOW
L0001062	0	0.40265E-02	580956.5	4132494.9	112.8	4.15	2.84	0.45	YES	SHRDOW
L0001063	0	0.40265E-02	580951.6	4132498.6	112.7	4.15	2.84	0.45	YES	SHRDOW
L0001064	0	0.40265E-02	580946.8	4132502.2	112.7	4.15	2.84	0.45	YES	SHRDOW
L0001065	0	0.40265E-02	580941.9	4132505.9	112.7	4.15	2.84	0.45	YES	SHRDOW
L0001066	0	0.40265E-02	580937.0	4132509.5	112.4	4.15	2.84	0.45	YES	SHRDOW
L0001067	0	0.40265E-02	580932.1	4132513.2	112.1	4.15	2.84	0.45	YES	SHRDOW
L0001068	0	0.40265E-02	580927.2	4132516.8	112.0	4.15	2.84	0.45	YES	SHRDOW

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0001069	0	0.40265E-02	580922.3	4132520.5	111.8	4.15	2.84	0.45	YES	SHRDOW
L0001070	0	0.40265E-02	580917.4	4132524.1	111.6	4.15	2.84	0.45	YES	SHRDOW
L0001071	0	0.40265E-02	580912.6	4132527.8	111.6	4.15	2.84	0.45	YES	SHRDOW
L0001072	0	0.40265E-02	580907.7	4132531.4	111.4	4.15	2.84	0.45	YES	SHRDOW
L0001073	0	0.40265E-02	580902.9	4132535.2	111.3	4.15	2.84	0.45	YES	SHRDOW
L0001074	0	0.40265E-02	580898.3	4132539.1	111.1	4.15	2.84	0.45	YES	SHRDOW
L0001075	0	0.40265E-02	580893.7	4132543.1	111.0	4.15	2.84	0.45	YES	SHRDOW
L0001076	0	0.40265E-02	580889.0	4132547.1	111.0	4.15	2.84	0.45	YES	SHRDOW
L0001077	0	0.40265E-02	580884.4	4132551.1	110.8	4.15	2.84	0.45	YES	SHRDOW
L0001078	0	0.40265E-02	580879.8	4132555.1	110.6	4.15	2.84	0.45	YES	SHRDOW
L0001079	0	0.40265E-02	580875.2	4132559.1	110.4	4.15	2.84	0.45	YES	SHRDOW
L0001080	0	0.40265E-02	580870.6	4132563.1	110.3	4.15	2.84	0.45	YES	SHRDOW
L0001081	0	0.40265E-02	580866.0	4132567.1	110.1	4.15	2.84	0.45	YES	SHRDOW
L0001082	0	0.40265E-02	580861.9	4132571.5	110.0	4.15	2.84	0.45	YES	SHRDOW
L0001083	0	0.40265E-02	580859.0	4132576.9	110.0	4.15	2.84	0.45	YES	SHRDOW
L0001084	0	0.40265E-02	580856.1	4132582.2	109.8	4.15	2.84	0.45	YES	SHRDOW
L0001085	0	0.40265E-02	580853.2	4132587.6	109.6	4.15	2.84	0.45	YES	SHRDOW
L0001086	0	0.40265E-02	580850.3	4132593.0	109.5	4.15	2.84	0.45	YES	SHRDOW
L0001087	0	0.40265E-02	580847.4	4132598.3	109.3	4.15	2.84	0.45	YES	SHRDOW
L0001088	0	0.40265E-02	580844.5	4132603.7	109.1	4.15	2.84	0.45	YES	SHRDOW
L0001089	0	0.40265E-02	580841.7	4132609.1	108.8	4.15	2.84	0.45	YES	SHRDOW
L0001090	0	0.40265E-02	580839.3	4132614.6	108.3	4.15	2.84	0.45	YES	SHRDOW
L0001091	0	0.40265E-02	580839.1	4132620.7	107.8	4.15	2.84	0.45	YES	SHRDOW
L0001092	0	0.40265E-02	580838.9	4132626.8	107.3	4.15	2.84	0.45	YES	SHRDOW
L0001093	0	0.40265E-02	580838.7	4132632.8	106.8	4.15	2.84	0.45	YES	SHRDOW
L0001094	0	0.40265E-02	580838.5	4132638.9	106.5	4.15	2.84	0.45	YES	SHRDOW
L0001095	0	0.40265E-02	580838.3	4132645.0	106.5	4.15	2.84	0.45	YES	SHRDOW
L0001096	0	0.40265E-02	580838.1	4132651.1	106.5	4.15	2.84	0.45	YES	SHRDOW
L0001097	0	0.40265E-02	580837.9	4132657.2	106.5	4.15	2.84	0.45	YES	SHRDOW
L0001098	0	0.40265E-02	580837.7	4132663.3	106.5	4.15	2.84	0.45	YES	SHRDOW
L0001099	0	0.40265E-02	580837.5	4132669.4	106.5	4.15	2.84	0.45	YES	SHRDOW
L0001100	0	0.40265E-02	580837.3	4132675.5	106.6	4.15	2.84	0.45	YES	SHRDOW
L0001101	0	0.40265E-02	580841.7	4132679.4	106.9	4.15	2.84	0.45	YES	SHRDOW
L0001102	0	0.40265E-02	580846.5	4132683.2	107.2	4.15	2.84	0.45	YES	SHRDOW
L0001103	0	0.40265E-02	580851.3	4132686.9	107.6	4.15	2.84	0.45	YES	SHRDOW
L0001104	0	0.40265E-02	580855.9	4132690.8	107.9	4.15	2.84	0.45	YES	SHRDOW
L0001105	0	0.40265E-02	580855.9	4132696.9	108.1	4.15	2.84	0.45	YES	SHRDOW
L0001106	0	0.40265E-02	580855.9	4132703.0	108.3	4.15	2.84	0.45	YES	SHRDOW

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

L0001107	0	0.40265E-02	580855.9	4132709.1	108.5	4.15	2.84	0.45	YES	SHRDOW
L0001108	0	0.40265E-02	580852.7	4132713.6	108.5	4.15	2.84	0.45	YES	SHRDOW
L0001109	0	0.40265E-02	580847.9	4132717.4	108.3	4.15	2.84	0.45	YES	SHRDOW
L0001110	0	0.40265E-02	580843.1	4132721.1	108.2	4.15	2.84	0.45	YES	SHRDOW
L0001111	0	0.40265E-02	580838.3	4132724.9	108.0	4.15	2.84	0.45	YES	SHRDOW
L0001112	0	0.40265E-02	580837.2	4132730.4	108.0	4.15	2.84	0.45	YES	SHRDOW
L0001113	0	0.40265E-02	580837.0	4132736.5	107.9	4.15	2.84	0.45	YES	SHRDOW
L0001114	0	0.40265E-02	580836.9	4132742.6	107.9	4.15	2.84	0.45	YES	SHRDOW
L0001115	0	0.40265E-02	580836.8	4132748.7	107.9	4.15	2.84	0.45	YES	SHRDOW
L0001116	0	0.40265E-02	580836.6	4132754.8	107.9	4.15	2.84	0.45	YES	SHRDOW
L0001117	0	0.40265E-02	580836.5	4132760.9	108.0	4.15	2.84	0.45	YES	SHRDOW
L0001118	0	0.40265E-02	580836.4	4132767.0	108.0	4.15	2.84	0.45	YES	SHRDOW
L0001119	0	0.40265E-02	580836.3	4132773.1	108.1	4.15	2.84	0.45	YES	SHRDOW
L0001120	0	0.40265E-02	580836.1	4132779.2	108.2	4.15	2.84	0.45	YES	SHRDOW
L0001121	0	0.40265E-02	580836.0	4132785.3	108.3	4.15	2.84	0.45	YES	SHRDOW
L0001122	0	0.40265E-02	580833.6	4132789.2	108.2	4.15	2.84	0.45	YES	SHRDOW
L0001123	0	0.40265E-02	580827.5	4132789.6	107.6	4.15	2.84	0.45	YES	SHRDOW
L0001124	0	0.40265E-02	580822.4	4132792.4	107.2	4.15	2.84	0.45	YES	SHRDOW
L0001125	0	0.40265E-02	580817.7	4132796.3	107.1	4.15	2.84	0.45	YES	SHRDOW
L0001126	0	0.40265E-02	580813.0	4132800.2	107.1	4.15	2.84	0.45	YES	SHRDOW
L0001127	0	0.40265E-02	580808.3	4132804.1	107.1	4.15	2.84	0.45	YES	SHRDOW
L0001128	0	0.40265E-02	580804.3	4132808.5	107.1	4.15	2.84	0.45	YES	SHRDOW
L0001129	0	0.40265E-02	580801.9	4132814.1	107.2	4.15	2.84	0.45	YES	SHRDOW
L0001130	0	0.40265E-02	580799.6	4132819.7	107.2	4.15	2.84	0.45	YES	SHRDOW
L0001131	0	0.40265E-02	580797.3	4132825.4	107.2	4.15	2.84	0.45	YES	SHRDOW
L0001132	0	0.40265E-02	580794.9	4132831.0	107.1	4.15	2.84	0.45	YES	SHRDOW
L0001133	0	0.40265E-02	580792.6	4132836.6	107.0	4.15	2.84	0.45	YES	SHRDOW
L0001134	0	0.40265E-02	580790.2	4132842.3	106.8	4.15	2.84	0.45	YES	SHRDOW
L0001135	0	0.40265E-02	580785.2	4132845.0	106.5	4.15	2.84	0.45	YES	SHRDOW
L0001136	0	0.40265E-02	580779.4	4132846.9	106.1	4.15	2.84	0.45	YES	SHRDOW
L0001137	0	0.40265E-02	580773.6	4132848.9	105.6	4.15	2.84	0.45	YES	SHRDOW
L0001138	0	0.40265E-02	580767.9	4132850.8	105.1	4.15	2.84	0.45	YES	SHRDOW
L0001139	0	0.40265E-02	580762.1	4132852.7	104.8	4.15	2.84	0.45	YES	SHRDOW
L0001140	0	0.40265E-02	580756.3	4132854.6	104.9	4.15	2.84	0.45	YES	SHRDOW
L0001141	0	0.40265E-02	580751.0	4132857.4	105.2	4.15	2.84	0.45	YES	SHRDOW
L0001142	0	0.40265E-02	580746.6	4132861.6	105.8	4.15	2.84	0.45	YES	SHRDOW
L0001143	0	0.40265E-02	580742.3	4132865.9	106.8	4.15	2.84	0.45	YES	SHRDOW
L0001144	0	0.40265E-02	580737.9	4132870.1	108.0	4.15	2.84	0.45	YES	SHRDOW
L0001145	0	0.40265E-02	580733.5	4132874.4	109.4	4.15	2.84	0.45	YES	SHRDOW
L0001146	0	0.40265E-02	580729.2	4132878.6	109.9	4.15	2.84	0.45	YES	SHRDOW
L0001147	0	0.40265E-02	580724.8	4132882.9	109.9	4.15	2.84	0.45	YES	SHRDOW
L0001148	0	0.40265E-02	580720.4	4132887.1	109.9	4.15	2.84	0.45	YES	SHRDOW

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0001149	0	0.40265E-02	580716.0	4132891.4	109.9	4.15	2.84	0.45	YES	SHRDOW
L0001150	0	0.40265E-02	580711.7	4132895.6	109.9	4.15	2.84	0.45	YES	SHRDOW
L0001151	0	0.40265E-02	580707.3	4132899.9	109.9	4.15	2.84	0.45	YES	SHRDOW
L0001152	0	0.40265E-02	580702.9	4132904.1	109.9	4.15	2.84	0.45	YES	SHRDOW
L0001153	0	0.40265E-02	580697.2	4132905.7	108.8	4.15	2.84	0.45	YES	SHRDOW
L0001154	0	0.40265E-02	580691.2	4132906.7	107.6	4.15	2.84	0.45	YES	SHRDOW
L0001155	0	0.40265E-02	580685.2	4132907.8	106.4	4.15	2.84	0.45	YES	SHRDOW
L0001156	0	0.40265E-02	580679.9	4132906.2	105.4	4.15	2.84	0.45	YES	SHRDOW
L0001157	0	0.40265E-02	580675.4	4132902.1	104.3	4.15	2.84	0.45	YES	SHRDOW
L0001158	0	0.40265E-02	580670.9	4132898.0	103.3	4.15	2.84	0.45	YES	SHRDOW
L0001159	0	0.40265E-02	580666.4	4132893.9	102.4	4.15	2.84	0.45	YES	SHRDOW
L0001160	0	0.40265E-02	580661.9	4132889.8	101.6	4.15	2.84	0.45	YES	SHRDOW
L0001161	0	0.40265E-02	580657.4	4132885.7	100.9	4.15	2.84	0.45	YES	SHRDOW
L0001162	0	0.40265E-02	580652.8	4132881.6	100.3	4.15	2.84	0.45	YES	SHRDOW
L0001163	0	0.40265E-02	580648.3	4132877.5	99.7	4.15	2.84	0.45	YES	SHRDOW
L0001164	0	0.40265E-02	580644.6	4132873.0	99.2	4.15	2.84	0.45	YES	SHRDOW
L0001165	0	0.40265E-02	580642.9	4132867.1	99.0	4.15	2.84	0.45	YES	SHRDOW
L0001166	0	0.40265E-02	580641.2	4132861.3	98.9	4.15	2.84	0.45	YES	SHRDOW
L0001167	0	0.40265E-02	580639.5	4132855.4	98.8	4.15	2.84	0.45	YES	SHRDOW
L0001168	0	0.40265E-02	580639.4	4132849.5	98.8	4.15	2.84	0.45	YES	SHRDOW
L0001169	0	0.40265E-02	580640.4	4132843.4	98.9	4.15	2.84	0.45	YES	SHRDOW
L0001170	0	0.40265E-02	580641.4	4132837.4	99.2	4.15	2.84	0.45	YES	SHRDOW
L0001171	0	0.40265E-02	580642.4	4132831.4	99.5	4.15	2.84	0.45	YES	SHRDOW
L0001172	0	0.40265E-02	580644.8	4132826.0	99.9	4.15	2.84	0.45	YES	SHRDOW
L0001173	0	0.40265E-02	580648.6	4132821.3	100.4	4.15	2.84	0.45	YES	SHRDOW
L0001174	0	0.40265E-02	580652.5	4132816.6	101.0	4.15	2.84	0.45	YES	SHRDOW
L0001175	0	0.40265E-02	580655.8	4132811.5	101.2	4.15	2.84	0.45	YES	SHRDOW
L0001176	0	0.40265E-02	580658.3	4132806.0	101.3	4.15	2.84	0.45	YES	SHRDOW
L0001177	0	0.40265E-02	580660.9	4132800.4	101.4	4.15	2.84	0.45	YES	SHRDOW
L0001178	0	0.40265E-02	580663.5	4132794.9	101.3	4.15	2.84	0.45	YES	SHRDOW
L0001179	0	0.40265E-02	580666.1	4132789.4	101.1	4.15	2.84	0.45	YES	SHRDOW
L0001180	0	0.40265E-02	580668.7	4132783.9	101.2	4.15	2.84	0.45	YES	SHRDOW
L0001181	0	0.40265E-02	580673.1	4132779.8	101.5	4.15	2.84	0.45	YES	SHRDOW
L0001182	0	0.40265E-02	580677.9	4132776.1	101.9	4.15	2.84	0.45	YES	SHRDOW
L0001183	0	0.40265E-02	580682.7	4132772.3	102.3	4.15	2.84	0.45	YES	SHRDOW
L0001184	0	0.40265E-02	580687.5	4132768.6	102.7	4.15	2.84	0.45	YES	SHRDOW
L0001185	0	0.40265E-02	580692.4	4132764.9	103.1	4.15	2.84	0.45	YES	SHRDOW
L0001186	0	0.40265E-02	580697.2	4132761.2	103.5	4.15	2.84	0.45	YES	SHRDOW

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

L0001187	0	0.40265E-02	580702.0	4132757.4	103.9	4.15	2.84	0.45	YES	SHRDOW
L0001188	0	0.40265E-02	580706.6	4132753.5	104.0	4.15	2.84	0.45	YES	SHRDOW
L0001189	0	0.40265E-02	580710.8	4132749.0	104.0	4.15	2.84	0.45	YES	SHRDOW
L0001190	0	0.40265E-02	580714.9	4132744.5	104.0	4.15	2.84	0.45	YES	SHRDOW
L0001191	0	0.40265E-02	580719.0	4132740.0	104.0	4.15	2.84	0.45	YES	SHRDOW
L0001192	0	0.40265E-02	580723.1	4132735.5	104.0	4.15	2.84	0.45	YES	SHRDOW
L0001193	0	0.40265E-02	580727.2	4132731.0	104.0	4.15	2.84	0.45	YES	SHRDOW
L0001194	0	0.40265E-02	580731.3	4132726.5	104.0	4.15	2.84	0.45	YES	SHRDOW
L0001195	0	0.40265E-02	580735.7	4132722.3	104.2	4.15	2.84	0.45	YES	SHRDOW
L0001196	0	0.40265E-02	580740.7	4132718.8	104.5	4.15	2.84	0.45	YES	SHRDOW
L0001197	0	0.40265E-02	580745.7	4132715.3	104.8	4.15	2.84	0.45	YES	SHRDOW
L0001198	0	0.40265E-02	580750.7	4132711.8	105.1	4.15	2.84	0.45	YES	SHRDOW
L0001199	0	0.40265E-02	580754.8	4132707.8	105.4	4.15	2.84	0.45	YES	SHRDOW
L0001200	0	0.40265E-02	580755.9	4132701.8	105.6	4.15	2.84	0.45	YES	SHRDOW
L0001201	0	0.40265E-02	580761.8	4132701.5	105.8	4.15	2.84	0.45	YES	SHRDOW
L0001202	0	0.40265E-02	580767.9	4132701.4	105.9	4.15	2.84	0.45	YES	SHRDOW
L0001203	0	0.40265E-02	580774.0	4132701.3	105.9	4.15	2.84	0.45	YES	SHRDOW
L0001204	0	0.40265E-02	580780.1	4132701.2	105.9	4.15	2.84	0.45	YES	SHRDOW
L0001205	0	0.40265E-02	580786.2	4132701.2	106.0	4.15	2.84	0.45	YES	SHRDOW
L0001206	0	0.40265E-02	580792.3	4132701.1	106.0	4.15	2.84	0.45	YES	SHRDOW
L0001207	0	0.40265E-02	580798.4	4132701.0	106.0	4.15	2.84	0.45	YES	SHRDOW
L0001208	0	0.40265E-02	580804.5	4132700.9	106.0	4.15	2.84	0.45	YES	SHRDOW
L0001209	0	0.40265E-02	580810.6	4132700.9	106.1	4.15	2.84	0.45	YES	SHRDOW
L0001210	0	0.40265E-02	580814.9	4132697.5	106.0	4.15	2.84	0.45	YES	SHRDOW
L0001211	0	0.40265E-02	580818.6	4132692.6	106.0	4.15	2.84	0.45	YES	SHRDOW
L0001212	0	0.40265E-02	580822.2	4132687.7	106.0	4.15	2.84	0.45	YES	SHRDOW
L0001213	0	0.40265E-02	580825.8	4132682.7	106.1	4.15	2.84	0.45	YES	SHRDOW
L0001214	0	0.40265E-02	580829.4	4132677.8	106.3	4.15	2.84	0.45	YES	SHRDOW
L0000947	0	0.38095E-02	580941.8	4132511.0	112.4	4.15	2.84	0.90	YES	SHRDOW
L0000948	0	0.38095E-02	580945.6	4132515.8	111.8	4.15	2.84	0.90	YES	SHRDOW
L0000949	0	0.38095E-02	580949.3	4132520.6	111.0	4.15	2.84	0.90	YES	SHRDOW
L0000950	0	0.38095E-02	580950.7	4132526.5	110.3	4.15	2.84	0.90	YES	SHRDOW
L0000951	0	0.38095E-02	580951.8	4132532.5	109.6	4.15	2.84	0.90	YES	SHRDOW
L0000952	0	0.38095E-02	580952.9	4132538.5	109.1	4.15	2.84	0.90	YES	SHRDOW
L0000953	0	0.38095E-02	580954.0	4132544.5	108.6	4.15	2.84	0.90	YES	SHRDOW
L0000954	0	0.38095E-02	580955.1	4132550.5	108.6	4.15	2.84	0.90	YES	SHRDOW
L0000955	0	0.38095E-02	580957.7	4132555.6	108.9	4.15	2.84	0.90	YES	SHRDOW
L0000956	0	0.38095E-02	580962.5	4132559.4	109.5	4.15	2.84	0.90	YES	SHRDOW
L0000957	0	0.38095E-02	580967.6	4132562.4	110.1	4.15	2.84	0.90	YES	SHRDOW
L0000958	0	0.38095E-02	580973.6	4132562.8	110.7	4.15	2.84	0.90	YES	SHRDOW
L0000959	0	0.38095E-02	580979.6	4132562.1	111.7	4.15	2.84	0.90	YES	SHRDOW
L0000960	0	0.38095E-02	580985.4	4132560.3	112.6	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0000961	0	0.38095E-02	580991.2	4132558.5	113.6	4.15	2.84	0.90	YES	SHRDOW
L0000962	0	0.38095E-02	580996.9	4132558.7	114.7	4.15	2.84	0.90	YES	SHRDOW
L0000963	0	0.38095E-02	581002.4	4132561.3	115.9	4.15	2.84	0.90	YES	SHRDOW
L0000964	0	0.38095E-02	581007.9	4132564.0	116.9	4.15	2.84	0.90	YES	SHRDOW
L0000965	0	0.38095E-02	581013.4	4132566.6	117.9	4.15	2.84	0.90	YES	SHRDOW
L0000966	0	0.38095E-02	581018.6	4132564.5	118.6	4.15	2.84	0.90	YES	SHRDOW
L0000967	0	0.38095E-02	581023.8	4132561.3	119.1	4.15	2.84	0.90	YES	SHRDOW

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.24581E-04	581145.4	4132318.2	127.6	4.15	14	1.93	YES	SHRDOW
PAREA2	0	0.20685E-04	581114.1	4132387.6	126.8	4.15	6	1.93	YES	SHRDOW
PAREA3	0	0.21399E-04	581031.5	4132493.8	118.7	4.15	10	1.93	YES	SHRDOW
PAREA5	0	0.24573E-04	580679.2	4132787.3	101.2	4.15	29	1.93	YES	SHRDOW
PAREA6	0	0.23755E-04	580636.1	4132878.3	98.5	4.15	6	1.93	YES	SHRDOW
PAREA7	0	0.25941E-04	580884.3	4132800.7	115.1	4.15	11	1.93	YES	SHRDOW
PAREA8	0	0.32188E-04	580849.4	4132657.6	106.4	4.15	5	1.93	YES	SHRDOW

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ONSITE	PAREA1 , PAREA2 , PAREA3 , PAREA5 , PAREA6 , PAREA7 , PAREA8 ,
HAUL	L0000989 , L0000990 , L0000991 , L0000992 , L0000993 , L0000994 , L0000995 , L0000996 ,
	L0000997 , L0000998 , L0000999 , L0001000 , L0001001 , L0001002 , L0001003 , L0001004 ,
	L0001005 , L0001006 , L0001007 , L0001008 , L0001009 , L0001010 , L0001011 , L0001012 ,
	L0001013 , L0001014 , L0001015 , L0001016 , L0001017 , L0001018 , L0001019 , L0001020 ,
	L0001021 , L0001022 , L0001023 , L0001024 , L0001025 , L0001026 , L0001027 , L0001028 ,
	L0001029 , L0001030 , L0001031 , L0001032 , L0001033 , L0001034 , L0001035 , L0001036 ,
	L0001037 , L0001038 , L0001039 , L0001040 , L0001041 , L0001042 , L0001043 , L0001044 ,
	L0001045 , L0001046 , L0001047 , L0001048 , L0001049 , L0001050 , L0001051 , L0001052 ,
	L0001053 , L0001054 , L0001055 , L0001056 , L0001057 , L0001058 , L0001059 , L0001060 ,
	L0001061 , L0001062 , L0001063 , L0001064 , L0001065 , L0001066 , L0001067 , L0001068 ,
	L0001069 , L0001070 , L0001071 , L0001072 , L0001073 , L0001074 , L0001075 , L0001076 ,
	L0001077 , L0001078 , L0001079 , L0001080 , L0001081 , L0001082 , L0001083 , L0001084 ,
	L0001085 , L0001086 , L0001087 , L0001088 , L0001089 , L0001090 , L0001091 , L0001092 ,
	L0001093 , L0001094 , L0001095 , L0001096 , L0001097 , L0001098 , L0001099 , L0001100 ,
	L0001101 , L0001102 , L0001103 , L0001104 , L0001105 , L0001106 , L0001107 , L0001108 ,
	L0001109 , L0001110 , L0001111 , L0001112 , L0001113 , L0001114 , L0001115 , L0001116 ,
	L0001117 , L0001118 , L0001119 , L0001120 , L0001121 , L0001122 , L0001123 , L0001124 ,
	L0001125 , L0001126 , L0001127 , L0001128 , L0001129 , L0001130 , L0001131 , L0001132 ,
	L0001133 , L0001134 , L0001135 , L0001136 , L0001137 , L0001138 , L0001139 , L0001140 ,

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	L0001141 , L0001142 , L0001143 , L0001144 , L0001145 , L0001146 , L0001147 , L0001148 ,
	L0001149 , L0001150 , L0001151 , L0001152 , L0001153 , L0001154 , L0001155 , L0001156 ,
	L0001157 , L0001158 , L0001159 , L0001160 , L0001161 , L0001162 , L0001163 , L0001164 ,
	L0001165 , L0001166 , L0001167 , L0001168 , L0001169 , L0001170 , L0001171 , L0001172 ,
	L0001173 , L0001174 , L0001175 , L0001176 , L0001177 , L0001178 , L0001179 , L0001180 ,
	L0001181 , L0001182 , L0001183 , L0001184 , L0001185 , L0001186 , L0001187 , L0001188 ,
	L0001189 , L0001190 , L0001191 , L0001192 , L0001193 , L0001194 , L0001195 , L0001196 ,
	L0001197 , L0001198 , L0001199 , L0001200 , L0001201 , L0001202 , L0001203 , L0001204 ,
	L0001205 , L0001206 , L0001207 , L0001208 , L0001209 , L0001210 , L0001211 , L0001212 ,
	L0001213 , L0001214 , L0000947 , L0000948 , L0000949 , L0000950 , L0000951 , L0000952 ,
	L0000953 , L0000954 , L0000955 , L0000956 , L0000957 , L0000958 , L0000959 , L0000960 ,
	L0000961 , L0000962 , L0000963 , L0000964 , L0000965 , L0000966 , L0000967 ,

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
	60572.	PAREA1 , PAREA2 , PAREA3 , PAREA5 , PAREA6 , L0000989 , L0000990 , L0000991 ,
		L0000992 , L0000993 , L0000994 , L0000995 , L0000996 , L0000997 , L0000998 , L0000999 ,
		L0001000 , L0001001 , L0001002 , L0001003 , L0001004 , L0001005 , L0001006 , L0001007 ,
		L0001008 , L0001009 , L0001010 , L0001011 , L0001012 , L0001013 , L0001014 , L0001015 ,
		L0001016 , L0001017 , L0001018 , L0001019 , L0001020 , L0001021 , L0001022 , L0001023 ,
		L0001024 , L0001025 , L0001026 , L0001027 , L0001028 , L0001029 , L0001030 , L0001031 ,
		L0001032 , L0001033 , L0001034 , L0001035 , L0001036 , L0001037 , L0001038 , L0001039 ,
		L0001040 , L0001041 , L0001042 , L0001043 , L0001044 , L0001045 , L0001046 , L0001047 ,
		L0001048 , L0001049 , L0001050 , L0001051 , L0001052 , L0001053 , L0001054 , L0001055 ,
		L0001056 , L0001057 , L0001058 , L0001059 , L0001060 , L0001061 , L0001062 , L0001063 ,
		L0001064 , L0001065 , L0001066 , L0001067 , L0001068 , L0001069 , L0001070 , L0001071 ,
		L0001072 , L0001073 , L0001074 , L0001075 , L0001076 , L0001077 , L0001078 , L0001079 ,
		L0001080 , L0001081 , L0001082 , L0001083 , L0001084 , L0001085 , L0001086 , L0001087 ,
		L0001088 , L0001089 , L0001090 , L0001091 , L0001092 , L0001093 , L0001094 , L0001095 ,
		L0001096 , L0001097 , L0001098 , L0001099 , L0001100 , L0001101 , L0001102 , L0001103 ,
		L0001104 , L0001105 , L0001106 , L0001107 , L0001108 , L0001109 , L0001110 , L0001111 ,
		L0001112 , L0001113 , L0001114 , L0001115 , L0001116 , L0001117 , L0001118 , L0001119 ,
		L0001120 , L0001121 , L0001122 , L0001123 , L0001124 , L0001125 , L0001126 , L0001127 ,
		L0001128 , L0001129 , L0001130 , L0001131 , L0001132 , L0001133 , L0001134 , L0001135 ,
		L0001136 , L0001137 , L0001138 , L0001139 , L0001140 , L0001141 , L0001142 , L0001143 ,
		L0001144 , L0001145 , L0001146 , L0001147 , L0001148 , L0001149 , L0001150 , L0001151 ,
		L0001152 , L0001153 , L0001154 , L0001155 , L0001156 , L0001157 , L0001158 , L0001159 ,
		L0001160 , L0001161 , L0001162 , L0001163 , L0001164 , L0001165 , L0001166 , L0001167 ,
		L0001168 , L0001169 , L0001170 , L0001171 , L0001172 , L0001173 , L0001174 , L0001175 ,
		L0001176 , L0001177 , L0001178 , L0001179 , L0001180 , L0001181 , L0001182 , L0001183 ,
		L0001184 , L0001185 , L0001186 , L0001187 , L0001188 , L0001189 , L0001190 , L0001191 ,
		L0001192 , L0001193 , L0001194 , L0001195 , L0001196 , L0001197 , L0001198 , L0001199 ,
		L0001200 , L0001201 , L0001202 , L0001203 , L0001204 , L0001205 , L0001206 , L0001207 ,
		L0001208 , L0001209 , L0001210 , L0001211 , L0001212 , L0001213 , L0001214 , L0000947 ,
		L0000948 , L0000949 , L0000950 , L0000951 , L0000952 , L0000953 , L0000954 , L0000955 ,
		L0000956 , L0000957 , L0000958 , L0000959 , L0000960 , L0000961 , L0000962 , L0000963 ,
		L0000964 , L0000965 , L0000966 , L0000967 , PAREA7 , PAREA8 ,

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) *

SOURCE ID = All Sources; SOURCE TYPE = AREAPOLY and VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
							SEASON = WINTER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SUNDAY								

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ; DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

(	580975.4,	4132337.5,	119.1,	772.0,	1.5);	(	580967.1,	4132359.9,	118.2,	772.0,	1.5);
(	580961.6,	4132368.8,	117.9,	772.0,	1.5);	(	580949.4,	4132389.9,	117.2,	772.0,	1.5);
(	580934.9,	4132409.2,	116.3,	772.0,	1.5);	(	580915.0,	4132432.2,	114.9,	772.0,	1.5);
(	580896.9,	4132452.2,	113.8,	772.0,	1.5);	(	580879.8,	4132473.3,	111.8,	772.0,	1.5);
(	580869.6,	4132493.6,	110.5,	772.0,	1.5);	(	580856.1,	4132512.6,	109.3,	772.0,	1.5);
(	580814.4,	4132483.8,	114.5,	772.0,	1.5);	(	580829.2,	4132468.1,	114.3,	772.0,	1.5);
(	580844.5,	4132446.0,	113.6,	772.0,	1.5);	(	580860.1,	4132428.6,	113.7,	772.0,	1.5);
(	580874.5,	4132406.8,	114.9,	772.0,	1.5);	(	580901.2,	4132381.3,	115.6,	772.0,	1.5);
(	580873.6,	4132367.2,	115.3,	772.0,	1.5);	(	580854.6,	4132358.0,	115.7,	772.0,	1.5);
(	580843.6,	4132388.7,	115.0,	772.0,	1.5);	(	580810.5,	4132394.8,	115.6,	772.0,	1.5);
(	580807.7,	4132420.3,	115.1,	772.0,	1.5);	(	580797.6,	4132446.6,	114.4,	772.0,	1.5);
(	580775.2,	4132459.2,	113.9,	772.0,	1.5);	(	580744.2,	4132496.0,	113.2,	772.0,	1.5);
(	580764.5,	4132478.2,	113.3,	772.0,	1.5);	(	580786.2,	4132521.8,	113.4,	772.0,	1.5);
(	580796.0,	4132503.7,	113.4,	772.0,	1.5);	(	580736.2,	4132524.8,	112.1,	772.0,	1.5);
(	580714.8,	4132511.0,	112.8,	772.0,	1.5);	(	580745.4,	4132426.7,	113.4,	772.0,	1.5);
(	580727.7,	4132447.0,	112.8,	772.0,	1.5);	(	580755.9,	4132403.7,	113.6,	772.0,	1.5);
(	580776.4,	4132387.2,	114.0,	772.0,	1.5);	(	580793.9,	4132363.6,	114.0,	772.0,	1.5);
(	580804.0,	4132344.5,	114.0,	772.0,	1.5);	(	580816.0,	4132325.8,	113.9,	772.0,	1.5);
(	580841.4,	4132309.3,	114.3,	772.0,	1.5);	(	580870.2,	4132311.1,	116.1,	772.0,	1.5);
(	580895.1,	4132323.7,	116.6,	772.0,	1.5);	(	580913.8,	4132337.8,	116.0,	772.0,	1.5);
(	580922.1,	4132320.0,	117.4,	772.0,	1.5);	(	580835.9,	4132532.8,	109.5,	772.0,	1.5);
(	580763.2,	4132498.8,	113.0,	772.0,	1.5);	(	580826.4,	4132554.9,	109.3,	772.0,	1.5);
(	580813.8,	4132577.3,	110.3,	772.0,	1.5);	(	580797.0,	4132595.7,	110.8,	772.0,	1.5);
(	580784.7,	4132615.3,	110.4,	772.0,	1.5);	(	580768.4,	4132641.1,	108.9,	772.0,	1.5);
(	580747.9,	4132659.1,	107.0,	772.0,	1.5);	(	580733.2,	4132674.5,	105.8,	772.0,	1.5);
(	580713.2,	4132684.9,	105.4,	772.0,	1.5);	(	580671.9,	4132705.4,	104.7,	772.0,	1.5);
(	580655.0,	4132720.5,	103.7,	772.0,	1.5);	(	580620.7,	4132730.3,	102.0,	772.0,	1.5);
(	580636.6,	4132677.5,	105.8,	772.0,	1.5);	(	580608.7,	4132684.9,	103.7,	772.0,	1.5);
(	580659.6,	4132661.6,	108.0,	772.0,	1.5);	(	580682.6,	4132642.9,	109.2,	772.0,	1.5);
(	580698.8,	4132629.1,	109.6,	772.0,	1.5);	(	580711.7,	4132604.9,	110.7,	772.0,	1.5);
(	580695.8,	4132571.8,	111.0,	772.0,	1.5);	(	580674.3,	4132553.7,	111.7,	772.0,	1.5);
(	580664.2,	4132589.8,	110.4,	772.0,	1.5);	(	580649.2,	4132608.9,	110.0,	772.0,	1.5);
(	580629.5,	4132626.0,	108.5,	772.0,	1.5);	(	580614.5,	4132645.7,	105.9,	772.0,	1.5);
(	580634.8,	4132534.0,	110.1,	772.0,	1.5);	(	580621.6,	4132556.7,	109.5,	772.0,	1.5);
(	580607.5,	4132578.5,	108.2,	772.0,	1.5);	(	580596.1,	4132599.0,	106.4,	772.0,	1.5);
(	580644.3,	4132513.5,	110.8,	772.0,	1.5);	(	580750.7,	4132540.2,	112.6,	772.0,	1.5);
(	580768.1,	4132552.1,	112.4,	772.0,	1.5);	(	580570.1,	4132626.0,	103.7,	772.0,	1.5);
(	580546.8,	4132665.9,	101.6,	772.0,	1.5);	(	580540.6,	4132634.3,	101.1,	772.0,	1.5);
(	580556.9,	4132695.0,	102.1,	772.0,	1.5);	(	580562.7,	4132724.8,	103.3,	772.0,	1.5);
(	580567.9,	4132742.9,	103.0,	772.0,	1.5);	(	580589.1,	4132765.8,	100.3,	772.0,	1.5);
(	580604.7,	4132786.1,	97.8,	772.0,	1.5);	(	580639.7,	4132745.9,	102.2,	772.0,	1.5);
(	580788.4,	4132302.8,	111.5,	772.0,	1.5);	(	580695.8,	4132465.2,	112.0,	772.0,	1.5);

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

```
( 580672.3, 4132479.1,    111.7,    772.0,      1.5);      ( 580657.1, 4132499.1,    110.8,    772.0,      1.5);
( 580975.4, 4132337.5,    119.1,    772.0,      6.1);      ( 580967.1, 4132359.9,    118.2,    772.0,      6.1);
( 580961.6, 4132368.8,    117.9,    772.0,      6.1);      ( 580949.4, 4132389.9,    117.2,    772.0,      6.1);
( 580934.9, 4132409.2,    116.3,    772.0,      6.1);      ( 580915.0, 4132432.2,    114.9,    772.0,      6.1);
( 580896.9, 4132452.2,    113.8,    772.0,      6.1);      ( 580879.8, 4132473.3,    111.8,    772.0,      6.1);
( 580869.6, 4132493.6,    110.5,    772.0,      6.1);      ( 580856.1, 4132512.6,    109.3,    772.0,      6.1);
( 580814.4, 4132483.8,    114.5,    772.0,      6.1);      ( 580829.2, 4132468.1,    114.3,    772.0,      6.1);
( 580844.5, 4132446.0,    113.6,    772.0,      6.1);      ( 580860.1, 4132428.6,    113.7,    772.0,      6.1);
( 580874.5, 4132406.8,    114.9,    772.0,      6.1);      ( 580901.2, 4132381.3,    115.6,    772.0,      6.1);
( 580873.6, 4132367.2,    115.3,    772.0,      6.1);      ( 580854.6, 4132358.0,    115.7,    772.0,      6.1);
( 580843.6, 4132388.7,    115.0,    772.0,      6.1);      ( 580810.5, 4132394.8,    115.6,    772.0,      6.1);
( 580807.7, 4132420.3,    115.1,    772.0,      6.1);      ( 580797.6, 4132446.6,    114.4,    772.0,      6.1);
( 580775.2, 4132459.2,    113.9,    772.0,      6.1);      ( 580744.2, 4132496.0,    113.2,    772.0,      6.1);
( 580764.5, 4132478.2,    113.3,    772.0,      6.1);      ( 580786.2, 4132521.8,    113.4,    772.0,      6.1);
( 580796.0, 4132503.7,    113.4,    772.0,      6.1);      ( 580736.2, 4132524.8,    112.1,    772.0,      6.1);
( 580714.8, 4132511.0,    112.8,    772.0,      6.1);      ( 580745.4, 4132426.7,    113.4,    772.0,      6.1);
( 580727.7, 4132447.0,    112.8,    772.0,      6.1);      ( 580755.9, 4132403.7,    113.6,    772.0,      6.1);
( 580776.4, 4132387.2,    114.0,    772.0,      6.1);      ( 580793.9, 4132363.6,    114.0,    772.0,      6.1);
( 580804.0, 4132344.5,    114.0,    772.0,      6.1);      ( 580816.0, 4132325.8,    113.9,    772.0,      6.1);
( 580841.4, 4132309.3,    114.3,    772.0,      6.1);      ( 580870.2, 4132311.1,    116.1,    772.0,      6.1);
( 580895.1, 4132323.7,    116.6,    772.0,      6.1);      ( 580913.8, 4132337.8,    116.0,    772.0,      6.1);
( 580922.1, 4132320.0,    117.4,    772.0,      6.1);      ( 580835.9, 4132532.8,    109.5,    772.0,      6.1);
( 580763.2, 4132498.8,    113.0,    772.0,      6.1);      ( 580826.4, 4132554.9,    109.3,    772.0,      6.1);
( 580813.8, 4132577.3,    110.3,    772.0,      6.1);      ( 580797.0, 4132595.7,    110.8,    772.0,      6.1);
( 580784.7, 4132615.3,    110.4,    772.0,      6.1);      ( 580768.4, 4132641.1,    108.9,    772.0,      6.1);
( 580747.9, 4132659.1,    107.0,    772.0,      6.1);      ( 580733.2, 4132674.5,    105.8,    772.0,      6.1);
( 580713.2, 4132684.9,    105.4,    772.0,      6.1);      ( 580671.9, 4132705.4,    104.7,    772.0,      6.1);
( 580655.0, 4132720.5,    103.7,    772.0,      6.1);      ( 580620.7, 4132730.3,    102.0,    772.0,      6.1);
( 580636.6, 4132677.5,    105.8,    772.0,      6.1);      ( 580608.7, 4132684.9,    103.7,    772.0,      6.1);
( 580659.6, 4132661.6,    108.0,    772.0,      6.1);      ( 580682.6, 4132642.9,    109.2,    772.0,      6.1);
( 580698.8, 4132629.1,    109.6,    772.0,      6.1);      ( 580711.7, 4132604.9,    110.7,    772.0,      6.1);
( 580695.8, 4132571.8,    111.0,    772.0,      6.1);      ( 580674.3, 4132553.7,    111.7,    772.0,      6.1);
( 580664.2, 4132589.8,    110.4,    772.0,      6.1);      ( 580649.2, 4132608.9,    110.0,    772.0,      6.1);
( 580629.5, 4132626.0,    108.5,    772.0,      6.1);      ( 580614.5, 4132645.7,    105.9,    772.0,      6.1);
( 580634.8, 4132534.0,    110.1,    772.0,      6.1);      ( 580621.6, 4132556.7,    109.5,    772.0,      6.1);
( 580607.5, 4132578.5,    108.2,    772.0,      6.1);      ( 580596.1, 4132599.0,    106.4,    772.0,      6.1);
( 580644.3, 4132513.5,    110.8,    772.0,      6.1);      ( 580750.7, 4132540.2,    112.6,    772.0,      6.1);
( 580768.1, 4132552.1,    112.4,    772.0,      6.1);      ( 580570.1, 4132626.0,    103.7,    772.0,      6.1);
( 580546.8, 4132665.9,    101.6,    772.0,      6.1);      ( 580540.6, 4132634.3,    101.1,    772.0,      6.1);
( 580556.9, 4132695.0,    102.1,    772.0,      6.1);      ( 580562.7, 4132724.8,    103.3,    772.0,      6.1);
( 580567.9, 4132742.9,    103.0,    772.0,      6.1);      ( 580589.1, 4132765.8,    100.3,    772.0,      6.1);
( 580604.7, 4132786.1,     97.8,    772.0,      6.1);      ( 580639.7, 4132745.9,    102.2,    772.0,      6.1);
( 580788.4, 4132302.8,    111.5,    772.0,      6.1);      ( 580695.8, 4132465.2,    112.0,    772.0,      6.1);
( 580672.3, 4132479.1,    111.7,    772.0,      6.1);      ( 580657.1, 4132499.1,    110.8,    772.0,      6.1);
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*** AERMOD - VERSION 16216r ***   *** Phase 1 Residential Receptors                                        ***        05/24/17
*** AERMET - VERSION  14134 ***   ***                                                                      ***        13:52:56
                                                                                                                      PAGE 270
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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,
```

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

Surface file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion Met Version: 14134
Profile file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion
Surface format: FREE
Profile format: FREE
Surface station no.: 23289 Upper air station no.: 23230
Name: PALO_ALTO_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	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	07	-7.2	0.126	-9.000	-9.000	-999.	107.	25.2	0.04	0.36	1.00	2.36	999.	10.0	282.1	2.0
09	01	01	1	08	-7.2	0.125	-9.000	-9.000	-999.	106.	25.0	0.04	0.36	0.73	2.36	999.	10.0	281.1	2.0
09	01	01	1	09	-4.5	0.212	-9.000	-9.000	-999.	235.	195.5	0.01	0.36	0.37	3.86	327.	10.0	282.1	2.0
09	01	01	1	10	4.5	0.252	0.215	0.015	80.	304.	-322.7	0.01	0.36	0.25	4.36	341.	10.0	282.1	2.0
09	01	01	1	11	9.5	0.218	0.333	0.015	140.	245.	-99.2	0.04	0.36	0.20	2.86	999.	10.0	282.1	2.0
09	01	01	1	12	12.3	0.232	0.402	0.015	192.	268.	-91.9	0.00	0.36	0.19	4.36	6.	10.0	282.1	2.0
09	01	01	1	13	12.8	0.203	0.434	0.015	232.	220.	-59.9	0.01	0.36	0.18	3.36	333.	10.0	282.1	2.0
09	01	01	1	14	52.4	0.238	0.799	0.016	354.	278.	-23.3	0.04	0.36	0.19	2.86	999.	10.0	283.1	2.0
09	01	01	1	15	37.3	0.200	0.756	0.017	421.	214.	-19.4	0.04	0.36	0.22	2.36	999.	10.0	285.1	2.0
09	01	01	1	16	14.6	0.222	0.561	0.017	438.	251.	-67.8	0.04	0.36	0.30	2.86	999.	10.0	284.1	2.0
09	01	01	1	17	-11.9	0.162	-9.000	-9.000	-999.	157.	32.4	0.04	0.36	0.54	2.86	999.	10.0	283.1	2.0
09	01	01	1	18	-13.2	0.132	-9.000	-9.000	-999.	115.	15.9	0.01	0.36	1.00	3.36	327.	10.0	281.1	2.0
09	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0

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	-999.0	99.0	-99.00	-99.00

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

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
ONSITE	1ST HIGHEST VALUE IS	8.08719 AT	580733.18,	4132674.48,	105.75,	772.00,	1.50)	DC	
	2ND HIGHEST VALUE IS	7.96538 AT	580747.90,	4132659.15,	107.00,	772.00,	1.50)	DC	
	3RD HIGHEST VALUE IS	7.32790 AT	580768.44,	4132641.06,	108.87,	772.00,	1.50)	DC	
	4TH HIGHEST VALUE IS	6.98519 AT	580967.14,	4132359.88,	118.18,	772.00,	1.50)	DC	
	5TH HIGHEST VALUE IS	6.98425 AT	580713.25,	4132684.90,	105.39,	772.00,	1.50)	DC	
	6TH HIGHEST VALUE IS	6.84825 AT	580961.62,	4132368.77,	117.93,	772.00,	1.50)	DC	
	7TH HIGHEST VALUE IS	6.66366 AT	580975.42,	4132337.49,	119.14,	772.00,	1.50)	DC	
	8TH HIGHEST VALUE IS	6.50734 AT	580949.35,	4132389.93,	117.23,	772.00,	1.50)	DC	
	9TH HIGHEST VALUE IS	6.45571 AT	580975.42,	4132337.49,	119.14,	772.00,	6.10)	DC	
	10TH HIGHEST VALUE IS	6.33929 AT	580967.14,	4132359.88,	118.18,	772.00,	6.10)	DC	
HAUL	1ST HIGHEST VALUE IS	9.66271 AT	580733.18,	4132674.48,	105.75,	772.00,	1.50)	DC	
	2ND HIGHEST VALUE IS	9.48606 AT	580747.90,	4132659.15,	107.00,	772.00,	1.50)	DC	
	3RD HIGHEST VALUE IS	9.35697 AT	580856.14,	4132512.58,	109.33,	772.00,	1.50)	DC	
	4TH HIGHEST VALUE IS	8.75722 AT	580869.63,	4132493.57,	110.45,	772.00,	1.50)	DC	
	5TH HIGHEST VALUE IS	8.71716 AT	580826.39,	4132554.89,	109.35,	772.00,	1.50)	DC	
	6TH HIGHEST VALUE IS	8.67783 AT	580768.44,	4132641.06,	108.87,	772.00,	1.50)	DC	
	7TH HIGHEST VALUE IS	8.59039 AT	580713.25,	4132684.90,	105.39,	772.00,	1.50)	DC	
	8TH HIGHEST VALUE IS	8.53683 AT	580835.90,	4132532.82,	109.49,	772.00,	1.50)	DC	
	9TH HIGHEST VALUE IS	7.93656 AT	580813.82,	4132577.28,	110.29,	772.00,	1.50)	DC	
	10TH HIGHEST VALUE IS	7.64180 AT	580879.75,	4132473.33,	111.83,	772.00,	1.50)	DC	

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

Model Output - Phase 1 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

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

A Total of   0 Fatal Error Message(s)
A Total of   0 Warning Message(s)
A Total of   30785 Informational Message(s)

A Total of   43872 Hours Were Processed

A Total of   1576 Calm Hours Identified

A Total of   29209 Missing Hours Identified (66.58 Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
           Data May Not Be Acceptable for Regulatory Applications.
           See Section 5.3.2 of "Meteorological Monitoring Guidance
           for Regulatory Modeling Applications" (EPA-454/R-99-005).

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

   ********   WARNING MESSAGES   ********
              *** NONE ***

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

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

```
*** AERMOD - VERSION 16216r ***   *** Forum Phase 1 Onsite Receptors                                  ***        05/25/17
*** AERMET - VERSION  14134 ***   ***                                                                 ***        14:56:39
                                                                                                                PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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   254 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =     60572.0 ;  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:
       CCVR_Sub - Meteorological data includes CCVR substitutions
       TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates PERIOD Averages Only

**This Run Includes:    254 Source(s);       2 Source Group(s); and     174 Receptor(s)

              with:      0 POINT(s), including
                         0 POINTCAP(s) and      0 POINTHOR(s)
               and:    247 VOLUME source(s)
               and:      7 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.
```

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

```
**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) =     2.10 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                              ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      4.4 MB of RAM.

**Detailed Error/Message File:   Forum_P1_Onsite.err
**File for Summary of Results:   Forum_P1_Onsite.sum
```

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0000968	0	0.40265E-02	581191.8	4132151.1	129.8	4.15	2.84	0.90	YES	SHRDOW
L0000969	0	0.40265E-02	581191.0	4132157.2	129.8	4.15	2.84	0.90	YES	SHRDOW
L0000970	0	0.40265E-02	581190.2	4132163.2	130.0	4.15	2.84	0.90	YES	SHRDOW
L0000971	0	0.40265E-02	581189.5	4132169.3	130.2	4.15	2.84	0.90	YES	SHRDOW
L0000972	0	0.40265E-02	581188.7	4132175.3	130.3	4.15	2.84	0.90	YES	SHRDOW
L0000973	0	0.40265E-02	581187.9	4132181.4	130.5	4.15	2.84	0.90	YES	SHRDOW
L0000974	0	0.40265E-02	581187.1	4132187.4	130.6	4.15	2.84	0.90	YES	SHRDOW
L0000975	0	0.40265E-02	581186.3	4132193.5	130.7	4.15	2.84	0.90	YES	SHRDOW
L0000976	0	0.40265E-02	581185.5	4132199.5	130.8	4.15	2.84	0.90	YES	SHRDOW
L0000977	0	0.40265E-02	581184.8	4132205.5	130.9	4.15	2.84	0.90	YES	SHRDOW
L0000978	0	0.40265E-02	581184.0	4132211.6	131.0	4.15	2.84	0.90	YES	SHRDOW
L0000979	0	0.40265E-02	581183.2	4132217.6	131.1	4.15	2.84	0.90	YES	SHRDOW
L0000980	0	0.40265E-02	581182.4	4132223.7	131.2	4.15	2.84	0.90	YES	SHRDOW
L0000981	0	0.40265E-02	581181.6	4132229.7	131.3	4.15	2.84	0.90	YES	SHRDOW
L0000982	0	0.40265E-02	581180.8	4132235.8	131.5	4.15	2.84	0.90	YES	SHRDOW
L0000983	0	0.40265E-02	581180.1	4132241.8	131.6	4.15	2.84	0.90	YES	SHRDOW
L0000984	0	0.40265E-02	581179.3	4132247.9	131.6	4.15	2.84	0.90	YES	SHRDOW
L0000985	0	0.40265E-02	581178.5	4132253.9	131.2	4.15	2.84	0.90	YES	SHRDOW
L0000986	0	0.40265E-02	581177.7	4132260.0	130.8	4.15	2.84	0.90	YES	SHRDOW
L0000987	0	0.40265E-02	581176.9	4132266.0	130.5	4.15	2.84	0.90	YES	SHRDOW
L0000988	0	0.40265E-02	581176.1	4132272.0	130.2	4.15	2.84	0.90	YES	SHRDOW
L0000989	0	0.40265E-02	581174.7	4132277.9	130.0	4.15	2.84	0.90	YES	SHRDOW
L0000990	0	0.40265E-02	581172.2	4132283.5	129.8	4.15	2.84	0.90	YES	SHRDOW
L0000991	0	0.40265E-02	581169.7	4132289.1	129.6	4.15	2.84	0.90	YES	SHRDOW
L0000992	0	0.40265E-02	581167.3	4132294.6	129.4	4.15	2.84	0.90	YES	SHRDOW
L0000993	0	0.40265E-02	581164.8	4132300.2	129.1	4.15	2.84	0.90	YES	SHRDOW
L0000994	0	0.40265E-02	581162.4	4132305.8	128.7	4.15	2.84	0.90	YES	SHRDOW
L0000995	0	0.40265E-02	581159.9	4132311.4	128.4	4.15	2.84	0.90	YES	SHRDOW
L0000996	0	0.40265E-02	581157.4	4132316.9	128.2	4.15	2.84	0.90	YES	SHRDOW
L0000997	0	0.40265E-02	581155.0	4132322.5	128.1	4.15	2.84	0.90	YES	SHRDOW
L0000998	0	0.40265E-02	581152.5	4132328.1	128.0	4.15	2.84	0.90	YES	SHRDOW
L0000999	0	0.40265E-02	581147.3	4132331.1	127.7	4.15	2.84	0.90	YES	SHRDOW
L0001000	0	0.40265E-02	581141.9	4132333.7	127.3	4.15	2.84	0.90	YES	SHRDOW
L0001001	0	0.40265E-02	581136.4	4132336.4	126.9	4.15	2.84	0.90	YES	SHRDOW
L0001002	0	0.40265E-02	581130.9	4132339.1	126.5	4.15	2.84	0.90	YES	SHRDOW
L0001003	0	0.40265E-02	581125.4	4132341.7	126.1	4.15	2.84	0.90	YES	SHRDOW
L0001004	0	0.40265E-02	581119.9	4132344.4	125.9	4.15	2.84	0.90	YES	SHRDOW
L0001005	0	0.40265E-02	581114.4	4132347.0	125.7	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

L0001006	0	0.40265E-02	581109.0	4132349.7	125.5	4.15	2.84	0.90	YES	SHRDOW
L0001007	0	0.40265E-02	581103.5	4132352.5	125.3	4.15	2.84	0.90	YES	SHRDOW
L0001008	0	0.40265E-02	581098.5	4132356.0	125.2	4.15	2.84	0.90	YES	SHRDOW
L0001009	0	0.40265E-02	581093.6	4132359.5	125.0	4.15	2.84	0.90	YES	SHRDOW
L0001010	0	0.40265E-02	581088.6	4132363.0	124.6	4.15	2.84	0.90	YES	SHRDOW
L0001011	0	0.40265E-02	581083.6	4132366.5	124.1	4.15	2.84	0.90	YES	SHRDOW
L0001012	0	0.40265E-02	581078.6	4132370.0	123.4	4.15	2.84	0.90	YES	SHRDOW
L0001013	0	0.40265E-02	581073.6	4132373.5	122.8	4.15	2.84	0.90	YES	SHRDOW
L0001014	0	0.40265E-02	581068.6	4132377.0	122.2	4.15	2.84	0.90	YES	SHRDOW
L0001015	0	0.40265E-02	581063.7	4132380.5	121.6	4.15	2.84	0.90	YES	SHRDOW
L0001016	0	0.40265E-02	581059.6	4132385.0	121.3	4.15	2.84	0.90	YES	SHRDOW
L0001017	0	0.40265E-02	581056.0	4132389.9	121.0	4.15	2.84	0.90	YES	SHRDOW
L0001018	0	0.40265E-02	581052.4	4132394.9	120.7	4.15	2.84	0.90	YES	SHRDOW
L0001019	0	0.40265E-02	581048.9	4132399.8	120.5	4.15	2.84	0.90	YES	SHRDOW
L0001020	0	0.40265E-02	581045.3	4132404.7	120.4	4.15	2.84	0.90	YES	SHRDOW
L0001021	0	0.40265E-02	581041.7	4132409.7	120.3	4.15	2.84	0.90	YES	SHRDOW
L0001022	0	0.40265E-02	581038.1	4132414.6	120.2	4.15	2.84	0.90	YES	SHRDOW
L0001023	0	0.40265E-02	581034.6	4132419.5	120.0	4.15	2.84	0.90	YES	SHRDOW
L0001024	0	0.40265E-02	581031.0	4132424.5	119.9	4.15	2.84	0.90	YES	SHRDOW
L0001025	0	0.40265E-02	581027.4	4132429.4	119.7	4.15	2.84	0.90	YES	SHRDOW
L0001026	0	0.40265E-02	581023.8	4132434.4	119.5	4.15	2.84	0.90	YES	SHRDOW
L0001027	0	0.40265E-02	581020.2	4132439.3	119.3	4.15	2.84	0.90	YES	SHRDOW
L0001028	0	0.40265E-02	581016.7	4132444.2	119.2	4.15	2.84	0.90	YES	SHRDOW
L0001029	0	0.40265E-02	581013.1	4132449.2	119.1	4.15	2.84	0.90	YES	SHRDOW
L0001030	0	0.40265E-02	581009.5	4132454.1	119.0	4.15	2.84	0.90	YES	SHRDOW
L0001031	0	0.40265E-02	581005.4	4132458.5	118.7	4.15	2.84	0.90	YES	SHRDOW
L0001032	0	0.40265E-02	581000.5	4132462.1	117.9	4.15	2.84	0.90	YES	SHRDOW
L0001033	0	0.40265E-02	580995.6	4132465.8	116.9	4.15	2.84	0.90	YES	SHRDOW
L0001034	0	0.40265E-02	580990.7	4132469.4	116.0	4.15	2.84	0.90	YES	SHRDOW
L0001035	0	0.40265E-02	580985.8	4132473.1	115.2	4.15	2.84	0.90	YES	SHRDOW
L0001036	0	0.40265E-02	580980.9	4132476.7	114.4	4.15	2.84	0.90	YES	SHRDOW
L0001037	0	0.40265E-02	580976.1	4132480.4	113.8	4.15	2.84	0.90	YES	SHRDOW
L0001038	0	0.40265E-02	580971.2	4132484.0	113.3	4.15	2.84	0.90	YES	SHRDOW
L0001039	0	0.40265E-02	580966.3	4132487.6	113.1	4.15	2.84	0.90	YES	SHRDOW
L0001040	0	0.40265E-02	580961.4	4132491.3	112.9	4.15	2.84	0.90	YES	SHRDOW
L0001041	0	0.40265E-02	580956.5	4132494.9	112.8	4.15	2.84	0.90	YES	SHRDOW
L0001042	0	0.40265E-02	580951.6	4132498.6	112.7	4.15	2.84	0.90	YES	SHRDOW
L0001043	0	0.40265E-02	580946.8	4132502.2	112.7	4.15	2.84	0.90	YES	SHRDOW
L0001044	0	0.40265E-02	580941.9	4132505.9	112.7	4.15	2.84	0.90	YES	SHRDOW
L0001045	0	0.40265E-02	580937.0	4132509.5	112.4	4.15	2.84	0.90	YES	SHRDOW
L0001046	0	0.40265E-02	580932.1	4132513.2	112.1	4.15	2.84	0.90	YES	SHRDOW
L0001047	0	0.40265E-02	580927.2	4132516.8	112.0	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0001048	0	0.40265E-02	580922.3	4132520.5	111.8	4.15	2.84	0.90	YES	SHRDOW
L0001049	0	0.40265E-02	580917.4	4132524.1	111.6	4.15	2.84	0.90	YES	SHRDOW
L0001050	0	0.40265E-02	580912.6	4132527.8	111.6	4.15	2.84	0.90	YES	SHRDOW
L0001051	0	0.40265E-02	580907.7	4132531.4	111.4	4.15	2.84	0.90	YES	SHRDOW
L0001052	0	0.40265E-02	580902.9	4132535.2	111.3	4.15	2.84	0.90	YES	SHRDOW
L0001053	0	0.40265E-02	580898.3	4132539.1	111.1	4.15	2.84	0.90	YES	SHRDOW
L0001054	0	0.40265E-02	580893.7	4132543.1	111.0	4.15	2.84	0.90	YES	SHRDOW
L0001055	0	0.40265E-02	580889.0	4132547.1	111.0	4.15	2.84	0.90	YES	SHRDOW
L0001056	0	0.40265E-02	580884.4	4132551.1	110.8	4.15	2.84	0.90	YES	SHRDOW
L0001057	0	0.40265E-02	580879.8	4132555.1	110.6	4.15	2.84	0.90	YES	SHRDOW
L0001058	0	0.40265E-02	580875.2	4132559.1	110.4	4.15	2.84	0.90	YES	SHRDOW
L0001059	0	0.40265E-02	580870.6	4132563.1	110.3	4.15	2.84	0.90	YES	SHRDOW
L0001060	0	0.40265E-02	580866.0	4132567.1	110.1	4.15	2.84	0.90	YES	SHRDOW
L0001061	0	0.40265E-02	580861.9	4132571.5	110.0	4.15	2.84	0.90	YES	SHRDOW
L0001062	0	0.40265E-02	580859.0	4132576.9	110.0	4.15	2.84	0.90	YES	SHRDOW
L0001063	0	0.40265E-02	580856.1	4132582.2	109.8	4.15	2.84	0.90	YES	SHRDOW
L0001064	0	0.40265E-02	580853.2	4132587.6	109.6	4.15	2.84	0.90	YES	SHRDOW
L0001065	0	0.40265E-02	580850.3	4132593.0	109.5	4.15	2.84	0.90	YES	SHRDOW
L0001066	0	0.40265E-02	580847.4	4132598.3	109.3	4.15	2.84	0.90	YES	SHRDOW
L0001067	0	0.40265E-02	580844.5	4132603.7	109.1	4.15	2.84	0.90	YES	SHRDOW
L0001068	0	0.40265E-02	580841.7	4132609.1	108.8	4.15	2.84	0.90	YES	SHRDOW
L0001069	0	0.40265E-02	580839.3	4132614.6	108.3	4.15	2.84	0.90	YES	SHRDOW
L0001070	0	0.40265E-02	580839.1	4132620.7	107.8	4.15	2.84	0.90	YES	SHRDOW
L0001071	0	0.40265E-02	580838.9	4132626.8	107.3	4.15	2.84	0.90	YES	SHRDOW
L0001072	0	0.40265E-02	580838.7	4132632.8	106.8	4.15	2.84	0.90	YES	SHRDOW
L0001073	0	0.40265E-02	580838.5	4132638.9	106.5	4.15	2.84	0.90	YES	SHRDOW
L0001074	0	0.40265E-02	580838.3	4132645.0	106.5	4.15	2.84	0.90	YES	SHRDOW
L0001075	0	0.40265E-02	580838.1	4132651.1	106.5	4.15	2.84	0.90	YES	SHRDOW
L0001076	0	0.40265E-02	580837.9	4132657.2	106.5	4.15	2.84	0.90	YES	SHRDOW
L0001077	0	0.40265E-02	580837.7	4132663.3	106.5	4.15	2.84	0.90	YES	SHRDOW
L0001078	0	0.40265E-02	580837.5	4132669.4	106.5	4.15	2.84	0.90	YES	SHRDOW
L0001079	0	0.40265E-02	580837.3	4132675.5	106.6	4.15	2.84	0.90	YES	SHRDOW
L0001080	0	0.40265E-02	580841.7	4132679.4	106.9	4.15	2.84	0.90	YES	SHRDOW
L0001081	0	0.40265E-02	580846.5	4132683.2	107.2	4.15	2.84	0.90	YES	SHRDOW
L0001082	0	0.40265E-02	580851.3	4132686.9	107.6	4.15	2.84	0.90	YES	SHRDOW
L0001083	0	0.40265E-02	580855.9	4132690.8	107.9	4.15	2.84	0.90	YES	SHRDOW
L0001084	0	0.40265E-02	580855.9	4132696.9	108.1	4.15	2.84	0.90	YES	SHRDOW
L0001085	0	0.40265E-02	580855.9	4132703.0	108.3	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

L0001086	0	0.40265E-02	580855.9	4132709.1	108.5	4.15	2.84	0.90	YES	SHRDOW
L0001087	0	0.40265E-02	580852.7	4132713.6	108.5	4.15	2.84	0.90	YES	SHRDOW
L0001088	0	0.40265E-02	580847.9	4132717.4	108.3	4.15	2.84	0.90	YES	SHRDOW
L0001089	0	0.40265E-02	580843.1	4132721.1	108.2	4.15	2.84	0.90	YES	SHRDOW
L0001090	0	0.40265E-02	580838.3	4132724.9	108.0	4.15	2.84	0.90	YES	SHRDOW
L0001091	0	0.40265E-02	580837.2	4132730.4	108.0	4.15	2.84	0.90	YES	SHRDOW
L0001092	0	0.40265E-02	580837.0	4132736.5	107.9	4.15	2.84	0.90	YES	SHRDOW
L0001093	0	0.40265E-02	580836.9	4132742.6	107.9	4.15	2.84	0.90	YES	SHRDOW
L0001094	0	0.40265E-02	580836.8	4132748.7	107.9	4.15	2.84	0.90	YES	SHRDOW
L0001095	0	0.40265E-02	580836.6	4132754.8	107.9	4.15	2.84	0.90	YES	SHRDOW
L0001096	0	0.40265E-02	580836.5	4132760.9	108.0	4.15	2.84	0.90	YES	SHRDOW
L0001097	0	0.40265E-02	580836.4	4132767.0	108.0	4.15	2.84	0.90	YES	SHRDOW
L0001098	0	0.40265E-02	580836.3	4132773.1	108.1	4.15	2.84	0.90	YES	SHRDOW
L0001099	0	0.40265E-02	580836.1	4132779.2	108.2	4.15	2.84	0.90	YES	SHRDOW
L0001100	0	0.40265E-02	580836.0	4132785.3	108.3	4.15	2.84	0.90	YES	SHRDOW
L0001101	0	0.40265E-02	580833.6	4132789.2	108.2	4.15	2.84	0.90	YES	SHRDOW
L0001102	0	0.40265E-02	580827.5	4132789.6	107.6	4.15	2.84	0.90	YES	SHRDOW
L0001103	0	0.40265E-02	580822.4	4132792.4	107.2	4.15	2.84	0.90	YES	SHRDOW
L0001104	0	0.40265E-02	580817.7	4132796.3	107.1	4.15	2.84	0.90	YES	SHRDOW
L0001105	0	0.40265E-02	580813.0	4132800.2	107.1	4.15	2.84	0.90	YES	SHRDOW
L0001106	0	0.40265E-02	580808.3	4132804.1	107.1	4.15	2.84	0.90	YES	SHRDOW
L0001107	0	0.40265E-02	580804.3	4132808.5	107.1	4.15	2.84	0.90	YES	SHRDOW
L0001108	0	0.40265E-02	580801.9	4132814.1	107.2	4.15	2.84	0.90	YES	SHRDOW
L0001109	0	0.40265E-02	580799.6	4132819.7	107.2	4.15	2.84	0.90	YES	SHRDOW
L0001110	0	0.40265E-02	580797.3	4132825.4	107.2	4.15	2.84	0.90	YES	SHRDOW
L0001111	0	0.40265E-02	580794.9	4132831.0	107.1	4.15	2.84	0.90	YES	SHRDOW
L0001112	0	0.40265E-02	580792.6	4132836.6	107.0	4.15	2.84	0.90	YES	SHRDOW
L0001113	0	0.40265E-02	580790.2	4132842.3	106.8	4.15	2.84	0.90	YES	SHRDOW
L0001114	0	0.40265E-02	580785.2	4132845.0	106.5	4.15	2.84	0.90	YES	SHRDOW
L0001115	0	0.40265E-02	580779.4	4132846.9	106.1	4.15	2.84	0.90	YES	SHRDOW
L0001116	0	0.40265E-02	580773.6	4132848.9	105.6	4.15	2.84	0.90	YES	SHRDOW
L0001117	0	0.40265E-02	580767.9	4132850.8	105.1	4.15	2.84	0.90	YES	SHRDOW
L0001118	0	0.40265E-02	580762.1	4132852.7	104.8	4.15	2.84	0.90	YES	SHRDOW
L0001119	0	0.40265E-02	580756.3	4132854.6	104.9	4.15	2.84	0.90	YES	SHRDOW
L0001120	0	0.40265E-02	580751.0	4132857.4	105.2	4.15	2.84	0.90	YES	SHRDOW
L0001121	0	0.40265E-02	580746.6	4132861.6	105.8	4.15	2.84	0.90	YES	SHRDOW
L0001122	0	0.40265E-02	580742.3	4132865.9	106.8	4.15	2.84	0.90	YES	SHRDOW
L0001123	0	0.40265E-02	580737.9	4132870.1	108.0	4.15	2.84	0.90	YES	SHRDOW
L0001124	0	0.40265E-02	580733.5	4132874.4	109.4	4.15	2.84	0.90	YES	SHRDOW
L0001125	0	0.40265E-02	580729.2	4132878.6	109.9	4.15	2.84	0.90	YES	SHRDOW
L0001126	0	0.40265E-02	580724.8	4132882.9	109.9	4.15	2.84	0.90	YES	SHRDOW
L0001127	0	0.40265E-02	580720.4	4132887.1	109.9	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0001128	0	0.40265E-02	580716.0	4132891.4	109.9	4.15	2.84	0.90	YES	SHRDOW
L0001129	0	0.40265E-02	580711.7	4132895.6	109.9	4.15	2.84	0.90	YES	SHRDOW
L0001130	0	0.40265E-02	580707.3	4132899.9	109.9	4.15	2.84	0.90	YES	SHRDOW
L0001131	0	0.40265E-02	580702.9	4132904.1	109.9	4.15	2.84	0.90	YES	SHRDOW
L0001132	0	0.40265E-02	580697.2	4132905.7	108.8	4.15	2.84	0.90	YES	SHRDOW
L0001133	0	0.40265E-02	580691.2	4132906.7	107.6	4.15	2.84	0.90	YES	SHRDOW
L0001134	0	0.40265E-02	580685.2	4132907.8	106.4	4.15	2.84	0.90	YES	SHRDOW
L0001135	0	0.40265E-02	580679.9	4132906.2	105.4	4.15	2.84	0.90	YES	SHRDOW
L0001136	0	0.40265E-02	580675.4	4132902.1	104.3	4.15	2.84	0.90	YES	SHRDOW
L0001137	0	0.40265E-02	580670.9	4132898.0	103.3	4.15	2.84	0.90	YES	SHRDOW
L0001138	0	0.40265E-02	580666.4	4132893.9	102.4	4.15	2.84	0.90	YES	SHRDOW
L0001139	0	0.40265E-02	580661.9	4132889.8	101.6	4.15	2.84	0.90	YES	SHRDOW
L0001140	0	0.40265E-02	580657.4	4132885.7	100.9	4.15	2.84	0.90	YES	SHRDOW
L0001141	0	0.40265E-02	580652.8	4132881.6	100.3	4.15	2.84	0.90	YES	SHRDOW
L0001142	0	0.40265E-02	580648.3	4132877.5	99.7	4.15	2.84	0.90	YES	SHRDOW
L0001143	0	0.40265E-02	580644.6	4132873.0	99.2	4.15	2.84	0.90	YES	SHRDOW
L0001144	0	0.40265E-02	580642.9	4132867.1	99.0	4.15	2.84	0.90	YES	SHRDOW
L0001145	0	0.40265E-02	580641.2	4132861.3	98.9	4.15	2.84	0.90	YES	SHRDOW
L0001146	0	0.40265E-02	580639.5	4132855.4	98.8	4.15	2.84	0.90	YES	SHRDOW
L0001147	0	0.40265E-02	580639.4	4132849.5	98.8	4.15	2.84	0.90	YES	SHRDOW
L0001148	0	0.40265E-02	580640.4	4132843.4	98.9	4.15	2.84	0.90	YES	SHRDOW
L0001149	0	0.40265E-02	580641.4	4132837.4	99.2	4.15	2.84	0.90	YES	SHRDOW
L0001150	0	0.40265E-02	580642.4	4132831.4	99.5	4.15	2.84	0.90	YES	SHRDOW
L0001151	0	0.40265E-02	580644.8	4132826.0	99.9	4.15	2.84	0.90	YES	SHRDOW
L0001152	0	0.40265E-02	580648.6	4132821.3	100.4	4.15	2.84	0.90	YES	SHRDOW
L0001153	0	0.40265E-02	580652.5	4132816.6	101.0	4.15	2.84	0.90	YES	SHRDOW
L0001154	0	0.40265E-02	580655.8	4132811.5	101.2	4.15	2.84	0.90	YES	SHRDOW
L0001155	0	0.40265E-02	580658.3	4132806.0	101.3	4.15	2.84	0.90	YES	SHRDOW
L0001156	0	0.40265E-02	580660.9	4132800.4	101.4	4.15	2.84	0.90	YES	SHRDOW
L0001157	0	0.40265E-02	580663.5	4132794.9	101.3	4.15	2.84	0.90	YES	SHRDOW
L0001158	0	0.40265E-02	580666.1	4132789.4	101.1	4.15	2.84	0.90	YES	SHRDOW
L0001159	0	0.40265E-02	580668.7	4132783.9	101.2	4.15	2.84	0.90	YES	SHRDOW
L0001160	0	0.40265E-02	580673.1	4132779.8	101.5	4.15	2.84	0.90	YES	SHRDOW
L0001161	0	0.40265E-02	580677.9	4132776.1	101.9	4.15	2.84	0.90	YES	SHRDOW
L0001162	0	0.40265E-02	580682.7	4132772.3	102.3	4.15	2.84	0.90	YES	SHRDOW
L0001163	0	0.40265E-02	580687.5	4132768.6	102.7	4.15	2.84	0.90	YES	SHRDOW
L0001164	0	0.40265E-02	580692.4	4132764.9	103.1	4.15	2.84	0.90	YES	SHRDOW
L0001165	0	0.40265E-02	580697.2	4132761.2	103.5	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

L0001166	0	0.40265E-02	580702.0	4132757.4	103.9	4.15	2.84	0.90	YES	SHRDOW
L0001167	0	0.40265E-02	580706.6	4132753.5	104.0	4.15	2.84	0.90	YES	SHRDOW
L0001168	0	0.40265E-02	580710.8	4132749.0	104.0	4.15	2.84	0.90	YES	SHRDOW
L0001169	0	0.40265E-02	580714.9	4132744.5	104.0	4.15	2.84	0.90	YES	SHRDOW
L0001170	0	0.40265E-02	580719.0	4132740.0	104.0	4.15	2.84	0.90	YES	SHRDOW
L0001171	0	0.40265E-02	580723.1	4132735.5	104.0	4.15	2.84	0.90	YES	SHRDOW
L0001172	0	0.40265E-02	580727.2	4132731.0	104.0	4.15	2.84	0.90	YES	SHRDOW
L0001173	0	0.40265E-02	580731.3	4132726.5	104.0	4.15	2.84	0.90	YES	SHRDOW
L0001174	0	0.40265E-02	580735.7	4132722.3	104.2	4.15	2.84	0.90	YES	SHRDOW
L0001175	0	0.40265E-02	580740.7	4132718.8	104.5	4.15	2.84	0.90	YES	SHRDOW
L0001176	0	0.40265E-02	580745.7	4132715.3	104.8	4.15	2.84	0.90	YES	SHRDOW
L0001177	0	0.40265E-02	580750.7	4132711.8	105.1	4.15	2.84	0.90	YES	SHRDOW
L0001178	0	0.40265E-02	580754.8	4132707.8	105.4	4.15	2.84	0.90	YES	SHRDOW
L0001179	0	0.40265E-02	580755.9	4132701.8	105.6	4.15	2.84	0.90	YES	SHRDOW
L0001180	0	0.40265E-02	580761.8	4132701.5	105.8	4.15	2.84	0.90	YES	SHRDOW
L0001181	0	0.40265E-02	580767.9	4132701.4	105.9	4.15	2.84	0.90	YES	SHRDOW
L0001182	0	0.40265E-02	580774.0	4132701.3	105.9	4.15	2.84	0.90	YES	SHRDOW
L0001183	0	0.40265E-02	580780.1	4132701.2	105.9	4.15	2.84	0.90	YES	SHRDOW
L0001184	0	0.40265E-02	580786.2	4132701.2	106.0	4.15	2.84	0.90	YES	SHRDOW
L0001185	0	0.40265E-02	580792.3	4132701.1	106.0	4.15	2.84	0.90	YES	SHRDOW
L0001186	0	0.40265E-02	580798.4	4132701.0	106.0	4.15	2.84	0.90	YES	SHRDOW
L0001187	0	0.40265E-02	580804.5	4132700.9	106.0	4.15	2.84	0.90	YES	SHRDOW
L0001188	0	0.40265E-02	580810.6	4132700.9	106.1	4.15	2.84	0.90	YES	SHRDOW
L0001189	0	0.40265E-02	580814.9	4132697.5	106.0	4.15	2.84	0.90	YES	SHRDOW
L0001190	0	0.40265E-02	580818.6	4132692.6	106.0	4.15	2.84	0.90	YES	SHRDOW
L0001191	0	0.40265E-02	580822.2	4132687.7	106.0	4.15	2.84	0.90	YES	SHRDOW
L0001192	0	0.40265E-02	580825.8	4132682.7	106.1	4.15	2.84	0.90	YES	SHRDOW
L0001193	0	0.40265E-02	580829.4	4132677.8	106.3	4.15	2.84	0.90	YES	SHRDOW
L0001194	0	0.42857E-02	580941.8	4132511.0	112.4	4.15	2.84	0.90	YES	SHRDOW
L0001195	0	0.42857E-02	580945.6	4132515.8	111.8	4.15	2.84	0.90	YES	SHRDOW
L0001196	0	0.42857E-02	580949.3	4132520.6	111.0	4.15	2.84	0.90	YES	SHRDOW
L0001197	0	0.42857E-02	580950.7	4132526.5	110.3	4.15	2.84	0.90	YES	SHRDOW
L0001198	0	0.42857E-02	580951.8	4132532.5	109.6	4.15	2.84	0.90	YES	SHRDOW
L0001199	0	0.42857E-02	580952.9	4132538.5	109.1	4.15	2.84	0.90	YES	SHRDOW
L0001200	0	0.42857E-02	580954.0	4132544.5	108.6	4.15	2.84	0.90	YES	SHRDOW
L0001201	0	0.42857E-02	580955.1	4132550.5	108.6	4.15	2.84	0.90	YES	SHRDOW
L0001202	0	0.42857E-02	580957.7	4132555.6	108.9	4.15	2.84	0.90	YES	SHRDOW
L0001203	0	0.42857E-02	580962.5	4132559.4	109.5	4.15	2.84	0.90	YES	SHRDOW
L0001204	0	0.42857E-02	580967.6	4132562.4	110.1	4.15	2.84	0.90	YES	SHRDOW
L0001205	0	0.42857E-02	580973.6	4132562.8	110.7	4.15	2.84	0.90	YES	SHRDOW
L0001206	0	0.42857E-02	580979.6	4132562.1	111.7	4.15	2.84	0.90	YES	SHRDOW
L0001207	0	0.42857E-02	580985.4	4132560.3	112.6	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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
L0001208	0	0.42857E-02	580991.2	4132558.5	113.6	4.15	2.84	0.90	YES	SHRDOW
L0001209	0	0.42857E-02	580996.9	4132558.7	114.7	4.15	2.84	0.90	YES	SHRDOW
L0001210	0	0.42857E-02	581002.4	4132561.3	115.9	4.15	2.84	0.90	YES	SHRDOW
L0001211	0	0.42857E-02	581007.9	4132564.0	116.9	4.15	2.84	0.90	YES	SHRDOW
L0001212	0	0.42857E-02	581013.4	4132566.6	117.9	4.15	2.84	0.90	YES	SHRDOW
L0001213	0	0.42857E-02	581018.6	4132564.5	118.6	4.15	2.84	0.90	YES	SHRDOW
L0001214	0	0.42857E-02	581023.8	4132561.3	119.1	4.15	2.84	0.90	YES	SHRDOW

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.24581E-04	581145.4	4132318.2	127.6	4.15	14	1.93	YES	SHRDOW
PAREA2	0	0.20685E-04	581114.1	4132387.6	126.8	4.15	6	1.93	YES	SHRDOW
PAREA3	0	0.21399E-04	581031.5	4132493.8	118.7	4.15	10	1.93	YES	SHRDOW
PAREA5	0	0.24573E-04	580679.2	4132787.3	101.2	4.15	29	1.93	YES	SHRDOW
PAREA6	0	0.23755E-04	580636.1	4132878.3	98.5	4.15	6	1.93	YES	SHRDOW
PAREA7	0	0.25941E-04	580884.3	4132800.7	115.1	4.15	11	1.93	YES	SHRDOW
PAREA8	0	0.32188E-04	580849.4	4132657.6	106.4	4.15	5	1.93	YES	SHRDOW

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ONSITE	PAREA1 , PAREA2 , PAREA3 , PAREA5 , PAREA6 , PAREA7 , PAREA8 ,
HAUL	L0000968 , L0000969 , L0000970 , L0000971 , L0000972 , L0000973 , L0000974 , L0000975 ,
	L0000976 , L0000977 , L0000978 , L0000979 , L0000980 , L0000981 , L0000982 , L0000983 ,
	L0000984 , L0000985 , L0000986 , L0000987 , L0000988 , L0000989 , L0000990 , L0000991 ,
	L0000992 , L0000993 , L0000994 , L0000995 , L0000996 , L0000997 , L0000998 , L0000999 ,
	L0001000 , L0001001 , L0001002 , L0001003 , L0001004 , L0001005 , L0001006 , L0001007 ,
	L0001008 , L0001009 , L0001010 , L0001011 , L0001012 , L0001013 , L0001014 , L0001015 ,
	L0001016 , L0001017 , L0001018 , L0001019 , L0001020 , L0001021 , L0001022 , L0001023 ,
	L0001024 , L0001025 , L0001026 , L0001027 , L0001028 , L0001029 , L0001030 , L0001031 ,
	L0001032 , L0001033 , L0001034 , L0001035 , L0001036 , L0001037 , L0001038 , L0001039 ,
	L0001040 , L0001041 , L0001042 , L0001043 , L0001044 , L0001045 , L0001046 , L0001047 ,
	L0001048 , L0001049 , L0001050 , L0001051 , L0001052 , L0001053 , L0001054 , L0001055 ,
	L0001056 , L0001057 , L0001058 , L0001059 , L0001060 , L0001061 , L0001062 , L0001063 ,
	L0001064 , L0001065 , L0001066 , L0001067 , L0001068 , L0001069 , L0001070 , L0001071 ,
	L0001072 , L0001073 , L0001074 , L0001075 , L0001076 , L0001077 , L0001078 , L0001079 ,
	L0001080 , L0001081 , L0001082 , L0001083 , L0001084 , L0001085 , L0001086 , L0001087 ,
	L0001088 , L0001089 , L0001090 , L0001091 , L0001092 , L0001093 , L0001094 , L0001095 ,
	L0001096 , L0001097 , L0001098 , L0001099 , L0001100 , L0001101 , L0001102 , L0001103 ,
	L0001104 , L0001105 , L0001106 , L0001107 , L0001108 , L0001109 , L0001110 , L0001111 ,
	L0001112 , L0001113 , L0001114 , L0001115 , L0001116 , L0001117 , L0001118 , L0001119 ,
	L0001120 , L0001121 , L0001122 , L0001123 , L0001124 , L0001125 , L0001126 , L0001127 ,
	L0001128 , L0001129 , L0001130 , L0001131 , L0001132 , L0001133 , L0001134 , L0001135 ,
	L0001136 , L0001137 , L0001138 , L0001139 , L0001140 , L0001141 , L0001142 , L0001143 ,
	L0001144 , L0001145 , L0001146 , L0001147 , L0001148 , L0001149 , L0001150 , L0001151 ,
	L0001152 , L0001153 , L0001154 , L0001155 , L0001156 , L0001157 , L0001158 , L0001159 ,
	L0001160 , L0001161 , L0001162 , L0001163 , L0001164 , L0001165 , L0001166 , L0001167 ,
	L0001168 , L0001169 , L0001170 , L0001171 , L0001172 , L0001173 , L0001174 , L0001175 ,
	L0001176 , L0001177 , L0001178 , L0001179 , L0001180 , L0001181 , L0001182 , L0001183 ,
	L0001184 , L0001185 , L0001186 , L0001187 , L0001188 , L0001189 , L0001190 , L0001191 ,
	L0001192 , L0001193 , L0001194 , L0001195 , L0001196 , L0001197 , L0001198 , L0001199 ,
	L0001200 , L0001201 , L0001202 , L0001203 , L0001204 , L0001205 , L0001206 , L0001207 ,
	L0001208 , L0001209 , L0001210 , L0001211 , L0001212 , L0001213 , L0001214 ,

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
	60572.	PAREA1 , PAREA2 , PAREA3 , PAREA5 , PAREA6 , L0000968 , L0000969 , L0000970 ,
		L0000971 , L0000972 , L0000973 , L0000974 , L0000975 , L0000976 , L0000977 , L0000978 ,
		L0000979 , L0000980 , L0000981 , L0000982 , L0000983 , L0000984 , L0000985 , L0000986 ,
		L0000987 , L0000988 , L0000989 , L0000990 , L0000991 , L0000992 , L0000993 , L0000994 ,
		L0000995 , L0000996 , L0000997 , L0000998 , L0000999 , L0001000 , L0001001 , L0001002 ,
		L0001003 , L0001004 , L0001005 , L0001006 , L0001007 , L0001008 , L0001009 , L0001010 ,
		L0001011 , L0001012 , L0001013 , L0001014 , L0001015 , L0001016 , L0001017 , L0001018 ,
		L0001019 , L0001020 , L0001021 , L0001022 , L0001023 , L0001024 , L0001025 , L0001026 ,
		L0001027 , L0001028 , L0001029 , L0001030 , L0001031 , L0001032 , L0001033 , L0001034 ,
		L0001035 , L0001036 , L0001037 , L0001038 , L0001039 , L0001040 , L0001041 , L0001042 ,
		L0001043 , L0001044 , L0001045 , L0001046 , L0001047 , L0001048 , L0001049 , L0001050 ,
		L0001051 , L0001052 , L0001053 , L0001054 , L0001055 , L0001056 , L0001057 , L0001058 ,
		L0001059 , L0001060 , L0001061 , L0001062 , L0001063 , L0001064 , L0001065 , L0001066 ,
		L0001067 , L0001068 , L0001069 , L0001070 , L0001071 , L0001072 , L0001073 , L0001074 ,
		L0001075 , L0001076 , L0001077 , L0001078 , L0001079 , L0001080 , L0001081 , L0001082 ,
		L0001083 , L0001084 , L0001085 , L0001086 , L0001087 , L0001088 , L0001089 , L0001090 ,
		L0001091 , L0001092 , L0001093 , L0001094 , L0001095 , L0001096 , L0001097 , L0001098 ,
		L0001099 , L0001100 , L0001101 , L0001102 , L0001103 , L0001104 , L0001105 , L0001106 ,
		L0001107 , L0001108 , L0001109 , L0001110 , L0001111 , L0001112 , L0001113 , L0001114 ,
		L0001115 , L0001116 , L0001117 , L0001118 , L0001119 , L0001120 , L0001121 , L0001122 ,
		L0001123 , L0001124 , L0001125 , L0001126 , L0001127 , L0001128 , L0001129 , L0001130 ,
		L0001131 , L0001132 , L0001133 , L0001134 , L0001135 , L0001136 , L0001137 , L0001138 ,
		L0001139 , L0001140 , L0001141 , L0001142 , L0001143 , L0001144 , L0001145 , L0001146 ,
		L0001147 , L0001148 , L0001149 , L0001150 , L0001151 , L0001152 , L0001153 , L0001154 ,
		L0001155 , L0001156 , L0001157 , L0001158 , L0001159 , L0001160 , L0001161 , L0001162 ,
		L0001163 , L0001164 , L0001165 , L0001166 , L0001167 , L0001168 , L0001169 , L0001170 ,
		L0001171 , L0001172 , L0001173 , L0001174 , L0001175 , L0001176 , L0001177 , L0001178 ,
		L0001179 , L0001180 , L0001181 , L0001182 , L0001183 , L0001184 , L0001185 , L0001186 ,
		L0001187 , L0001188 , L0001189 , L0001190 , L0001191 , L0001192 , L0001193 , L0001194 ,
		L0001195 , L0001196 , L0001197 , L0001198 , L0001199 , L0001200 , L0001201 , L0001202 ,
		L0001203 , L0001204 , L0001205 , L0001206 , L0001207 , L0001208 , L0001209 , L0001210 ,
		L0001211 , L0001212 , L0001213 , L0001214 , PAREA7 , PAREA8 ,

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) *

SOURCE ID = All Sources ; SOURCE TYPE = AREAPOLY and VOLUME:

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
							SEASON = WINTER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SUNDAY								

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ; DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

(580913.0,	4132644.9,	109.5,	772.0,	1.5);	(580929.2,	4132624.1,	110.3,	772.0,	1.5);
(580933.8,	4132629.6,	111.3,	772.0,	1.5);	(580945.8,	4132618.3,	112.1,	772.0,	1.5);
(580981.5,	4132586.1,	114.3,	772.0,	1.5);	(581018.2,	4132600.8,	121.1,	772.0,	1.5);
(581015.5,	4132619.2,	121.9,	772.0,	1.5);	(580978.8,	4132605.1,	115.6,	772.0,	1.5);
(580971.1,	4132637.2,	116.8,	772.0,	1.5);	(580962.9,	4132644.6,	116.2,	772.0,	1.5);
(580947.9,	4132654.9,	114.9,	772.0,	1.5);	(580954.6,	4132661.1,	116.2,	772.0,	1.5);
(580938.4,	4132663.2,	114.2,	772.0,	1.5);	(580938.1,	4132684.3,	115.5,	772.0,	1.5);
(581011.5,	4132649.4,	123.4,	772.0,	1.5);	(580983.7,	4132671.8,	120.8,	772.0,	1.5);
(580999.6,	4132658.6,	122.0,	772.0,	1.5);	(580981.8,	4132691.9,	122.1,	772.0,	1.5);
(580968.7,	4132720.1,	121.2,	772.0,	1.5);	(580952.5,	4132750.7,	120.9,	772.0,	1.5);
(580940.2,	4132759.8,	119.8,	772.0,	1.5);	(580871.4,	4132622.2,	106.4,	772.0,	1.5);
(580888.3,	4132614.3,	106.3,	772.0,	1.5);	(580895.3,	4132622.2,	106.8,	772.0,	1.5);
(580900.8,	4132615.5,	106.9,	772.0,	1.5);	(580900.8,	4132595.9,	107.2,	772.0,	1.5);
(580912.4,	4132583.7,	107.0,	772.0,	1.5);	(580920.4,	4132590.4,	107.6,	772.0,	1.5);
(580925.0,	4132577.9,	107.5,	772.0,	1.5);	(580926.5,	4132553.1,	109.2,	772.0,	1.5);
(580928.3,	4132542.4,	109.8,	772.0,	1.5);	(580974.2,	4132542.4,	109.2,	772.0,	1.5);
(580973.9,	4132529.6,	109.1,	772.0,	1.5);	(580980.0,	4132512.4,	110.0,	772.0,	1.5);
(580989.2,	4132504.8,	111.5,	772.0,	1.5);	(581051.6,	4132520.7,	121.1,	772.0,	1.5);
(581101.4,	4132550.7,	131.7,	772.0,	1.5);	(581092.2,	4132557.4,	130.9,	772.0,	1.5);
(581089.2,	4132567.8,	131.5,	772.0,	1.5);	(581080.0,	4132580.9,	131.2,	772.0,	1.5);
(581073.0,	4132590.4,	130.7,	772.0,	1.5);	(581068.1,	4132603.3,	130.8,	772.0,	1.5);
(581062.6,	4132618.6,	130.3,	772.0,	1.5);	(581062.0,	4132631.1,	130.6,	772.0,	1.5);
(581054.0,	4132625.6,	129.0,	772.0,	1.5);	(581046.1,	4132664.1,	130.1,	772.0,	1.5);
(581047.0,	4132653.1,	129.5,	772.0,	1.5);	(581059.5,	4132651.9,	131.0,	772.0,	1.5);
(581057.1,	4132662.6,	131.2,	772.0,	1.5);	(581096.2,	4132504.8,	129.2,	772.0,	1.5);
(581085.5,	4132392.9,	122.7,	772.0,	1.5);	(581090.4,	4132387.1,	123.4,	772.0,	1.5);
(581136.0,	4132397.8,	127.8,	772.0,	1.5);	(581123.7,	4132414.6,	129.0,	772.0,	1.5);
(581128.6,	4132403.9,	128.8,	772.0,	1.5);	(581115.2,	4132432.3,	128.4,	772.0,	1.5);
(581107.8,	4132438.8,	127.8,	772.0,	1.5);	(581103.2,	4132447.6,	127.5,	772.0,	1.5);
(581068.7,	4132420.1,	121.7,	772.0,	1.5);	(581061.3,	4132431.1,	121.1,	772.0,	1.5);
(581056.4,	4132440.9,	121.0,	772.0,	1.5);	(581052.8,	4132456.8,	121.0,	772.0,	1.5);
(581049.1,	4132469.0,	120.6,	772.0,	1.5);	(581014.6,	4132488.3,	115.8,	772.0,	1.5);
(581002.9,	4132491.3,	113.5,	772.0,	1.5);	(581043.3,	4132462.0,	120.0,	772.0,	1.5);
(581099.6,	4132479.4,	128.8,	772.0,	1.5);	(581090.1,	4132478.2,	126.9,	772.0,	1.5);
(581088.6,	4132466.6,	126.0,	772.0,	1.5);	(581099.6,	4132468.7,	128.1,	772.0,	1.5);
(581101.7,	4132494.7,	129.9,	772.0,	1.5);	(581105.1,	4132507.9,	130.8,	772.0,	1.5);
(580749.4,	4132883.1,	106.8,	772.0,	1.5);	(580750.7,	4132892.9,	106.7,	772.0,	1.5);
(580747.0,	4132913.7,	107.8,	772.0,	1.5);	(580744.5,	4132921.9,	108.5,	772.0,	1.5);
(580736.6,	4132932.0,	110.3,	772.0,	1.5);	(580719.2,	4132942.7,	109.0,	772.0,	1.5);
(580701.7,	4132947.9,	106.3,	772.0,	1.5);	(580706.0,	4132953.1,	106.2,	772.0,	1.5);
(580723.4,	4132948.8,	109.0,	772.0,	1.5);	(580621.9,	4132895.6,	97.0,	772.0,	1.5);
(580627.7,	4132908.5,	97.0,	772.0,	1.5);	(580641.8,	4132936.0,	97.9,	772.0,	1.5);

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

```
( 580644.2, 4132946.7,   97.8,   772.0,    1.5);    ( 580659.8, 4132963.5,   98.3,   772.0,    1.5);
( 580671.4, 4132969.6,   98.7,   772.0,    1.5);    ( 580913.0, 4132644.9,  109.5,   772.0,    6.1);
( 580929.2, 4132624.1,  110.3,   772.0,    6.1);    ( 580933.8, 4132629.6,  111.3,   772.0,    6.1);
( 580945.8, 4132618.3,  112.1,   772.0,    6.1);    ( 580981.5, 4132586.1,  114.3,   772.0,    6.1);
( 581018.2, 4132600.8,  121.1,   772.0,    6.1);    ( 581015.5, 4132619.2,  121.9,   772.0,    6.1);
( 580978.8, 4132605.1,  115.6,   772.0,    6.1);    ( 580971.1, 4132637.2,  116.8,   772.0,    6.1);
( 580962.9, 4132644.6,  116.2,   772.0,    6.1);    ( 580947.9, 4132654.9,  114.9,   772.0,    6.1);
( 580954.6, 4132661.1,  116.2,   772.0,    6.1);    ( 580938.4, 4132663.2,  114.2,   772.0,    6.1);
( 580938.1, 4132684.3,  115.5,   772.0,    6.1);    ( 581011.5, 4132649.4,  123.4,   772.0,    6.1);
( 580983.7, 4132671.8,  120.8,   772.0,    6.1);    ( 580999.6, 4132658.6,  122.0,   772.0,    6.1);
( 580981.8, 4132691.9,  122.1,   772.0,    6.1);    ( 580968.7, 4132720.1,  121.2,   772.0,    6.1);
( 580952.5, 4132750.7,  120.9,   772.0,    6.1);    ( 580940.2, 4132759.8,  119.8,   772.0,    6.1);
( 580871.4, 4132622.2,  106.4,   772.0,    6.1);    ( 580888.3, 4132614.3,  106.3,   772.0,    6.1);
( 580895.3, 4132622.2,  106.8,   772.0,    6.1);    ( 580900.8, 4132615.5,  106.9,   772.0,    6.1);
( 580900.8, 4132595.9,  107.2,   772.0,    6.1);    ( 580912.4, 4132583.7,  107.0,   772.0,    6.1);
( 580920.4, 4132590.4,  107.6,   772.0,    6.1);    ( 580925.0, 4132577.9,  107.5,   772.0,    6.1);
( 580926.5, 4132553.1,  109.2,   772.0,    6.1);    ( 580928.3, 4132542.4,  109.8,   772.0,    6.1);
( 580974.2, 4132542.4,  109.2,   772.0,    6.1);    ( 580973.9, 4132529.6,  109.1,   772.0,    6.1);
( 580980.0, 4132512.4,  110.0,   772.0,    6.1);    ( 580989.2, 4132504.8,  111.5,   772.0,    6.1);
( 581051.6, 4132520.7,  121.1,   772.0,    6.1);    ( 581101.4, 4132550.7,  131.7,   772.0,    6.1);
( 581092.2, 4132557.4,  130.9,   772.0,    6.1);    ( 581089.2, 4132567.8,  131.5,   772.0,    6.1);
( 581080.0, 4132580.9,  131.2,   772.0,    6.1);    ( 581073.0, 4132590.4,  130.7,   772.0,    6.1);
( 581068.1, 4132603.3,  130.8,   772.0,    6.1);    ( 581062.6, 4132618.6,  130.3,   772.0,    6.1);
( 581062.0, 4132631.1,  130.6,   772.0,    6.1);    ( 581054.0, 4132625.6,  129.0,   772.0,    6.1);
( 581046.1, 4132664.1,  130.1,   772.0,    6.1);    ( 581047.0, 4132653.1,  129.5,   772.0,    6.1);
( 581059.5, 4132651.9,  131.0,   772.0,    6.1);    ( 581057.1, 4132662.6,  131.2,   772.0,    6.1);
( 581096.2, 4132504.8,  129.2,   772.0,    6.1);    ( 581085.5, 4132392.9,  122.7,   772.0,    6.1);
( 581090.4, 4132387.1,  123.4,   772.0,    6.1);    ( 581136.0, 4132397.8,  127.8,   772.0,    6.1);
( 581123.7, 4132414.6,  129.0,   772.0,    6.1);    ( 581128.6, 4132403.9,  128.8,   772.0,    6.1);
( 581115.2, 4132432.3,  128.4,   772.0,    6.1);    ( 581107.8, 4132438.8,  127.8,   772.0,    6.1);
( 581103.2, 4132447.6,  127.5,   772.0,    6.1);    ( 581068.7, 4132420.1,  121.7,   772.0,    6.1);
( 581061.3, 4132431.1,  121.1,   772.0,    6.1);    ( 581056.4, 4132440.9,  121.0,   772.0,    6.1);
( 581052.8, 4132456.8,  121.0,   772.0,    6.1);    ( 581049.1, 4132469.0,  120.6,   772.0,    6.1);
( 581014.6, 4132488.3,  115.8,   772.0,    6.1);    ( 581002.9, 4132491.3,  113.5,   772.0,    6.1);
( 581043.3, 4132462.0,  120.0,   772.0,    6.1);    ( 581099.6, 4132479.4,  128.8,   772.0,    6.1);
( 581090.1, 4132478.2,  126.9,   772.0,    6.1);    ( 581088.6, 4132466.6,  126.0,   772.0,    6.1);
( 581099.6, 4132468.7,  128.1,   772.0,    6.1);    ( 581101.7, 4132494.7,  129.9,   772.0,    6.1);
( 581105.1, 4132507.9,  130.8,   772.0,    6.1);    ( 580749.4, 4132883.1,  106.8,   772.0,    6.1);
( 580750.7, 4132892.9,  106.7,   772.0,    6.1);    ( 580747.0, 4132913.7,  107.8,   772.0,    6.1);
( 580744.5, 4132921.9,  108.5,   772.0,    6.1);    ( 580736.6, 4132932.0,  110.3,   772.0,    6.1);
( 580719.2, 4132942.7,  109.0,   772.0,    6.1);    ( 580701.7, 4132947.9,  106.3,   772.0,    6.1);
( 580706.0, 4132953.1,  106.2,   772.0,    6.1);    ( 580723.4, 4132948.8,  109.0,   772.0,    6.1);
( 580621.9, 4132895.6,   97.0,   772.0,    6.1);    ( 580627.7, 4132908.5,   97.0,   772.0,    6.1);
( 580641.8, 4132936.0,   97.9,   772.0,    6.1);    ( 580644.2, 4132946.7,   97.8,   772.0,    6.1);
( 580659.8, 4132963.5,   98.3,   772.0,    6.1);    ( 580671.4, 4132969.6,   98.7,   772.0,    6.1);
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*** AERMOD - VERSION 16216r ***   *** Forum Phase 1 Onsite Receptors                                       ***          05/25/17
*** AERMET - VERSION  14134 ***   ***                                                                      ***          14:56:39
                                                                                                                      PAGE 270
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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,
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Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

Surface file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion Met Version: 14134
Profile file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion
Surface format: FREE
Profile format: FREE
Surface station no.: 23289 Upper air station no.: 23230
Name: PALO_ALTO_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	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	07	-7.2	0.126	-9.000	-9.000	-999.	107.	25.2	0.04	0.36	1.00	2.36	999.	10.0	282.1	2.0
09	01	01	1	08	-7.2	0.125	-9.000	-9.000	-999.	106.	25.0	0.04	0.36	0.73	2.36	999.	10.0	281.1	2.0
09	01	01	1	09	-4.5	0.212	-9.000	-9.000	-999.	235.	195.5	0.01	0.36	0.37	3.86	327.	10.0	282.1	2.0
09	01	01	1	10	4.5	0.252	0.215	0.015	80.	304.	-322.7	0.01	0.36	0.25	4.36	341.	10.0	282.1	2.0
09	01	01	1	11	9.5	0.218	0.333	0.015	140.	245.	-99.2	0.04	0.36	0.20	2.86	999.	10.0	282.1	2.0
09	01	01	1	12	12.3	0.232	0.402	0.015	192.	268.	-91.9	0.00	0.36	0.19	4.36	6.	10.0	282.1	2.0
09	01	01	1	13	12.8	0.203	0.434	0.015	232.	220.	-59.9	0.01	0.36	0.18	3.36	333.	10.0	282.1	2.0
09	01	01	1	14	52.4	0.238	0.799	0.016	354.	278.	-23.3	0.04	0.36	0.19	2.86	999.	10.0	283.1	2.0
09	01	01	1	15	37.3	0.200	0.756	0.017	421.	214.	-19.4	0.04	0.36	0.22	2.36	999.	10.0	285.1	2.0
09	01	01	1	16	14.6	0.222	0.561	0.017	438.	251.	-67.8	0.04	0.36	0.30	2.86	999.	10.0	284.1	2.0
09	01	01	1	17	-11.9	0.162	-9.000	-9.000	-999.	157.	32.4	0.04	0.36	0.54	2.86	999.	10.0	283.1	2.0
09	01	01	1	18	-13.2	0.132	-9.000	-9.000	-999.	115.	15.9	0.01	0.36	1.00	3.36	327.	10.0	281.1	2.0
09	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0

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	-999.0	99.0	-99.00	-99.00

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

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

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 *** AERMOD - VERSION 16216r ***   *** Forum Phase 1 Onsite Receptors                                  ***        05/25/17
 *** AERMET - VERSION  14134 ***   ***                                                                 ***        14:56:39
                                                                                                                 PAGE 278
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

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


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

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

ONSITE    1ST HIGHEST VALUE IS      8.80281 AT (  580871.44,  4132622.23,  106.36,  772.00,  1.50)  DC
           2ND HIGHEST VALUE IS      8.27558 AT (  580938.10,  4132684.31,  115.52,  772.00,  1.50)  DC
           3RD HIGHEST VALUE IS      7.85293 AT (  580871.44,  4132622.23,  106.36,  772.00,  6.10)  DC
           4TH HIGHEST VALUE IS      7.38523 AT (  580888.26,  4132614.28,  106.26,  772.00,  1.50)  DC
           5TH HIGHEST VALUE IS      6.82572 AT (  580938.41,  4132663.21,  114.16,  772.00,  1.50)  DC
           6TH HIGHEST VALUE IS      6.79615 AT (  580895.29,  4132622.23,  106.83,  772.00,  1.50)  DC
           7TH HIGHEST VALUE IS      6.39847 AT (  580888.26,  4132614.28,  106.26,  772.00,  6.10)  DC
           8TH HIGHEST VALUE IS      6.23067 AT (  580900.79,  4132615.51,  106.94,  772.00,  1.50)  DC
           9TH HIGHEST VALUE IS      6.21939 AT (  580938.10,  4132684.31,  115.52,  772.00,  6.10)  DC
          10TH HIGHEST VALUE IS      6.01206 AT (  580895.29,  4132622.23,  106.83,  772.00,  6.10)  DC

HAUL      1ST HIGHEST VALUE IS     11.57391 AT (  580871.44,  4132622.23,  106.36,  772.00,  1.50)  DC
           2ND HIGHEST VALUE IS     10.89174 AT (  580974.19,  4132542.42,  109.22,  772.00,  6.10)  DC
           3RD HIGHEST VALUE IS     10.44702 AT (  580980.00,  4132512.45,  110.00,  772.00,  1.50)  DC
           4TH HIGHEST VALUE IS      9.79828 AT (  580973.88,  4132529.58,  109.11,  772.00,  6.10)  DC
           5TH HIGHEST VALUE IS      9.74980 AT (  580989.17,  4132504.81,  111.45,  772.00,  1.50)  DC
           6TH HIGHEST VALUE IS      9.60539 AT (  580973.88,  4132529.58,  109.11,  772.00,  1.50)  DC
           7TH HIGHEST VALUE IS      9.09310 AT (  580871.44,  4132622.23,  106.36,  772.00,  6.10)  DC
           8TH HIGHEST VALUE IS      8.61356 AT (  580980.00,  4132512.45,  110.00,  772.00,  6.10)  DC
           9TH HIGHEST VALUE IS      8.60891 AT (  580888.26,  4132614.28,  106.26,  772.00,  1.50)  DC
          10TH HIGHEST VALUE IS      8.35939 AT (  581002.93,  4132491.35,  113.54,  772.00,  1.50)  DC


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

Model Output - Phase 1 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

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

A Total of   0 Fatal Error Message(s)
A Total of   0 Warning Message(s)
A Total of   30785 Informational Message(s)

A Total of   43872 Hours Were Processed

A Total of   1576 Calm Hours Identified

A Total of   29209 Missing Hours Identified (66.58 Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
           Data May Not Be Acceptable for Regulatory Applications.
           See Section 5.3.2 of "Meteorological Monitoring Guidance
           for Regulatory Modeling Applications" (EPA-454/R-99-005).

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

   ********   WARNING MESSAGES   ********
              *** NONE ***

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

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

```
*** AERMOD - VERSION 16216r ***   *** Phase 2 Residential Receptors                                  ***        05/24/17
*** AERMET - VERSION  14134 ***   ***                                                               ***        14:13:19
                                                                                                              PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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   133 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =     60572.0 ;  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:
       CCVR_Sub - Meteorological data includes CCVR substitutions
       TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates PERIOD Averages Only

**This Run Includes:    133 Source(s);       2 Source Group(s); and     172 Receptor(s)

              with:      0 POINT(s), including
                         0 POINTCAP(s) and      0 POINTHOR(s)
               and:    132 VOLUME source(s)
               and:      1 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.
```

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

```
**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) =     2.10 ;  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:   Forum_P2_Offstie.err
**File for Summary of Results:   Forum_P2_Offstie.sum
```

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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	0.75758E-02	581189.9	4132154.3	129.6	4.15	2.84	0.90	YES	SHRDOW
L0000002	0	0.75758E-02	581189.2	4132160.4	129.8	4.15	2.84	0.90	YES	SHRDOW
L0000003	0	0.75758E-02	581188.6	4132166.4	130.0	4.15	2.84	0.90	YES	SHRDOW
L0000004	0	0.75758E-02	581188.0	4132172.5	130.1	4.15	2.84	0.90	YES	SHRDOW
L0000005	0	0.75758E-02	581187.4	4132178.6	130.3	4.15	2.84	0.90	YES	SHRDOW
L0000006	0	0.75758E-02	581186.8	4132184.6	130.4	4.15	2.84	0.90	YES	SHRDOW
L0000007	0	0.75758E-02	581186.2	4132190.7	130.6	4.15	2.84	0.90	YES	SHRDOW
L0000008	0	0.75758E-02	581185.6	4132196.8	130.7	4.15	2.84	0.90	YES	SHRDOW
L0000009	0	0.75758E-02	581184.9	4132202.8	130.8	4.15	2.84	0.90	YES	SHRDOW
L0000010	0	0.75758E-02	581184.3	4132208.9	130.9	4.15	2.84	0.90	YES	SHRDOW
L0000011	0	0.75758E-02	581183.7	4132215.0	131.0	4.15	2.84	0.90	YES	SHRDOW
L0000012	0	0.75758E-02	581183.1	4132221.0	131.2	4.15	2.84	0.90	YES	SHRDOW
L0000013	0	0.75758E-02	581182.5	4132227.1	131.3	4.15	2.84	0.90	YES	SHRDOW
L0000014	0	0.75758E-02	581181.9	4132233.2	131.5	4.15	2.84	0.90	YES	SHRDOW
L0000015	0	0.75758E-02	581181.2	4132239.2	131.6	4.15	2.84	0.90	YES	SHRDOW
L0000016	0	0.75758E-02	581180.6	4132245.3	131.7	4.15	2.84	0.90	YES	SHRDOW
L0000017	0	0.75758E-02	581180.0	4132251.4	131.4	4.15	2.84	0.90	YES	SHRDOW
L0000018	0	0.75758E-02	581179.4	4132257.4	131.1	4.15	2.84	0.90	YES	SHRDOW
L0000019	0	0.75758E-02	581178.8	4132263.5	130.7	4.15	2.84	0.90	YES	SHRDOW
L0000020	0	0.75758E-02	581178.2	4132269.5	130.4	4.15	2.84	0.90	YES	SHRDOW
L0000021	0	0.75758E-02	581177.5	4132275.6	130.1	4.15	2.84	0.90	YES	SHRDOW
L0000022	0	0.75758E-02	581174.6	4132281.0	129.9	4.15	2.84	0.90	YES	SHRDOW
L0000023	0	0.75758E-02	581171.7	4132286.3	129.8	4.15	2.84	0.90	YES	SHRDOW
L0000024	0	0.75758E-02	581168.8	4132291.7	129.5	4.15	2.84	0.90	YES	SHRDOW
L0000025	0	0.75758E-02	581165.9	4132297.0	129.2	4.15	2.84	0.90	YES	SHRDOW
L0000026	0	0.75758E-02	581163.0	4132302.4	128.9	4.15	2.84	0.90	YES	SHRDOW
L0000027	0	0.75758E-02	581160.1	4132307.8	128.5	4.15	2.84	0.90	YES	SHRDOW
L0000028	0	0.75758E-02	581157.2	4132313.1	128.2	4.15	2.84	0.90	YES	SHRDOW
L0000029	0	0.75758E-02	581154.3	4132318.5	128.1	4.15	2.84	0.90	YES	SHRDOW
L0000030	0	0.75758E-02	581151.3	4132323.8	127.9	4.15	2.84	0.90	YES	SHRDOW
L0000031	0	0.75758E-02	581150.3	4132329.7	127.8	4.15	2.84	0.90	YES	SHRDOW
L0000032	0	0.75758E-02	581149.8	4132335.8	127.8	4.15	2.84	0.90	YES	SHRDOW
L0000033	0	0.75758E-02	581149.4	4132341.9	127.6	4.15	2.84	0.90	YES	SHRDOW
L0000034	0	0.75758E-02	581144.8	4132345.3	127.2	4.15	2.84	0.90	YES	SHRDOW
L0000035	0	0.75758E-02	581139.5	4132348.4	126.9	4.15	2.84	0.90	YES	SHRDOW
L0000036	0	0.75758E-02	581134.3	4132351.5	126.6	4.15	2.84	0.90	YES	SHRDOW
L0000037	0	0.75758E-02	581129.0	4132354.6	126.3	4.15	2.84	0.90	YES	SHRDOW
L0000038	0	0.75758E-02	581123.6	4132356.9	126.0	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

L0000039	0	0.75758E-02	581117.5	4132356.1	125.8	4.15	2.84	0.90	YES	SHRDOW
L0000040	0	0.75758E-02	581111.5	4132355.3	125.6	4.15	2.84	0.90	YES	SHRDOW
L0000041	0	0.75758E-02	581105.7	4132355.5	125.4	4.15	2.84	0.90	YES	SHRDOW
L0000042	0	0.75758E-02	581100.8	4132359.1	125.3	4.15	2.84	0.90	YES	SHRDOW
L0000043	0	0.75758E-02	581096.0	4132362.8	125.1	4.15	2.84	0.90	YES	SHRDOW
L0000044	0	0.75758E-02	581091.1	4132366.4	124.8	4.15	2.84	0.90	YES	SHRDOW
L0000045	0	0.75758E-02	581086.2	4132370.1	124.1	4.15	2.84	0.90	YES	SHRDOW
L0000046	0	0.75758E-02	581081.3	4132373.7	123.5	4.15	2.84	0.90	YES	SHRDOW
L0000047	0	0.75758E-02	581076.5	4132377.4	122.8	4.15	2.84	0.90	YES	SHRDOW
L0000048	0	0.75758E-02	581071.6	4132381.1	122.2	4.15	2.84	0.90	YES	SHRDOW
L0000049	0	0.75758E-02	581066.7	4132384.7	121.7	4.15	2.84	0.90	YES	SHRDOW
L0000050	0	0.75758E-02	581062.2	4132388.8	121.2	4.15	2.84	0.90	YES	SHRDOW
L0000051	0	0.75758E-02	581058.5	4132393.6	121.0	4.15	2.84	0.90	YES	SHRDOW
L0000052	0	0.75758E-02	581054.8	4132398.5	120.7	4.15	2.84	0.90	YES	SHRDOW
L0000053	0	0.75758E-02	581051.2	4132403.3	120.6	4.15	2.84	0.90	YES	SHRDOW
L0000054	0	0.75758E-02	581047.5	4132408.2	120.5	4.15	2.84	0.90	YES	SHRDOW
L0000055	0	0.75758E-02	581043.8	4132413.0	120.4	4.15	2.84	0.90	YES	SHRDOW
L0000056	0	0.75758E-02	581040.1	4132417.9	120.2	4.15	2.84	0.90	YES	SHRDOW
L0000057	0	0.75758E-02	581036.4	4132422.7	120.1	4.15	2.84	0.90	YES	SHRDOW
L0000058	0	0.75758E-02	581032.7	4132427.6	120.0	4.15	2.84	0.90	YES	SHRDOW
L0000059	0	0.75758E-02	581029.0	4132432.4	119.7	4.15	2.84	0.90	YES	SHRDOW
L0000060	0	0.75758E-02	581025.3	4132437.3	119.5	4.15	2.84	0.90	YES	SHRDOW
L0000061	0	0.75758E-02	581021.6	4132442.1	119.3	4.15	2.84	0.90	YES	SHRDOW
L0000062	0	0.75758E-02	581017.9	4132446.9	119.2	4.15	2.84	0.90	YES	SHRDOW
L0000063	0	0.75758E-02	581014.2	4132451.8	119.1	4.15	2.84	0.90	YES	SHRDOW
L0000064	0	0.75758E-02	581010.5	4132456.6	119.0	4.15	2.84	0.90	YES	SHRDOW
L0000065	0	0.75758E-02	581006.8	4132461.5	118.3	4.15	2.84	0.90	YES	SHRDOW
L0000066	0	0.75758E-02	581002.9	4132466.1	117.4	4.15	2.84	0.90	YES	SHRDOW
L0000067	0	0.75758E-02	580997.8	4132469.6	116.5	4.15	2.84	0.90	YES	SHRDOW
L0000068	0	0.75758E-02	580992.8	4132473.0	115.6	4.15	2.84	0.90	YES	SHRDOW
L0000069	0	0.75758E-02	580987.8	4132476.4	114.9	4.15	2.84	0.90	YES	SHRDOW
L0000070	0	0.75758E-02	580982.7	4132479.9	114.2	4.15	2.84	0.90	YES	SHRDOW
L0000071	0	0.75758E-02	580977.7	4132483.3	113.5	4.15	2.84	0.90	YES	SHRDOW
L0000072	0	0.75758E-02	580972.7	4132486.7	113.0	4.15	2.84	0.90	YES	SHRDOW
L0000073	0	0.75758E-02	580967.6	4132490.2	112.8	4.15	2.84	0.90	YES	SHRDOW
L0000074	0	0.75758E-02	580962.6	4132493.6	112.6	4.15	2.84	0.90	YES	SHRDOW
L0000075	0	0.75758E-02	580957.6	4132497.1	112.5	4.15	2.84	0.90	YES	SHRDOW
L0000076	0	0.75758E-02	580952.5	4132500.5	112.5	4.15	2.84	0.90	YES	SHRDOW
L0000077	0	0.75758E-02	580947.5	4132503.9	112.5	4.15	2.84	0.90	YES	SHRDOW
L0000078	0	0.75758E-02	580942.4	4132507.4	112.6	4.15	2.84	0.90	YES	SHRDOW
L0000079	0	0.75758E-02	580937.4	4132510.8	112.3	4.15	2.84	0.90	YES	SHRDOW
L0000080	0	0.75758E-02	580932.4	4132514.2	112.1	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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	0.75758E-02	580927.3	4132517.7	111.9	4.15	2.84	0.90	YES	SHRDOW
L0000082	0	0.75758E-02	580922.3	4132521.1	111.7	4.15	2.84	0.90	YES	SHRDOW
L0000083	0	0.75758E-02	580917.3	4132524.5	111.6	4.15	2.84	0.90	YES	SHRDOW
L0000084	0	0.75758E-02	580912.2	4132528.0	111.6	4.15	2.84	0.90	YES	SHRDOW
L0000085	0	0.75758E-02	580907.2	4132531.4	111.4	4.15	2.84	0.90	YES	SHRDOW
L0000086	0	0.75758E-02	580902.2	4132534.8	111.2	4.15	2.84	0.90	YES	SHRDOW
L0000087	0	0.75758E-02	580898.3	4132539.5	111.1	4.15	2.84	0.90	YES	SHRDOW
L0000088	0	0.75758E-02	580894.6	4132544.4	111.0	4.15	2.84	0.90	YES	SHRDOW
L0000089	0	0.75758E-02	580890.9	4132549.2	110.8	4.15	2.84	0.90	YES	SHRDOW
L0000090	0	0.75758E-02	580887.1	4132554.0	110.7	4.15	2.84	0.90	YES	SHRDOW
L0000091	0	0.75758E-02	580883.4	4132558.8	110.6	4.15	2.84	0.90	YES	SHRDOW
L0000092	0	0.75758E-02	580879.7	4132563.7	110.4	4.15	2.84	0.90	YES	SHRDOW
L0000093	0	0.75758E-02	580876.0	4132568.5	110.2	4.15	2.84	0.90	YES	SHRDOW
L0000094	0	0.75758E-02	580872.3	4132573.3	110.1	4.15	2.84	0.90	YES	SHRDOW
L0000095	0	0.75758E-02	580868.6	4132578.2	109.9	4.15	2.84	0.90	YES	SHRDOW
L0000096	0	0.75758E-02	580864.8	4132583.0	109.5	4.15	2.84	0.90	YES	SHRDOW
L0000097	0	0.75758E-02	580861.1	4132587.8	109.3	4.15	2.84	0.90	YES	SHRDOW
L0000098	0	0.75758E-02	580857.4	4132592.7	109.2	4.15	2.84	0.90	YES	SHRDOW
L0000099	0	0.75758E-02	580853.7	4132597.5	109.3	4.15	2.84	0.90	YES	SHRDOW
L0000100	0	0.75758E-02	580850.0	4132602.3	109.1	4.15	2.84	0.90	YES	SHRDOW
L0000101	0	0.75758E-02	580846.2	4132607.2	109.0	4.15	2.84	0.90	YES	SHRDOW
L0000102	0	0.75758E-02	580843.4	4132612.3	108.4	4.15	2.84	0.90	YES	SHRDOW
L0000103	0	0.75758E-02	580843.2	4132618.4	107.8	4.15	2.84	0.90	YES	SHRDOW
L0000104	0	0.75758E-02	580843.0	4132624.5	107.2	4.15	2.84	0.90	YES	SHRDOW
L0000105	0	0.75758E-02	580842.9	4132630.6	106.6	4.15	2.84	0.90	YES	SHRDOW
L0000106	0	0.75758E-02	580842.7	4132636.7	106.0	4.15	2.84	0.90	YES	SHRDOW
L0000107	0	0.75758E-02	580842.6	4132642.8	106.2	4.15	2.84	0.90	YES	SHRDOW
L0000108	0	0.75758E-02	580842.4	4132648.8	106.3	4.15	2.84	0.90	YES	SHRDOW
L0000109	0	0.75758E-02	580842.2	4132654.9	106.4	4.15	2.84	0.90	YES	SHRDOW
L0000110	0	0.75758E-02	580842.1	4132661.0	106.5	4.15	2.84	0.90	YES	SHRDOW
L0000111	0	0.75758E-02	580841.9	4132667.1	106.6	4.15	2.84	0.90	YES	SHRDOW
L0000112	0	0.75758E-02	580841.7	4132673.2	106.8	4.15	2.84	0.90	YES	SHRDOW
L0000113	0	0.75758E-02	580842.5	4132679.0	106.9	4.15	2.84	0.90	YES	SHRDOW
L0000114	0	0.75758E-02	580846.8	4132683.3	107.2	4.15	2.84	0.90	YES	SHRDOW
L0000115	0	0.75758E-02	580851.0	4132687.7	107.6	4.15	2.84	0.90	YES	SHRDOW
L0000116	0	0.75758E-02	580855.2	4132692.1	107.9	4.15	2.84	0.90	YES	SHRDOW
L0000117	0	0.75758E-02	580856.9	4132697.0	108.1	4.15	2.84	0.90	YES	SHRDOW
L0000118	0	0.75758E-02	580854.5	4132702.6	108.2	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

```
L0000119         0   0.75758E-02  580852.0 4132708.2   108.3     4.15     2.84     0.90     YES   SHRDOW
L0000120         0   0.75758E-02  580849.0 4132712.8   108.3     4.15     2.84     0.90     YES   SHRDOW
L0000121         0   0.75758E-02  580842.9 4132713.1   107.9     4.15     2.84     0.90     YES   SHRDOW
L0000122         0   0.75758E-02  580836.8 4132713.3   107.5     4.15     2.84     0.90     YES   SHRDOW
L0000123         0   0.75758E-02  580830.7 4132713.6   107.1     4.15     2.84     0.90     YES   SHRDOW
L0000124         0   0.75758E-02  580824.6 4132713.8   106.7     4.15     2.84     0.90     YES   SHRDOW
L0000125         0   0.75758E-02  580818.8 4132713.3   106.5     4.15     2.84     0.90     YES   SHRDOW
L0000126         0   0.75758E-02  580814.8 4132708.8   106.3     4.15     2.84     0.90     YES   SHRDOW
L0000127         0   0.75758E-02  580810.7 4132704.2   106.1     4.15     2.84     0.90     YES   SHRDOW
L0000128         0   0.75758E-02  580812.7 4132699.5   106.1     4.15     2.84     0.90     YES   SHRDOW
L0000129         0   0.75758E-02  580816.5 4132694.7   106.0     4.15     2.84     0.90     YES   SHRDOW
L0000130         0   0.75758E-02  580820.3 4132689.9   106.0     4.15     2.84     0.90     YES   SHRDOW
L0000131         0   0.75758E-02  580824.0 4132685.1   106.1     4.15     2.84     0.90     YES   SHRDOW
L0000132         0   0.75758E-02  580827.8 4132680.3   106.2     4.15     2.84     0.90     YES   SHRDOW

*** AERMOD - VERSION 16216r ***   *** Phase 2 Residential Receptors                                  ***       05/24/17
*** AERMET - VERSION  14134 ***   ***                                                               ***       14:13:19
                                                                                                              PAGE   6
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN


                                          *** AREAPOLY SOURCE DATA ***

             NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER      INIT.   URBAN  EMISSION RATE
  SOURCE      PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.     SZ     SOURCE  SCALAR VARY
    ID        CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)            (METERS)             BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

PAREA1           0   0.21016E-03  580847.2 4132751.3   108.6     4.15       8         1.93     YES   SHRDOW
```

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
HAUL	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 ,
ONSITE	PAREA1 ,

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
	60572.	PAREA1 , 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 ,

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) *

SOURCE ID = All Sources ; SOURCE TYPE = AREAPOLY and VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
							SEASON = WINTER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SUNDAY								

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ; DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

(	580975.4,	4132337.5,	119.1,	772.0,	1.5);	(	580967.1,	4132359.9,	118.2,	772.0,	1.5);
(	580961.6,	4132368.8,	117.9,	772.0,	1.5);	(	580949.4,	4132389.9,	117.2,	772.0,	1.5);
(	580934.9,	4132409.2,	116.3,	772.0,	1.5);	(	580915.0,	4132432.2,	114.9,	772.0,	1.5);
(	580896.9,	4132452.2,	113.8,	772.0,	1.5);	(	580879.8,	4132473.3,	111.8,	772.0,	1.5);
(	580869.6,	4132493.6,	110.5,	772.0,	1.5);	(	580856.1,	4132512.6,	109.3,	772.0,	1.5);
(	580814.4,	4132483.8,	114.5,	772.0,	1.5);	(	580829.2,	4132468.1,	114.3,	772.0,	1.5);
(	580844.5,	4132446.0,	113.6,	772.0,	1.5);	(	580860.1,	4132428.6,	113.7,	772.0,	1.5);
(	580874.5,	4132406.8,	114.9,	772.0,	1.5);	(	580901.2,	4132381.3,	115.6,	772.0,	1.5);
(	580873.6,	4132367.2,	115.3,	772.0,	1.5);	(	580854.6,	4132358.0,	115.7,	772.0,	1.5);
(	580843.6,	4132388.7,	115.0,	772.0,	1.5);	(	580810.5,	4132394.8,	115.6,	772.0,	1.5);
(	580807.7,	4132420.3,	115.1,	772.0,	1.5);	(	580797.6,	4132446.6,	114.4,	772.0,	1.5);
(	580775.2,	4132459.2,	113.9,	772.0,	1.5);	(	580744.2,	4132496.0,	113.2,	772.0,	1.5);
(	580764.5,	4132478.2,	113.3,	772.0,	1.5);	(	580786.2,	4132521.8,	113.4,	772.0,	1.5);
(	580796.0,	4132503.7,	113.4,	772.0,	1.5);	(	580736.2,	4132524.8,	112.1,	772.0,	1.5);
(	580714.8,	4132511.0,	112.8,	772.0,	1.5);	(	580745.4,	4132426.7,	113.4,	772.0,	1.5);
(	580727.7,	4132447.0,	112.8,	772.0,	1.5);	(	580755.9,	4132403.7,	113.6,	772.0,	1.5);
(	580776.4,	4132387.2,	114.0,	772.0,	1.5);	(	580793.9,	4132363.6,	114.0,	772.0,	1.5);
(	580804.0,	4132344.5,	114.0,	772.0,	1.5);	(	580816.0,	4132325.8,	113.9,	772.0,	1.5);
(	580841.4,	4132309.3,	114.3,	772.0,	1.5);	(	580870.2,	4132311.1,	116.1,	772.0,	1.5);
(	580895.1,	4132323.7,	116.6,	772.0,	1.5);	(	580913.8,	4132337.8,	116.0,	772.0,	1.5);
(	580922.1,	4132320.0,	117.4,	772.0,	1.5);	(	580835.9,	4132532.8,	109.5,	772.0,	1.5);
(	580763.2,	4132498.8,	113.0,	772.0,	1.5);	(	580826.4,	4132554.9,	109.3,	772.0,	1.5);
(	580813.8,	4132577.3,	110.3,	772.0,	1.5);	(	580797.0,	4132595.7,	110.8,	772.0,	1.5);
(	580784.7,	4132615.3,	110.4,	772.0,	1.5);	(	580768.4,	4132641.1,	108.9,	772.0,	1.5);
(	580747.9,	4132659.1,	107.0,	772.0,	1.5);	(	580733.2,	4132674.5,	105.8,	772.0,	1.5);
(	580713.2,	4132684.9,	105.4,	772.0,	1.5);	(	580671.9,	4132705.4,	104.7,	772.0,	1.5);
(	580655.0,	4132720.5,	103.7,	772.0,	1.5);	(	580620.7,	4132730.3,	102.0,	772.0,	1.5);
(	580636.6,	4132677.5,	105.8,	772.0,	1.5);	(	580608.7,	4132684.9,	103.7,	772.0,	1.5);
(	580659.6,	4132661.6,	108.0,	772.0,	1.5);	(	580682.6,	4132642.9,	109.2,	772.0,	1.5);
(	580698.8,	4132629.1,	109.6,	772.0,	1.5);	(	580711.7,	4132604.9,	110.7,	772.0,	1.5);
(	580695.8,	4132571.8,	111.0,	772.0,	1.5);	(	580674.3,	4132553.7,	111.7,	772.0,	1.5);
(	580664.2,	4132589.8,	110.4,	772.0,	1.5);	(	580649.2,	4132608.9,	110.0,	772.0,	1.5);
(	580629.5,	4132626.0,	108.5,	772.0,	1.5);	(	580614.5,	4132645.7,	105.9,	772.0,	1.5);
(	580634.8,	4132534.0,	110.1,	772.0,	1.5);	(	580621.6,	4132556.7,	109.5,	772.0,	1.5);
(	580607.5,	4132578.5,	108.2,	772.0,	1.5);	(	580596.1,	4132599.0,	106.4,	772.0,	1.5);
(	580644.3,	4132513.5,	110.8,	772.0,	1.5);	(	580750.7,	4132540.2,	112.6,	772.0,	1.5);
(	580768.1,	4132552.1,	112.4,	772.0,	1.5);	(	580570.1,	4132626.0,	103.7,	772.0,	1.5);
(	580546.8,	4132665.9,	101.6,	772.0,	1.5);	(	580540.6,	4132634.3,	101.1,	772.0,	1.5);
(	580556.9,	4132695.0,	102.1,	772.0,	1.5);	(	580562.7,	4132724.8,	103.3,	772.0,	1.5);
(	580567.9,	4132742.9,	103.0,	772.0,	1.5);	(	580589.1,	4132765.8,	100.3,	772.0,	1.5);
(	580604.7,	4132786.1,	97.8,	772.0,	1.5);	(	580639.7,	4132745.9,	102.2,	772.0,	1.5);
(	580788.4,	4132302.8,	111.5,	772.0,	1.5);	(	580695.8,	4132465.2,	112.0,	772.0,	1.5);

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

```
( 580672.3, 4132479.1,     111.7,     772.0,       1.5);        ( 580657.1, 4132499.1,     110.8,     772.0,       1.5);
( 580975.4, 4132337.5,     119.1,     772.0,       6.1);        ( 580967.1, 4132359.9,     118.2,     772.0,       6.1);
( 580961.6, 4132368.8,     117.9,     772.0,       6.1);        ( 580949.4, 4132389.9,     117.2,     772.0,       6.1);
( 580934.9, 4132409.2,     116.3,     772.0,       6.1);        ( 580915.0, 4132432.2,     114.9,     772.0,       6.1);
( 580896.9, 4132452.2,     113.8,     772.0,       6.1);        ( 580879.8, 4132473.3,     111.8,     772.0,       6.1);
( 580869.6, 4132493.6,     110.5,     772.0,       6.1);        ( 580856.1, 4132512.6,     109.3,     772.0,       6.1);
( 580814.4, 4132483.8,     114.5,     772.0,       6.1);        ( 580829.2, 4132468.1,     114.3,     772.0,       6.1);
( 580844.5, 4132446.0,     113.6,     772.0,       6.1);        ( 580860.1, 4132428.6,     113.7,     772.0,       6.1);
( 580874.5, 4132406.8,     114.9,     772.0,       6.1);        ( 580901.2, 4132381.3,     115.6,     772.0,       6.1);
( 580873.6, 4132367.2,     115.3,     772.0,       6.1);        ( 580854.6, 4132358.0,     115.7,     772.0,       6.1);
( 580843.6, 4132388.7,     115.0,     772.0,       6.1);        ( 580810.5, 4132394.8,     115.6,     772.0,       6.1);
( 580807.7, 4132420.3,     115.1,     772.0,       6.1);        ( 580797.6, 4132446.6,     114.4,     772.0,       6.1);
( 580775.2, 4132459.2,     113.9,     772.0,       6.1);        ( 580744.2, 4132496.0,     113.2,     772.0,       6.1);
( 580764.5, 4132478.2,     113.3,     772.0,       6.1);        ( 580786.2, 4132521.8,     113.4,     772.0,       6.1);
( 580796.0, 4132503.7,     113.4,     772.0,       6.1);        ( 580736.2, 4132524.8,     112.1,     772.0,       6.1);
( 580714.8, 4132511.0,     112.8,     772.0,       6.1);        ( 580745.4, 4132426.7,     113.4,     772.0,       6.1);
( 580727.7, 4132447.0,     112.8,     772.0,       6.1);        ( 580755.9, 4132403.7,     113.6,     772.0,       6.1);
( 580776.4, 4132387.2,     114.0,     772.0,       6.1);        ( 580793.9, 4132363.6,     114.0,     772.0,       6.1);
( 580804.0, 4132344.5,     114.0,     772.0,       6.1);        ( 580816.0, 4132325.8,     113.9,     772.0,       6.1);
( 580841.4, 4132309.3,     114.3,     772.0,       6.1);        ( 580870.2, 4132311.1,     116.1,     772.0,       6.1);
( 580895.1, 4132323.7,     116.6,     772.0,       6.1);        ( 580913.8, 4132337.8,     116.0,     772.0,       6.1);
( 580922.1, 4132320.0,     117.4,     772.0,       6.1);        ( 580835.9, 4132532.8,     109.5,     772.0,       6.1);
( 580763.2, 4132498.8,     113.0,     772.0,       6.1);        ( 580826.4, 4132554.9,     109.3,     772.0,       6.1);
( 580813.8, 4132577.3,     110.3,     772.0,       6.1);        ( 580797.0, 4132595.7,     110.8,     772.0,       6.1);
( 580784.7, 4132615.3,     110.4,     772.0,       6.1);        ( 580768.4, 4132641.1,     108.9,     772.0,       6.1);
( 580747.9, 4132659.1,     107.0,     772.0,       6.1);        ( 580733.2, 4132674.5,     105.8,     772.0,       6.1);
( 580713.2, 4132684.9,     105.4,     772.0,       6.1);        ( 580671.9, 4132705.4,     104.7,     772.0,       6.1);
( 580655.0, 4132720.5,     103.7,     772.0,       6.1);        ( 580620.7, 4132730.3,     102.0,     772.0,       6.1);
( 580636.6, 4132677.5,     105.8,     772.0,       6.1);        ( 580608.7, 4132684.9,     103.7,     772.0,       6.1);
( 580659.6, 4132661.6,     108.0,     772.0,       6.1);        ( 580682.6, 4132642.9,     109.2,     772.0,       6.1);
( 580698.8, 4132629.1,     109.6,     772.0,       6.1);        ( 580711.7, 4132604.9,     110.7,     772.0,       6.1);
( 580695.8, 4132571.8,     111.0,     772.0,       6.1);        ( 580674.3, 4132553.7,     111.7,     772.0,       6.1);
( 580664.2, 4132589.8,     110.4,     772.0,       6.1);        ( 580649.2, 4132608.9,     110.0,     772.0,       6.1);
( 580629.5, 4132626.0,     108.5,     772.0,       6.1);        ( 580614.5, 4132645.7,     105.9,     772.0,       6.1);
( 580634.8, 4132534.0,     110.1,     772.0,       6.1);        ( 580621.6, 4132556.7,     109.5,     772.0,       6.1);
( 580607.5, 4132578.5,     108.2,     772.0,       6.1);        ( 580596.1, 4132599.0,     106.4,     772.0,       6.1);
( 580644.3, 4132513.5,     110.8,     772.0,       6.1);        ( 580750.7, 4132540.2,     112.6,     772.0,       6.1);
( 580768.1, 4132552.1,     112.4,     772.0,       6.1);        ( 580570.1, 4132626.0,     103.7,     772.0,       6.1);
( 580546.8, 4132665.9,     101.6,     772.0,       6.1);        ( 580540.6, 4132634.3,     101.1,     772.0,       6.1);
( 580556.9, 4132695.0,     102.1,     772.0,       6.1);        ( 580562.7, 4132724.8,     103.3,     772.0,       6.1);
( 580567.9, 4132742.9,     103.0,     772.0,       6.1);        ( 580589.1, 4132765.8,     100.3,     772.0,       6.1);
( 580604.7, 4132786.1,      97.8,     772.0,       6.1);        ( 580639.7, 4132745.9,     102.2,     772.0,       6.1);
( 580788.4, 4132302.8,     111.5,     772.0,       6.1);        ( 580695.8, 4132465.2,     112.0,     772.0,       6.1);
( 580672.3, 4132479.1,     111.7,     772.0,       6.1);        ( 580657.1, 4132499.1,     110.8,     772.0,       6.1);
```

```
*** AERMOD - VERSION 16216r ***   *** Phase 2 Residential Receptors                                                ***        05/24/17
*** AERMET - VERSION  14134 ***   ***                                                                              ***        14:13:19
                                                                                                                              PAGE 144
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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,
```

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

Surface file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion Met Version: 14134
Profile file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion
Surface format: FREE
Profile format: FREE
Surface station no.: 23289 Upper air station no.: 23230
Name: PALO_ALTO_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	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	07	-7.2	0.126	-9.000	-9.000	-999.	107.	25.2	0.04	0.36	1.00	2.36	999.	10.0	282.1	2.0
09	01	01	1	08	-7.2	0.125	-9.000	-9.000	-999.	106.	25.0	0.04	0.36	0.73	2.36	999.	10.0	281.1	2.0
09	01	01	1	09	-4.5	0.212	-9.000	-9.000	-999.	235.	195.5	0.01	0.36	0.37	3.86	327.	10.0	282.1	2.0
09	01	01	1	10	4.5	0.252	0.215	0.015	80.	304.	-322.7	0.01	0.36	0.25	4.36	341.	10.0	282.1	2.0
09	01	01	1	11	9.5	0.218	0.333	0.015	140.	245.	-99.2	0.04	0.36	0.20	2.86	999.	10.0	282.1	2.0
09	01	01	1	12	12.3	0.232	0.402	0.015	192.	268.	-91.9	0.00	0.36	0.19	4.36	6.	10.0	282.1	2.0
09	01	01	1	13	12.8	0.203	0.434	0.015	232.	220.	-59.9	0.01	0.36	0.18	3.36	333.	10.0	282.1	2.0
09	01	01	1	14	52.4	0.238	0.799	0.016	354.	278.	-23.3	0.04	0.36	0.19	2.86	999.	10.0	283.1	2.0
09	01	01	1	15	37.3	0.200	0.756	0.017	421.	214.	-19.4	0.04	0.36	0.22	2.36	999.	10.0	285.1	2.0
09	01	01	1	16	14.6	0.222	0.561	0.017	438.	251.	-67.8	0.04	0.36	0.30	2.86	999.	10.0	284.1	2.0
09	01	01	1	17	-11.9	0.162	-9.000	-9.000	-999.	157.	32.4	0.04	0.36	0.54	2.86	999.	10.0	283.1	2.0
09	01	01	1	18	-13.2	0.132	-9.000	-9.000	-999.	115.	15.9	0.01	0.36	1.00	3.36	327.	10.0	281.1	2.0
09	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0

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	-999.0	99.0	-99.00	-99.00

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

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

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

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
HAUL	1ST HIGHEST VALUE IS	12.05966 AT (580856.14, 4132512.58, 109.33, 772.00, 1.50)	DC	
	2ND HIGHEST VALUE IS	11.83377 AT (580869.63, 4132493.57, 110.45, 772.00, 1.50)	DC	
	3RD HIGHEST VALUE IS	10.53997 AT (580879.75, 4132473.33, 111.83, 772.00, 1.50)	DC	
	4TH HIGHEST VALUE IS	10.16780 AT (580835.90, 4132532.82, 109.49, 772.00, 1.50)	DC	
	5TH HIGHEST VALUE IS	9.88729 AT (580826.39, 4132554.89, 109.35, 772.00, 1.50)	DC	
	6TH HIGHEST VALUE IS	9.60857 AT (580896.92, 4132452.17, 113.78, 772.00, 1.50)	DC	
	7TH HIGHEST VALUE IS	8.96702 AT (580915.01, 4132432.24, 114.88, 772.00, 1.50)	DC	
	8TH HIGHEST VALUE IS	8.60412 AT (580856.14, 4132512.58, 109.33, 772.00, 6.10)	DC	
	9TH HIGHEST VALUE IS	8.37990 AT (580869.63, 4132493.57, 110.45, 772.00, 6.10)	DC	
	10TH HIGHEST VALUE IS	8.12673 AT (580934.94, 4132409.24, 116.31, 772.00, 1.50)	DC	
ONSITE	1ST HIGHEST VALUE IS	11.31184 AT (580856.14, 4132512.58, 109.33, 772.00, 1.50)	DC	
	2ND HIGHEST VALUE IS	10.61421 AT (580826.39, 4132554.89, 109.35, 772.00, 1.50)	DC	
	3RD HIGHEST VALUE IS	10.50779 AT (580835.90, 4132532.82, 109.49, 772.00, 1.50)	DC	
	4TH HIGHEST VALUE IS	10.34755 AT (580869.63, 4132493.57, 110.45, 772.00, 1.50)	DC	
	5TH HIGHEST VALUE IS	9.77912 AT (580856.14, 4132512.58, 109.33, 772.00, 6.10)	DC	
	6TH HIGHEST VALUE IS	9.08413 AT (580869.63, 4132493.57, 110.45, 772.00, 6.10)	DC	
	7TH HIGHEST VALUE IS	9.02465 AT (580813.82, 4132577.28, 110.29, 772.00, 1.50)	DC	
	8TH HIGHEST VALUE IS	8.91297 AT (580879.75, 4132473.33, 111.83, 772.00, 1.50)	DC	
	9TH HIGHEST VALUE IS	8.87095 AT (580835.90, 4132532.82, 109.49, 772.00, 6.10)	DC	
	10TH HIGHEST VALUE IS	8.70866 AT (580826.39, 4132554.89, 109.35, 772.00, 6.10)	DC	

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

Model Output - Phase 2 - Off-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

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

A Total of   0 Fatal Error Message(s)
A Total of   0 Warning Message(s)
A Total of   30785 Informational Message(s)

A Total of   43872 Hours Were Processed

A Total of   1576 Calm Hours Identified

A Total of   29209 Missing Hours Identified (66.58 Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
           Data May Not Be Acceptable for Regulatory Applications.
           See Section 5.3.2 of "Meteorological Monitoring Guidance
           for Regulatory Modeling Applications" (EPA-454/R-99-005).

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

   ********   WARNING MESSAGES   ********
              *** NONE ***

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

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

```
*** AERMOD - VERSION 16216r ***   *** Onsite Receptors Phase 2 Forum                                  ***        05/25/17
*** AERMET - VERSION  14134 ***   ***                                                                ***        16:36:09
                                                                                                               PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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   132 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =     60572.0 ;  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:
       CCVR_Sub - Meteorological data includes CCVR substitutions
       TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates PERIOD Averages Only

**This Run Includes:    132 Source(s);       2 Source Group(s); and     174 Receptor(s)

              with:      0 POINT(s), including
                         0 POINTCAP(s) and      0 POINTHOR(s)
               and:    131 VOLUME source(s)
               and:      1 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.
```

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

```
**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) =     2.10 ;  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:   Forum_P2_Onsite.err
**File for Summary of Results:   Forum_P2_Onsite.sum
```

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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	0.76336E-02	581188.8	4132151.2	129.4	4.15	2.84	0.90	YES	SHRDOW
L0000002	0	0.76336E-02	581188.1	4132157.2	129.5	4.15	2.84	0.90	YES	SHRDOW
L0000003	0	0.76336E-02	581187.3	4132163.3	129.7	4.15	2.84	0.90	YES	SHRDOW
L0000004	0	0.76336E-02	581186.5	4132169.3	129.8	4.15	2.84	0.90	YES	SHRDOW
L0000005	0	0.76336E-02	581185.8	4132175.4	130.0	4.15	2.84	0.90	YES	SHRDOW
L0000006	0	0.76336E-02	581185.0	4132181.4	130.1	4.15	2.84	0.90	YES	SHRDOW
L0000007	0	0.76336E-02	581184.2	4132187.5	130.2	4.15	2.84	0.90	YES	SHRDOW
L0000008	0	0.76336E-02	581183.5	4132193.5	130.3	4.15	2.84	0.90	YES	SHRDOW
L0000009	0	0.76336E-02	581182.7	4132199.6	130.4	4.15	2.84	0.90	YES	SHRDOW
L0000010	0	0.76336E-02	581182.0	4132205.6	130.6	4.15	2.84	0.90	YES	SHRDOW
L0000011	0	0.76336E-02	581181.2	4132211.7	130.7	4.15	2.84	0.90	YES	SHRDOW
L0000012	0	0.76336E-02	581180.4	4132217.7	130.9	4.15	2.84	0.90	YES	SHRDOW
L0000013	0	0.76336E-02	581179.7	4132223.8	131.0	4.15	2.84	0.90	YES	SHRDOW
L0000014	0	0.76336E-02	581178.9	4132229.8	131.1	4.15	2.84	0.90	YES	SHRDOW
L0000015	0	0.76336E-02	581178.2	4132235.9	131.2	4.15	2.84	0.90	YES	SHRDOW
L0000016	0	0.76336E-02	581177.4	4132241.9	131.3	4.15	2.84	0.90	YES	SHRDOW
L0000017	0	0.76336E-02	581176.6	4132248.0	131.3	4.15	2.84	0.90	YES	SHRDOW
L0000018	0	0.76336E-02	581175.9	4132254.0	131.0	4.15	2.84	0.90	YES	SHRDOW
L0000019	0	0.76336E-02	581175.1	4132260.1	130.7	4.15	2.84	0.90	YES	SHRDOW
L0000020	0	0.76336E-02	581174.4	4132266.1	130.4	4.15	2.84	0.90	YES	SHRDOW
L0000021	0	0.76336E-02	581173.6	4132272.2	130.2	4.15	2.84	0.90	YES	SHRDOW
L0000022	0	0.76336E-02	581172.8	4132278.2	130.0	4.15	2.84	0.90	YES	SHRDOW
L0000023	0	0.76336E-02	581172.0	4132284.2	129.8	4.15	2.84	0.90	YES	SHRDOW
L0000024	0	0.76336E-02	581169.5	4132289.8	129.6	4.15	2.84	0.90	YES	SHRDOW
L0000025	0	0.76336E-02	581167.1	4132295.4	129.3	4.15	2.84	0.90	YES	SHRDOW
L0000026	0	0.76336E-02	581164.6	4132301.0	129.0	4.15	2.84	0.90	YES	SHRDOW
L0000027	0	0.76336E-02	581162.1	4132306.5	128.6	4.15	2.84	0.90	YES	SHRDOW
L0000028	0	0.76336E-02	581159.7	4132312.1	128.4	4.15	2.84	0.90	YES	SHRDOW
L0000029	0	0.76336E-02	581157.2	4132317.7	128.2	4.15	2.84	0.90	YES	SHRDOW
L0000030	0	0.76336E-02	581154.8	4132323.3	128.1	4.15	2.84	0.90	YES	SHRDOW
L0000031	0	0.76336E-02	581152.3	4132328.8	128.0	4.15	2.84	0.90	YES	SHRDOW
L0000032	0	0.76336E-02	581149.8	4132334.4	127.8	4.15	2.84	0.90	YES	SHRDOW
L0000033	0	0.76336E-02	581147.0	4132339.7	127.5	4.15	2.84	0.90	YES	SHRDOW
L0000034	0	0.76336E-02	581141.8	4132342.9	127.1	4.15	2.84	0.90	YES	SHRDOW
L0000035	0	0.76336E-02	581136.6	4132346.1	126.8	4.15	2.84	0.90	YES	SHRDOW
L0000036	0	0.76336E-02	581131.5	4132349.3	126.5	4.15	2.84	0.90	YES	SHRDOW
L0000037	0	0.76336E-02	581126.3	4132352.5	126.2	4.15	2.84	0.90	YES	SHRDOW
L0000038	0	0.76336E-02	581120.6	4132354.0	125.9	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

L0000039	0	0.76336E-02	581114.5	4132354.2	125.7	4.15	2.84	0.90	YES	SHRDOW
L0000040	0	0.76336E-02	581108.4	4132354.3	125.5	4.15	2.84	0.90	YES	SHRDOW
L0000041	0	0.76336E-02	581102.3	4132354.5	125.3	4.15	2.84	0.90	YES	SHRDOW
L0000042	0	0.76336E-02	581096.5	4132355.4	125.1	4.15	2.84	0.90	YES	SHRDOW
L0000043	0	0.76336E-02	581092.0	4132359.6	124.9	4.15	2.84	0.90	YES	SHRDOW
L0000044	0	0.76336E-02	581087.6	4132363.7	124.5	4.15	2.84	0.90	YES	SHRDOW
L0000045	0	0.76336E-02	581083.1	4132367.9	124.0	4.15	2.84	0.90	YES	SHRDOW
L0000046	0	0.76336E-02	581078.6	4132372.0	123.3	4.15	2.84	0.90	YES	SHRDOW
L0000047	0	0.76336E-02	581074.2	4132376.2	122.7	4.15	2.84	0.90	YES	SHRDOW
L0000048	0	0.76336E-02	581069.7	4132380.3	122.1	4.15	2.84	0.90	YES	SHRDOW
L0000049	0	0.76336E-02	581065.3	4132384.5	121.6	4.15	2.84	0.90	YES	SHRDOW
L0000050	0	0.76336E-02	581061.1	4132388.9	121.2	4.15	2.84	0.90	YES	SHRDOW
L0000051	0	0.76336E-02	581057.5	4132393.8	120.9	4.15	2.84	0.90	YES	SHRDOW
L0000052	0	0.76336E-02	581053.8	4132398.7	120.7	4.15	2.84	0.90	YES	SHRDOW
L0000053	0	0.76336E-02	581050.2	4132403.6	120.6	4.15	2.84	0.90	YES	SHRDOW
L0000054	0	0.76336E-02	581046.6	4132408.5	120.5	4.15	2.84	0.90	YES	SHRDOW
L0000055	0	0.76336E-02	581043.0	4132413.4	120.3	4.15	2.84	0.90	YES	SHRDOW
L0000056	0	0.76336E-02	581039.3	4132418.3	120.2	4.15	2.84	0.90	YES	SHRDOW
L0000057	0	0.76336E-02	581035.7	4132423.2	120.1	4.15	2.84	0.90	YES	SHRDOW
L0000058	0	0.76336E-02	581032.1	4132428.1	119.9	4.15	2.84	0.90	YES	SHRDOW
L0000059	0	0.76336E-02	581028.5	4132433.0	119.7	4.15	2.84	0.90	YES	SHRDOW
L0000060	0	0.76336E-02	581024.8	4132437.9	119.5	4.15	2.84	0.90	YES	SHRDOW
L0000061	0	0.76336E-02	581021.2	4132442.8	119.3	4.15	2.84	0.90	YES	SHRDOW
L0000062	0	0.76336E-02	581017.6	4132447.7	119.1	4.15	2.84	0.90	YES	SHRDOW
L0000063	0	0.76336E-02	581014.0	4132452.6	119.0	4.15	2.84	0.90	YES	SHRDOW
L0000064	0	0.76336E-02	581010.3	4132457.5	118.9	4.15	2.84	0.90	YES	SHRDOW
L0000065	0	0.76336E-02	581006.7	4132462.4	118.2	4.15	2.84	0.90	YES	SHRDOW
L0000066	0	0.76336E-02	581002.5	4132466.8	117.3	4.15	2.84	0.90	YES	SHRDOW
L0000067	0	0.76336E-02	580997.6	4132470.3	116.4	4.15	2.84	0.90	YES	SHRDOW
L0000068	0	0.76336E-02	580992.6	4132473.8	115.5	4.15	2.84	0.90	YES	SHRDOW
L0000069	0	0.76336E-02	580987.6	4132477.4	114.7	4.15	2.84	0.90	YES	SHRDOW
L0000070	0	0.76336E-02	580982.7	4132480.9	114.0	4.15	2.84	0.90	YES	SHRDOW
L0000071	0	0.76336E-02	580977.7	4132484.5	113.4	4.15	2.84	0.90	YES	SHRDOW
L0000072	0	0.76336E-02	580972.8	4132488.0	112.8	4.15	2.84	0.90	YES	SHRDOW
L0000073	0	0.76336E-02	580967.8	4132491.6	112.6	4.15	2.84	0.90	YES	SHRDOW
L0000074	0	0.76336E-02	580962.9	4132495.1	112.4	4.15	2.84	0.90	YES	SHRDOW
L0000075	0	0.76336E-02	580957.9	4132498.7	112.3	4.15	2.84	0.90	YES	SHRDOW
L0000076	0	0.76336E-02	580952.9	4132502.2	112.3	4.15	2.84	0.90	YES	SHRDOW
L0000077	0	0.76336E-02	580948.0	4132505.8	112.3	4.15	2.84	0.90	YES	SHRDOW
L0000078	0	0.76336E-02	580943.0	4132509.3	112.5	4.15	2.84	0.90	YES	SHRDOW
L0000079	0	0.76336E-02	580938.1	4132512.9	112.2	4.15	2.84	0.90	YES	SHRDOW
L0000080	0	0.76336E-02	580933.1	4132516.4	112.0	4.15	2.84	0.90	YES	SHRDOW

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL 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	0.76336E-02	580928.1	4132519.9	111.7	4.15	2.84	0.90	YES	SHRDOW
L0000082	0	0.76336E-02	580923.2	4132523.5	111.5	4.15	2.84	0.90	YES	SHRDOW
L0000083	0	0.76336E-02	580918.2	4132527.0	111.5	4.15	2.84	0.90	YES	SHRDOW
L0000084	0	0.76336E-02	580913.3	4132530.6	111.5	4.15	2.84	0.90	YES	SHRDOW
L0000085	0	0.76336E-02	580908.3	4132534.1	111.3	4.15	2.84	0.90	YES	SHRDOW
L0000086	0	0.76336E-02	580903.4	4132537.7	111.2	4.15	2.84	0.90	YES	SHRDOW
L0000087	0	0.76336E-02	580898.4	4132541.2	111.1	4.15	2.84	0.90	YES	SHRDOW
L0000088	0	0.76336E-02	580893.4	4132544.8	111.0	4.15	2.84	0.90	YES	SHRDOW
L0000089	0	0.76336E-02	580888.5	4132548.3	110.9	4.15	2.84	0.90	YES	SHRDOW
L0000090	0	0.76336E-02	580883.5	4132551.9	110.8	4.15	2.84	0.90	YES	SHRDOW
L0000091	0	0.76336E-02	580879.7	4132556.5	110.6	4.15	2.84	0.90	YES	SHRDOW
L0000092	0	0.76336E-02	580876.5	4132561.7	110.4	4.15	2.84	0.90	YES	SHRDOW
L0000093	0	0.76336E-02	580873.2	4132566.8	110.2	4.15	2.84	0.90	YES	SHRDOW
L0000094	0	0.76336E-02	580870.0	4132572.0	110.1	4.15	2.84	0.90	YES	SHRDOW
L0000095	0	0.76336E-02	580866.7	4132577.1	110.0	4.15	2.84	0.90	YES	SHRDOW
L0000096	0	0.76336E-02	580863.5	4132582.3	109.6	4.15	2.84	0.90	YES	SHRDOW
L0000097	0	0.76336E-02	580860.2	4132587.5	109.4	4.15	2.84	0.90	YES	SHRDOW
L0000098	0	0.76336E-02	580857.0	4132592.6	109.3	4.15	2.84	0.90	YES	SHRDOW
L0000099	0	0.76336E-02	580853.8	4132597.8	109.2	4.15	2.84	0.90	YES	SHRDOW
L0000100	0	0.76336E-02	580850.5	4132602.9	109.1	4.15	2.84	0.90	YES	SHRDOW
L0000101	0	0.76336E-02	580847.3	4132608.1	108.8	4.15	2.84	0.90	YES	SHRDOW
L0000102	0	0.76336E-02	580844.0	4132613.3	108.3	4.15	2.84	0.90	YES	SHRDOW
L0000103	0	0.76336E-02	580842.0	4132618.8	107.8	4.15	2.84	0.90	YES	SHRDOW
L0000104	0	0.76336E-02	580842.0	4132624.9	107.2	4.15	2.84	0.90	YES	SHRDOW
L0000105	0	0.76336E-02	580842.0	4132631.0	106.6	4.15	2.84	0.90	YES	SHRDOW
L0000106	0	0.76336E-02	580842.0	4132637.1	106.1	4.15	2.84	0.90	YES	SHRDOW
L0000107	0	0.76336E-02	580842.0	4132643.2	106.2	4.15	2.84	0.90	YES	SHRDOW
L0000108	0	0.76336E-02	580842.0	4132649.3	106.3	4.15	2.84	0.90	YES	SHRDOW
L0000109	0	0.76336E-02	580842.0	4132655.4	106.4	4.15	2.84	0.90	YES	SHRDOW
L0000110	0	0.76336E-02	580842.0	4132661.5	106.5	4.15	2.84	0.90	YES	SHRDOW
L0000111	0	0.76336E-02	580842.0	4132667.6	106.6	4.15	2.84	0.90	YES	SHRDOW
L0000112	0	0.76336E-02	580842.0	4132673.7	106.8	4.15	2.84	0.90	YES	SHRDOW
L0000113	0	0.76336E-02	580843.4	4132679.3	107.0	4.15	2.84	0.90	YES	SHRDOW
L0000114	0	0.76336E-02	580846.9	4132684.3	107.3	4.15	2.84	0.90	YES	SHRDOW
L0000115	0	0.76336E-02	580850.5	4132689.2	107.6	4.15	2.84	0.90	YES	SHRDOW
L0000116	0	0.76336E-02	580854.1	4132694.2	108.0	4.15	2.84	0.90	YES	SHRDOW
L0000117	0	0.76336E-02	580856.1	4132699.3	108.2	4.15	2.84	0.90	YES	SHRDOW
L0000118	0	0.76336E-02	580853.9	4132705.0	108.3	4.15	2.84	0.90	YES	SHRDOW

L0000119	0	0.76336E-02	580851.6	4132710.7	108.4	4.15	2.84	0.90	YES	SHRDOW
L0000120	0	0.76336E-02	580846.7	4132712.6	108.1	4.15	2.84	0.90	YES	SHRDOW
L0000121	0	0.76336E-02	580840.7	4132712.9	107.7	4.15	2.84	0.90	YES	SHRDOW
L0000122	0	0.76336E-02	580834.6	4132713.2	107.3	4.15	2.84	0.90	YES	SHRDOW
L0000123	0	0.76336E-02	580828.5	4132713.6	106.9	4.15	2.84	0.90	YES	SHRDOW
L0000124	0	0.76336E-02	580822.4	4132713.9	106.6	4.15	2.84	0.90	YES	SHRDOW
L0000125	0	0.76336E-02	580818.1	4132711.3	106.4	4.15	2.84	0.90	YES	SHRDOW
L0000126	0	0.76336E-02	580815.6	4132705.7	106.2	4.15	2.84	0.90	YES	SHRDOW
L0000127	0	0.76336E-02	580814.2	4132700.3	106.1	4.15	2.84	0.90	YES	SHRDOW
L0000128	0	0.76336E-02	580817.9	4132695.4	106.0	4.15	2.84	0.90	YES	SHRDOW
L0000129	0	0.76336E-02	580821.6	4132690.6	106.0	4.15	2.84	0.90	YES	SHRDOW
L0000130	0	0.76336E-02	580825.3	4132685.8	106.1	4.15	2.84	0.90	YES	SHRDOW
L0000131	0	0.76336E-02	580829.0	4132680.9	106.3	4.15	2.84	0.90	YES	SHRDOW

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.24129E-03	580849.4	4132750.8	108.8	4.15	8	1.93	YES	SHRDOW

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
OFFSITE	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 ,
ONSITE	PAREA1 ,

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
	60572.	PAREA1 , 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 ,

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) *

SOURCE ID = All Sources ; SOURCE TYPE = AREAPOLY and VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
							SEASON = WINTER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = WEEKDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = FALL ; DAY OF WEEK = SATURDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = WINTER; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SPRING; DAY OF WEEK = SUNDAY								
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
							SEASON = SUMMER; DAY OF WEEK = SUNDAY								

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ; DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

(580913.0,	4132644.9,	109.5,	772.0,	1.5);	(580929.2,	4132624.1,	110.3,	772.0,	1.5);
(580933.8,	4132629.6,	111.3,	772.0,	1.5);	(580945.8,	4132618.3,	112.1,	772.0,	1.5);
(580981.5,	4132586.1,	114.3,	772.0,	1.5);	(581018.2,	4132600.8,	121.1,	772.0,	1.5);
(581015.5,	4132619.2,	121.9,	772.0,	1.5);	(580978.8,	4132605.1,	115.6,	772.0,	1.5);
(580971.1,	4132637.2,	116.8,	772.0,	1.5);	(580962.9,	4132644.6,	116.2,	772.0,	1.5);
(580947.9,	4132654.9,	114.9,	772.0,	1.5);	(580954.6,	4132661.1,	116.2,	772.0,	1.5);
(580938.4,	4132663.2,	114.2,	772.0,	1.5);	(580938.1,	4132684.3,	115.5,	772.0,	1.5);
(581011.5,	4132649.4,	123.4,	772.0,	1.5);	(580983.7,	4132671.8,	120.8,	772.0,	1.5);
(580999.6,	4132658.6,	122.0,	772.0,	1.5);	(580981.8,	4132691.9,	122.1,	772.0,	1.5);
(580968.7,	4132720.1,	121.2,	772.0,	1.5);	(580952.5,	4132750.7,	120.9,	772.0,	1.5);
(580940.2,	4132759.8,	119.8,	772.0,	1.5);	(580871.4,	4132622.2,	106.4,	772.0,	1.5);
(580888.3,	4132614.3,	106.3,	772.0,	1.5);	(580895.3,	4132622.2,	106.8,	772.0,	1.5);
(580900.8,	4132615.5,	106.9,	772.0,	1.5);	(580900.8,	4132595.9,	107.2,	772.0,	1.5);
(580912.4,	4132583.7,	107.0,	772.0,	1.5);	(580920.4,	4132590.4,	107.6,	772.0,	1.5);
(580925.0,	4132577.9,	107.5,	772.0,	1.5);	(580926.5,	4132553.1,	109.2,	772.0,	1.5);
(580928.3,	4132542.4,	109.8,	772.0,	1.5);	(580974.2,	4132542.4,	109.2,	772.0,	1.5);
(580973.9,	4132529.6,	109.1,	772.0,	1.5);	(580980.0,	4132512.4,	110.0,	772.0,	1.5);
(580989.2,	4132504.8,	111.5,	772.0,	1.5);	(581051.6,	4132520.7,	121.1,	772.0,	1.5);
(581101.4,	4132550.7,	131.7,	772.0,	1.5);	(581092.2,	4132557.4,	130.9,	772.0,	1.5);
(581089.2,	4132567.8,	131.5,	772.0,	1.5);	(581080.0,	4132580.9,	131.2,	772.0,	1.5);
(581073.0,	4132590.4,	130.7,	772.0,	1.5);	(581068.1,	4132603.3,	130.8,	772.0,	1.5);
(581062.6,	4132618.6,	130.3,	772.0,	1.5);	(581062.0,	4132631.1,	130.6,	772.0,	1.5);
(581054.0,	4132625.6,	129.0,	772.0,	1.5);	(581046.1,	4132664.1,	130.1,	772.0,	1.5);
(581047.0,	4132653.1,	129.5,	772.0,	1.5);	(581059.5,	4132651.9,	131.0,	772.0,	1.5);
(581057.1,	4132662.6,	131.2,	772.0,	1.5);	(581096.2,	4132504.8,	129.2,	772.0,	1.5);
(581085.5,	4132392.9,	122.7,	772.0,	1.5);	(581090.4,	4132387.1,	123.4,	772.0,	1.5);
(581136.0,	4132397.8,	127.8,	772.0,	1.5);	(581123.7,	4132414.6,	129.0,	772.0,	1.5);
(581128.6,	4132403.9,	128.8,	772.0,	1.5);	(581115.2,	4132432.3,	128.4,	772.0,	1.5);
(581107.8,	4132438.8,	127.8,	772.0,	1.5);	(581103.2,	4132447.6,	127.5,	772.0,	1.5);
(581068.7,	4132420.1,	121.7,	772.0,	1.5);	(581061.3,	4132431.1,	121.1,	772.0,	1.5);
(581056.4,	4132440.9,	121.0,	772.0,	1.5);	(581052.8,	4132456.8,	121.0,	772.0,	1.5);
(581049.1,	4132469.0,	120.6,	772.0,	1.5);	(581014.6,	4132488.3,	115.8,	772.0,	1.5);
(581002.9,	4132491.3,	113.5,	772.0,	1.5);	(581043.3,	4132462.0,	120.0,	772.0,	1.5);
(581099.6,	4132479.4,	128.8,	772.0,	1.5);	(581090.1,	4132478.2,	126.9,	772.0,	1.5);
(581088.6,	4132466.6,	126.0,	772.0,	1.5);	(581099.6,	4132468.7,	128.1,	772.0,	1.5);
(581101.7,	4132494.7,	129.9,	772.0,	1.5);	(581105.1,	4132507.9,	130.8,	772.0,	1.5);
(580749.4,	4132883.1,	106.8,	772.0,	1.5);	(580750.7,	4132892.9,	106.7,	772.0,	1.5);
(580747.0,	4132913.7,	107.8,	772.0,	1.5);	(580744.5,	4132921.9,	108.5,	772.0,	1.5);
(580736.6,	4132932.0,	110.3,	772.0,	1.5);	(580719.2,	4132942.7,	109.0,	772.0,	1.5);
(580701.7,	4132947.9,	106.3,	772.0,	1.5);	(580706.0,	4132953.1,	106.2,	772.0,	1.5);
(580723.4,	4132948.8,	109.0,	772.0,	1.5);	(580621.9,	4132895.6,	97.0,	772.0,	1.5);
(580627.7,	4132908.5,	97.0,	772.0,	1.5);	(580641.8,	4132936.0,	97.9,	772.0,	1.5);

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

```
( 580644.2, 4132946.7,    97.8,    772.0,      1.5);    ( 580659.8, 4132963.5,    98.3,    772.0,      1.5);
( 580671.4, 4132969.6,    98.7,    772.0,      1.5);    ( 580913.0, 4132644.9,   109.5,    772.0,      6.1);
( 580929.2, 4132624.1,   110.3,    772.0,      6.1);    ( 580933.8, 4132629.6,   111.3,    772.0,      6.1);
( 580945.8, 4132618.3,   112.1,    772.0,      6.1);    ( 580981.5, 4132586.1,   114.3,    772.0,      6.1);
( 581018.2, 4132600.8,   121.1,    772.0,      6.1);    ( 581015.5, 4132619.2,   121.9,    772.0,      6.1);
( 580978.8, 4132605.1,   115.6,    772.0,      6.1);    ( 580971.1, 4132637.2,   116.8,    772.0,      6.1);
( 580962.9, 4132644.6,   116.2,    772.0,      6.1);    ( 580947.9, 4132654.9,   114.9,    772.0,      6.1);
( 580954.6, 4132661.1,   116.2,    772.0,      6.1);    ( 580938.4, 4132663.2,   114.2,    772.0,      6.1);
( 580938.1, 4132684.3,   115.5,    772.0,      6.1);    ( 581011.5, 4132649.4,   123.4,    772.0,      6.1);
( 580983.7, 4132671.8,   120.8,    772.0,      6.1);    ( 580999.6, 4132658.6,   122.0,    772.0,      6.1);
( 580981.8, 4132691.9,   122.1,    772.0,      6.1);    ( 580968.7, 4132720.1,   121.2,    772.0,      6.1);
( 580952.5, 4132750.7,   120.9,    772.0,      6.1);    ( 580940.2, 4132759.8,   119.8,    772.0,      6.1);
( 580871.4, 4132622.2,   106.4,    772.0,      6.1);    ( 580888.3, 4132614.3,   106.3,    772.0,      6.1);
( 580895.3, 4132622.2,   106.8,    772.0,      6.1);    ( 580900.8, 4132615.5,   106.9,    772.0,      6.1);
( 580900.8, 4132595.9,   107.2,    772.0,      6.1);    ( 580912.4, 4132583.7,   107.0,    772.0,      6.1);
( 580920.4, 4132590.4,   107.6,    772.0,      6.1);    ( 580925.0, 4132577.9,   107.5,    772.0,      6.1);
( 580926.5, 4132553.1,   109.2,    772.0,      6.1);    ( 580928.3, 4132542.4,   109.8,    772.0,      6.1);
( 580974.2, 4132542.4,   109.2,    772.0,      6.1);    ( 580973.9, 4132529.6,   109.1,    772.0,      6.1);
( 580980.0, 4132512.4,   110.0,    772.0,      6.1);    ( 580989.2, 4132504.8,   111.5,    772.0,      6.1);
( 581051.6, 4132520.7,   121.1,    772.0,      6.1);    ( 581101.4, 4132550.7,   131.7,    772.0,      6.1);
( 581092.2, 4132557.4,   130.9,    772.0,      6.1);    ( 581089.2, 4132567.8,   131.5,    772.0,      6.1);
( 581080.0, 4132580.9,   131.2,    772.0,      6.1);    ( 581073.0, 4132590.4,   130.7,    772.0,      6.1);
( 581068.1, 4132603.3,   130.8,    772.0,      6.1);    ( 581062.6, 4132618.6,   130.3,    772.0,      6.1);
( 581062.0, 4132631.1,   130.6,    772.0,      6.1);    ( 581054.0, 4132625.6,   129.0,    772.0,      6.1);
( 581046.1, 4132664.1,   130.1,    772.0,      6.1);    ( 581047.0, 4132653.1,   129.5,    772.0,      6.1);
( 581059.5, 4132651.9,   131.0,    772.0,      6.1);    ( 581057.1, 4132662.6,   131.2,    772.0,      6.1);
( 581096.2, 4132504.8,   129.2,    772.0,      6.1);    ( 581085.5, 4132392.9,   122.7,    772.0,      6.1);
( 581090.4, 4132387.1,   123.4,    772.0,      6.1);    ( 581136.0, 4132397.8,   127.8,    772.0,      6.1);
( 581123.7, 4132414.6,   129.0,    772.0,      6.1);    ( 581128.6, 4132403.9,   128.8,    772.0,      6.1);
( 581115.2, 4132432.3,   128.4,    772.0,      6.1);    ( 581107.8, 4132438.8,   127.8,    772.0,      6.1);
( 581103.2, 4132447.6,   127.5,    772.0,      6.1);    ( 581068.7, 4132420.1,   121.7,    772.0,      6.1);
( 581061.3, 4132431.1,   121.1,    772.0,      6.1);    ( 581056.4, 4132440.9,   121.0,    772.0,      6.1);
( 581052.8, 4132456.8,   121.0,    772.0,      6.1);    ( 581049.1, 4132469.0,   120.6,    772.0,      6.1);
( 581014.6, 4132488.3,   115.8,    772.0,      6.1);    ( 581002.9, 4132491.3,   113.5,    772.0,      6.1);
( 581043.3, 4132462.0,   120.0,    772.0,      6.1);    ( 581099.6, 4132479.4,   128.8,    772.0,      6.1);
( 581090.1, 4132478.2,   126.9,    772.0,      6.1);    ( 581088.6, 4132466.6,   126.0,    772.0,      6.1);
( 581099.6, 4132468.7,   128.1,    772.0,      6.1);    ( 581101.7, 4132494.7,   129.9,    772.0,      6.1);
( 581105.1, 4132507.9,   130.8,    772.0,      6.1);    ( 580749.4, 4132883.1,   106.8,    772.0,      6.1);
( 580750.7, 4132892.9,   106.7,    772.0,      6.1);    ( 580747.0, 4132913.7,   107.8,    772.0,      6.1);
( 580744.5, 4132921.9,   108.5,    772.0,      6.1);    ( 580736.6, 4132932.0,   110.3,    772.0,      6.1);
( 580719.2, 4132942.7,   109.0,    772.0,      6.1);    ( 580701.7, 4132947.9,   106.3,    772.0,      6.1);
( 580706.0, 4132953.1,   106.2,    772.0,      6.1);    ( 580723.4, 4132948.8,   109.0,    772.0,      6.1);
( 580621.9, 4132895.6,    97.0,    772.0,      6.1);    ( 580627.7, 4132908.5,    97.0,    772.0,      6.1);
( 580641.8, 4132936.0,    97.9,    772.0,      6.1);    ( 580644.2, 4132946.7,    97.8,    772.0,      6.1);
( 580659.8, 4132963.5,    98.3,    772.0,      6.1);    ( 580671.4, 4132969.6,    98.7,    772.0,      6.1);
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 *** AERMOD - VERSION 16216r ***   *** Onsite Receptors Phase 2 Forum                                                  ***        05/25/17
 *** AERMET - VERSION  14134 ***   ***                                                                                 ***        16:36:09
                                                                                                                                   PAGE 143
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  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,
```

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

Surface file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion Met Version: 14134
Profile file: L:\COCU-10.0\03_ProductFiles\Tech\AQ GHG\HRA\Construction HRA\B - Air Dispersion
Surface format: FREE
Profile format: FREE
Surface station no.: 23289 Upper air station no.: 23230
Name: PALO_ALTO_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	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	07	-7.2	0.126	-9.000	-9.000	-999.	107.	25.2	0.04	0.36	1.00	2.36	999.	10.0	282.1	2.0
09	01	01	1	08	-7.2	0.125	-9.000	-9.000	-999.	106.	25.0	0.04	0.36	0.73	2.36	999.	10.0	281.1	2.0
09	01	01	1	09	-4.5	0.212	-9.000	-9.000	-999.	235.	195.5	0.01	0.36	0.37	3.86	327.	10.0	282.1	2.0
09	01	01	1	10	4.5	0.252	0.215	0.015	80.	304.	-322.7	0.01	0.36	0.25	4.36	341.	10.0	282.1	2.0
09	01	01	1	11	9.5	0.218	0.333	0.015	140.	245.	-99.2	0.04	0.36	0.20	2.86	999.	10.0	282.1	2.0
09	01	01	1	12	12.3	0.232	0.402	0.015	192.	268.	-91.9	0.00	0.36	0.19	4.36	6.	10.0	282.1	2.0
09	01	01	1	13	12.8	0.203	0.434	0.015	232.	220.	-59.9	0.01	0.36	0.18	3.36	333.	10.0	282.1	2.0
09	01	01	1	14	52.4	0.238	0.799	0.016	354.	278.	-23.3	0.04	0.36	0.19	2.86	999.	10.0	283.1	2.0
09	01	01	1	15	37.3	0.200	0.756	0.017	421.	214.	-19.4	0.04	0.36	0.22	2.36	999.	10.0	285.1	2.0
09	01	01	1	16	14.6	0.222	0.561	0.017	438.	251.	-67.8	0.04	0.36	0.30	2.86	999.	10.0	284.1	2.0
09	01	01	1	17	-11.9	0.162	-9.000	-9.000	-999.	157.	32.4	0.04	0.36	0.54	2.86	999.	10.0	283.1	2.0
09	01	01	1	18	-13.2	0.132	-9.000	-9.000	-999.	115.	15.9	0.01	0.36	1.00	3.36	327.	10.0	281.1	2.0
09	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	0.00	0.	10.0	280.1	2.0
09	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0
09	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.04	0.36	1.00	999.00	999.	-9.0	999.0	-9.0

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	-999.0	99.0	-99.00	-99.00

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

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE PERIOD (43872 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: **OFFSITE** ***
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 OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
580913.03	4132644.86	**4.56020** MER LOCATION	580929.23	4132624.07	4.02591
580933.82	4132629.57	3.42959	580945.75	4132618.26	3.11815
580981.52	4132586.15	2.56157	581018.22	4132600.83	1.35069
581015.47	4132619.17	1.15764	580978.77	4132605.11	2.14749
580971.13	4132637.22	1.65093	580962.87	4132644.56	1.70041
580947.89	4132654.95	1.87936	580954.61	4132661.07	1.56709
580938.41	4132663.21	1.97270	580938.10	4132684.31	1.51603
581011.49	4132649.45	0.90619	580983.66	4132671.77	0.98986
580999.57	4132658.62	0.94757	580981.83	4132691.95	0.84431
580968.68	4132720.09	0.76697	580952.47	4132750.67	0.66638
580940.24	4132759.84	0.67643	580871.44	4132622.23	15.86681
580888.26	4132614.28	10.89319	580895.29	4132622.23	8.93335
580900.79	4132615.51	8.15344	580900.79	4132595.93	9.04847
580912.41	4132583.70	7.82865	580920.36	4132590.43	6.48828
580924.95	4132577.89	6.59468	580926.48	4132553.12	8.26384
580928.32	4132542.42	9.04784	580974.19	4132542.42	4.63023
580973.88	4132529.58	5.42644	580980.00	4132512.45	6.35820
580989.17	4132504.81	6.36680	581051.55	4132520.71	2.10760
581101.40	4132550.68	0.85163	581092.22	4132557.40	0.88106
581089.17	4132567.80	0.82092	581079.99	4132580.95	0.79804
581072.96	4132590.43	0.78889	581068.07	4132603.27	0.74117
581062.56	4132618.56	0.69620	581061.95	4132631.10	0.63785
581054.00	4132625.60	0.72065	581046.05	4132664.13	0.57562
581046.97	4132653.12	0.62136	581059.50	4132651.90	0.56262
581057.06	4132662.60	0.53324	581096.20	4132504.81	1.38046
581085.50	4132392.88	8.12392	581090.39	4132387.07	8.20926
581135.95	4132397.78	3.31465	581123.72	4132414.60	2.90900
581128.61	4132403.89	3.24733	581115.16	4132432.33	2.56329
581107.82	4132438.75	2.61343	581103.23	4132447.62	2.46881
581068.68	4132420.10	7.01244	581061.34	4132431.11	6.61565
581056.44	4132440.89	6.01345	581052.78	4132456.80	4.78062
581049.11	4132469.03	4.18234	581014.55	4132488.29	5.44796
581002.93	4132491.35	6.27575	581043.30	4132461.99	5.23102
581099.56	4132479.42	1.72454	581090.08	4132478.20	2.01264

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

581088.55	4132466.58	2.38724	581099.56	4132468.72	1.96904
581101.70	4132494.71	1.41445	581105.07	4132507.86	1.19301
580749.42	4132883.08	0.80304	580750.65	4132892.86	0.73878
580746.98	4132913.66	0.63247	580744.53	4132921.92	0.59773
580736.58	4132932.01	0.56165	580719.15	4132942.71	0.54902
580701.72	4132947.91	0.54261	580706.00	4132953.11	0.52480
580723.43	4132948.83	0.52351	580621.90	4132895.62	0.41038
580627.71	4132908.46	0.42801	580641.78	4132935.98	0.45514
580644.23	4132946.69	0.44926	580659.82	4132963.50	0.45011
580671.44	4132969.62	0.44848	580913.03	4132644.86	3.33395
580929.23	4132624.07	3.13855	580933.82	4132629.57	2.68527
580945.75	4132618.26	2.51805	580981.52	4132586.15	2.17770
581018.22	4132600.83	1.16498	581015.47	4132619.17	1.00250
580978.77	4132605.11	1.81304	580971.13	4132637.22	1.39042
580962.87	4132644.56	1.41978	580947.89	4132654.95	1.53168
580954.61	4132661.07	1.29959	580938.41	4132663.21	1.57748
580938.10	4132684.31	1.22563	581011.49	4132649.45	0.78770
580983.66	4132671.77	0.85053	580999.57	4132658.62	0.82160
580981.83	4132691.95	0.72591	580968.68	4132720.09	0.65895
580952.47	4132750.67	0.57401	580940.24	4132759.84	0.58016
580871.44	4132622.23	12.04331	580888.26	4132614.28	8.38420
580895.29	4132622.23	6.68710	580900.79	4132615.51	6.27442
580900.79	4132595.93	7.20533	580912.41	4132583.70	6.61751
580920.36	4132590.43	5.39780	580924.95	4132577.89	5.68280
580926.48	4132553.12	7.14972	580928.32	4132542.42	8.43746
580974.19	4132542.42	4.15730	580973.88	4132529.58	4.98307
580980.00	4132512.45	6.07581	580989.17	4132504.81	5.96732
581051.55	4132520.71	1.77568	581101.40	4132550.68	0.72116
581092.22	4132557.40	0.74553	581089.17	4132567.80	0.69702
581079.99	4132580.95	0.67909	581072.96	4132590.43	0.67271
581068.07	4132603.27	0.63406	581062.56	4132618.56	0.59821
581061.95	4132631.10	0.54983	581054.00	4132625.60	0.62151
581046.05	4132664.13	0.49812	581046.97	4132653.12	0.53764
581059.50	4132651.90	0.48710	581057.06	4132662.60	0.46230
581096.20	4132504.81	1.13397	581085.50	4132392.88	6.59626
581090.39	4132387.07	6.65526	581135.95	4132397.78	2.45829
581123.72	4132414.60	2.14818	581128.61	4132403.89	2.36375
581115.16	4132432.33	1.95830	581107.82	4132438.75	2.01591
581103.23	4132447.62	1.92606	581068.68	4132420.10	5.35661
581061.34	4132431.11	5.09097	581056.44	4132440.89	4.57858
581052.78	4132456.80	3.67163	581049.11	4132469.03	3.25010
581014.55	4132488.29	4.74750	581002.93	4132491.35	6.05563
581043.30	4132461.99	4.04026	581099.56	4132479.42	1.38556
581090.08	4132478.20	1.62289	581088.55	4132466.58	1.90852
581099.56	4132468.72	1.56889	581101.70	4132494.71	1.15073
581105.07	4132507.86	0.98282	580749.42	4132883.08	0.74667

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE PERIOD (43872 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: OFFSITE ***
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 OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
580750.65	4132892.86	0.68962	580746.98	4132913.66	0.58638
580744.53	4132921.92	0.55194	580736.58	4132932.01	0.51529
580719.15	4132942.71	0.51220	580701.72	4132947.91	0.52343
580706.00	4132953.11	0.50607	580723.43	4132948.83	0.48836
580621.90	4132895.62	0.41939	580627.71	4132908.46	0.43768
580641.78	4132935.98	0.46696	580644.23	4132946.69	0.46087
580659.82	4132963.50	0.46218	580671.44	4132969.62	0.46061

Model Output - Phase 2 - On-site Residences
Unit Emission Rates (1 g/s)

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

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

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

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
OFFSITE	1ST HIGHEST VALUE IS	15.86681	AT (580871.44, 4132622.23, 106.36, 772.00, 1.50)	DC	
	2ND HIGHEST VALUE IS	12.04331	AT (580871.44, 4132622.23, 106.36, 772.00, 6.10)	DC	
	3RD HIGHEST VALUE IS	10.89319	AT (580888.26, 4132614.28, 106.26, 772.00, 1.50)	DC	
	4TH HIGHEST VALUE IS	9.04847	AT (580900.79, 4132595.93, 107.18, 772.00, 1.50)	DC	
	5TH HIGHEST VALUE IS	9.04784	AT (580928.32, 4132542.42, 109.83, 772.00, 1.50)	DC	
	6TH HIGHEST VALUE IS	8.93335	AT (580895.29, 4132622.23, 106.83, 772.00, 1.50)	DC	
	7TH HIGHEST VALUE IS	8.43746	AT (580928.32, 4132542.42, 109.83, 772.00, 6.10)	DC	
	8TH HIGHEST VALUE IS	8.38420	AT (580888.26, 4132614.28, 106.26, 772.00, 6.10)	DC	
	9TH HIGHEST VALUE IS	8.26384	AT (580926.48, 4132553.12, 109.18, 772.00, 1.50)	DC	
	10TH HIGHEST VALUE IS	8.20926	AT (581090.39, 4132387.07, 123.44, 772.00, 1.50)	DC	
ONSITE	1ST HIGHEST VALUE IS	82.15313	AT (580913.03, 4132644.86, 109.55, 772.00, 1.50)	DC	MER LOCATION
	2ND HIGHEST VALUE IS	67.97521	AT (580895.29, 4132622.23, 106.83, 772.00, 1.50)	DC	
	3RD HIGHEST VALUE IS	61.55311	AT (580900.79, 4132615.51, 106.94, 772.00, 1.50)	DC	
	4TH HIGHEST VALUE IS	56.25465	AT (580913.03, 4132644.86, 109.55, 772.00, 6.10)	DC	
	5TH HIGHEST VALUE IS	55.72698	AT (580888.26, 4132614.28, 106.26, 772.00, 1.50)	DC	
	6TH HIGHEST VALUE IS	51.30730	AT (580895.29, 4132622.23, 106.83, 772.00, 6.10)	DC	
	7TH HIGHEST VALUE IS	50.70555	AT (580871.44, 4132622.23, 106.36, 772.00, 1.50)	DC	
	8TH HIGHEST VALUE IS	46.30439	AT (580900.79, 4132615.51, 106.94, 772.00, 6.10)	DC	
	9TH HIGHEST VALUE IS	44.91538	AT (580900.79, 4132595.93, 107.18, 772.00, 1.50)	DC	
	10TH HIGHEST VALUE IS	44.52095	AT (580888.26, 4132614.28, 106.26, 772.00, 6.10)	DC	

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

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*** AERMOD - VERSION 16216r ***   *** Onsite Receptors Phase 2 Forum                    ***        05/25/17
*** AERMET - VERSION  14134 ***   ***                                                   ***        16:36:09
                                                                                                  PAGE 152

*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

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

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

A Total of            0 Fatal Error Message(s)
A Total of            0 Warning Message(s)
A Total of        30785 Informational Message(s)

A Total of        43872 Hours Were Processed

A Total of         1576 Calm Hours Identified

A Total of        29209 Missing Hours Identified ( 66.58 Percent)

CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
           Data May Not Be Acceptable for Regulatory Applications.
           See Section 5.3.2 of "Meteorological Monitoring Guidance
           for Regulatory Modeling Applications" (EPA-454/R-99-005).


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


   ********   WARNING MESSAGES   ********
              ***  NONE  ***


   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
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Appendix C. Construction Risk Calculations

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Table C1a
Off-site Residential MER Concentrations for Risk Calculations

Contaminant		Source	Model Output [1] ($\mu g/m^3$)	Emission Rates [2] (g/s)	MER Conc. ($\mu g/m^3$)	Total MER Conc. Annual Average ($\mu g/m^3$)
(a)		(b)	(c)	(d)	(e)	(f)
Residential Receptors - Unmitigated						
DPM	2018	On-Site Emissions	8.09	1.37E-02	1.10E-01	1.11E-01
		Truck Route	9.66	1.96E-05	1.89E-04	
	2019	On-Site Emissions	8.09	3.85E-03	3.11E-02	3.13E-02
		Truck Route	9.66	1.37E-05	1.33E-04	
	2020	On-Site Phase 1	8.09	7.21E-03	5.83E-02	5.84E-02
		Truck Route Phase 1	9.66	1.09E-05	1.05E-04	
	2020	On-Site Phase 2	11.31	8.29E-03	9.38E-02	9.38E-02
		Truck Route Phase 2	12.06	1.85E-06	2.23E-05	
				Total DPM concentrations used for Cancer Risk and Chronic Hazard calculations		
$PM_{2.5}$	2018	On-Site Emissions	8.09	1.28E-02	1.03E-01	1.03E-01
		Truck Route	9.66	1.86E-05	1.80E-04	
	2019	On-Site Emissions	8.09	3.71E-03	3.00E-02	3.01E-02
		Truck Route	9.66	1.30E-05	1.26E-04	
	2020	On-Site Phase 1	8.09	6.80E-03	5.50E-02	5.51E-02
		Truck Route Phase 1	9.66	9.91E-06	9.57E-05	
	2020	On-Site Phase 2	11.31	7.67E-03	8.67E-02	8.68E-02
		Truck Route Phase 2	12.06	1.61E-06	1.94E-05	
				Maximum Annual $PM_{2.5}$ Concentration		**0.10**
Residential Receptors - Mitigated Run: Level 3 DPFs for eq. > 50 HP						
DPM	2018	On-Site Emissions	8.09	3.83E-03	3.10E-02	3.12E-02
		Truck Route	9.66	1.96E-05	1.89E-04	
	2019	On-Site Emissions	8.09	2.30E-03	1.86E-02	1.88E-02
		Truck Route	9.66	1.37E-05	1.33E-04	
	2020	On-Site Phase 1	8.09	2.36E-03	1.91E-02	1.92E-02
		Truck Route Phase 1	9.66	1.09E-05	1.05E-04	
	2020	On-Site Phase 2	11.31	1.27E-03	1.44E-02	1.44E-02
		Truck Route Phase 2	12.06	1.85E-06	2.23E-05	
				Total DPM concentrations used for Cancer Risk and Chronic Hazard calculations		
$PM_{2.5}$	2018	On-Site Emissions	8.09	3.70E-03	2.99E-02	3.01E-02
		Truck Route	9.66	1.86E-05	1.80E-04	
	2019	On-Site Emissions	8.09	2.28E-03	1.84E-02	1.86E-02
		Truck Route	9.66	1.30E-05	1.26E-04	
	2020	On-Site Phase 1	8.09	2.29E-03	1.86E-02	1.86E-02
		Truck Route Phase 1	9.66	9.91E-06	9.57E-05	
	2020	On-Site Phase 2	11.31	1.18E-03	1.33E-02	1.33E-02
		Truck Route Phase 2	12.06	1.61E-06	1.94E-05	
				Maximum Annual $PM_{2.5}$ Concentration		**0.03**

Maximum Exposed Receptor (MER) UTM coordinates: 580733.18E, 4132674.48N for Phase 1

Maximum Exposed Receptor (MER) UTM coordinates: 580856.14E, 4132512.58N for Phase 2

[1] Model Output at the MER based on unit emission rates for sources (1 g/s).

[2] Emission Rates from Emission Rate Calculations (Appendix A - Construction Emissions).

Table C1b
On-site Resident MER Concentrations for Risk Calculations

Contaminant		Source	Model Output [1] ($\mu g/m^3$)	Emission Rates [2] (g/s)	MER Conc. ($\mu g/m^3$)	Total MER Conc. Annual Average ($\mu g/m^3$)
(a)		(b)	(c)	(d)	(e)	(f)
Residential Receptors - Unmitigated						
DPM	2018	On-Site Emissions	8.80	1.37E-02	1.20E-01	1.20E-01
		Truck Route	11.57	1.96E-05	2.27E-04	
	2019	On-Site Emissions	8.80	3.85E-03	3.39E-02	3.40E-02
		Truck Route	11.57	1.37E-05	1.59E-04	
	2020	On-Site Phase 1	8.80	7.21E-03	6.35E-02	6.36E-02
		Truck Route Phase 1	11.57	1.09E-05	1.26E-04	
	2020	On-Site Phase 2	82.15	8.29E-03	6.81E-01	6.81E-01
		Truck Route Phase 2	4.56	1.85E-06	8.45E-06	
					Total DPM concentrations used for Cancer Risk and Chronic Hazard calculations	
$PM_{2.5}$	2018	On-Site Emissions	8.80	1.28E-02	1.12E-01	1.12E-01
		Truck Route	11.57	1.86E-05	2.16E-04	
	2019	On-Site Emissions	8.80	3.71E-03	3.26E-02	3.28E-02
		Truck Route	11.57	1.30E-05	1.51E-04	
	2020	On-Site Phase 1	8.80	6.80E-03	5.99E-02	6.00E-02
		Truck Route Phase 1	11.57	9.91E-06	1.15E-04	
	2020	On-Site Phase 2	82.15	7.67E-03	6.30E-01	6.30E-01
		Truck Route Phase 2	4.56	1.61E-06	7.32E-06	
				Maximum Annual $PM_{2.5}$ Concentration		**0.63**
Residential Receptors - Mitigated Run: Level 3 DPFs for eq. > 50 HP						
DPM	2018	On-Site Emissions	8.80	3.83E-03	3.37E-02	3.40E-02
		Truck Route	11.57	1.96E-05	2.27E-04	
	2019	On-Site Emissions	8.80	2.30E-03	2.03E-02	2.04E-02
		Truck Route	11.57	1.37E-05	1.59E-04	
	2020	On-Site Phase 1	8.80	2.36E-03	2.07E-02	2.09E-02
		Truck Route Phase 1	11.57	1.09E-05	1.26E-04	
	2020	On-Site Phase 2	82.15	1.27E-03	1.04E-01	1.04E-01
		Truck Route Phase 2	4.56	1.85E-06	8.45E-06	
					Total DPM concentrations used for Cancer Risk and Chronic Hazard calculations	
$PM_{2.5}$	2018	On-Site Emissions	8.80	3.70E-03	3.26E-02	3.28E-02
		Truck Route	11.57	1.86E-05	2.16E-04	
	2019	On-Site Emissions	8.80	2.28E-03	2.01E-02	2.02E-02
		Truck Route	11.57	1.30E-05	1.51E-04	
	2020	On-Site Phase 1	8.80	2.29E-03	2.02E-02	2.03E-02
		Truck Route Phase 1	11.57	9.91E-06	1.15E-04	
	2020	On-Site Phase 2	82.15	1.18E-03	9.66E-02	9.66E-02
		Truck Route Phase 2	4.56	1.61E-06	7.32E-06	
				Maximum Annual $PM_{2.5}$ Concentration		**0.10**

Maximum Exposed Receptor (MER) UTM coordinates: 580871.44E, 4132622.23N for Phase 1

Maximum Exposed Receptor (MER) UTM coordinates: 580913.03, 4132644.86N for Phase 2

[1] Model Output at the MER based on unit emission rates for sources (1 g/s).

[2] Emission Rates from Emission Rate Calculations (Appendix A - Construction Emissions).

Table C2a
Quantification of Health Risks for Off-site Residents

Source		MER Conc. ($\mu g/m^3$)	Weight Fraction	Contaminant	URF $(\mu g/m^3)^{-1}$	CPF $(mg/kg/day)^{-1}$	Dose (by age bin) 3rd Trimester (mg/kg-day)	Dose (by age bin) 0 < 2 years	Dose (by age bin) 2 < 9 years (mg/kg-day)	Carcinogenic Risks (by age bin) 3rd Trimester per million	Carcinogenic Risks (by age bin) 0 < 2 years	Carcinogenic Risks (by age bin) 2 < 9 years per million	**Total Cancer Risk** per million	**Chronic Hazards** [3] Chronic REL ($\mu g/m^3$)	**Chronic Hazards** [3] RESP
(a)		(b)	(c)	(d)	(e)	(f)	(g)		(h)	(i)		(j)	(k)	(l)	(m)
Residential Receptors - Unmitigated															
2018	On & Off-Site	1.11E-01	1.00E+00	DPM	3.0E-04	1.1E+00	3.83E-05	1.16E-04		1.22E+00	1.11E+01		12.3	5.0E+00	2.21E-02
2019	On & Off-Site	3.13E-02	1.00E+00		3.0E-04	1.1E+00		3.27E-05			4.17E+00		4.2	5.0E+00	6.25E-03
2020 (1	On & Off-Site	5.84E-02	1.00E+00		3.0E-04	1.1E+00		6.11E-05			1.37E+00		1.4	5.0E+00	1.17E-02
2020 (2	On & Off-Site	9.38E-02	1.00E+00		3.0E-04	1.1E+00		9.80E-05	7.74E-05		9.22E-01	9.59E-01	1.9	5.0E+00	1.88E-02
												Total	**19.7**		**0.059**
Residential Receptors - Mitigated Run: Level 3 DPFs for eq. > 50 HP															
2018	On & Off-Site	3.12E-02	1.00E+00	DPM	3.0E-04	1.1E+00	1.08E-05	3.26E-05		3.44E-01	3.12E+00		3.46	5.0E+00	6.24E-03
2019	On & Off-Site	1.88E-02	1.00E+00		3.0E-04	1.1E+00		1.96E-05			2.50E+00		2.50	5.0E+00	3.75E-03
2020 (1	On & Off-Site	1.92E-02	1.00E+00		3.0E-04	1.1E+00		2.00E-05			4.50E-01		0.45	5.0E+00	3.83E-03
2020 (2	On & Off-Site	1.44E-02	1.00E+00		3.0E-04	1.1E+00		1.50E-05	1.19E-05		1.41E-01	0.00E+00	0.14	5.0E+00	2.88E-03
												Total	**6.55**		**0.017**

Maximum Exposed Receptor (MER) UTM coordinates: 580733.18E, 4132674.48N for Phase 1

		3rd Trimester	0 < 2 years	2 < 9 years
OEHHA age bin				
exposure year(s)		2018	2018-2020	2020
Dose Exposure Factors:	xposure frequency (days/year)	350	350	350
	inhalation rate (L/kg-day) [1]	361	1090	861
	inhalation absorption factor	1	1	1
	conversion factor (mg/µg; m^3/L)	1.0E-06	1.0E-06	1.0E-06
Risk Calculation Factors:	age sensitivity factor	10	10	3
	averaging time (years)	70	70	70
	per million	1.0E+06	1.0E+06	1.0E+06
	fraction of time at home	0.85	0.85	0.72

exposure durations per age bin		exposure durations (year)		
Construction Year	Risk Scalar [2]	3rd Trimester	0 < 2 years	2 < 9 years
2018	1.00	0.25	0.75	
2019	1.00		1.00	
2020 P1	0.18		0.18	
2020 P2	0.46		0.07	0.38
Total	2.63	0.25	2.00	0.38

[1] Inhalation rate taken as the 95th percentile breathing rates (OEHHA, 2015).

[2] Risk scalar determined for each year of construction to adjust receptor exposures to the exposure durations for each construction year (see App A - Construction Emissions).

[3] Chronic Hazards for DPM using the chronic reference exposure level (REL) for the Respiratory Toxicological Endpoint.

Table C2b
Quantification of Health Risks for On-site Residents

Source		MER Conc. ($\mu g/m^3$)	Weight Fraction	Contaminant	URF $(\mu g/m^3)^{-1}$	CPF $(mg/kg/day)^{-1}$	Dose (by age bin) 16 < 70 Years (mg/kg-day)	Carcinogenic Risks 16 < 70 Years per million	**Total Cancer Risk** per million	**Chronic Hazards [3]** Chronic REL ($\mu g/m^3$)	RESP
(a)		(b)	(c)	(d)	(e)	(f)	(g)	(i)	(k)	(l)	(m)
Residential Receptors - Unmitigated											
2018	On & Off-Site	1.20E-01	1.00E+00	DPM	3.0E-04	1.1E+00	3.49E-05	5.24E-01	0.52	5.0E+00	2.41E-02
2019	On & Off-Site	3.40E-02	1.00E+00		3.0E-04	1.1E+00	9.87E-06	1.48E-01	0.15	5.0E+00	6.81E-03
2020 (1	On & Off-Site	6.36E-02	1.00E+00		3.0E-04	1.1E+00	1.84E-05	4.88E-02	0.05	5.0E+00	1.27E-02
2020 (2	On & Off-Site	6.81E-01	1.00E+00		3.0E-04	1.1E+00	1.97E-04	1.35E+00	1.35	5.0E+00	1.36E-01
								Total	**2.07**		**0.180**
Residential Receptors - Mitigated Run: Level 3 DPFs for eq. > 50 HP											
2018	On & Off-Site	3.40E-02	1.00E+00	DPM	3.0E-04	1.1E+00	9.85E-06	1.48E-01	0.15	5.0E+00	6.79E-03
2019	On & Off-Site	2.04E-02	1.00E+00		3.0E-04	1.1E+00	5.92E-06	8.89E-02	0.09	5.0E+00	4.09E-03
2020	On & Off-Site	2.09E-02	1.00E+00		3.0E-04	1.1E+00	6.05E-06	1.60E-02	0.02	5.0E+00	4.17E-03
2020 (2	On & Off-Site	1.04E-01	1.00E+00		3.0E-04	1.1E+00	3.03E-05	2.07E-01	0.21	5.0E+00	2.09E-02
								Total	**0.46**		**0.036**

Maximum Exposed Receptor (MER) UTM coordinates: 580733.18E, 4132674.48N for Phase 1

	OEHHA age bin	16 < 70 Years
	exposure year(s)	2018 - 2020
Dose Exposure Factors:	xposure frequency (days/year)	365
	inhalation rate (L/kg-day) [1]	290
	inhalation absorption factor	1
	conversion factor (mg/µg; m^3/L)	1.0E-06
Risk Calculation Factors:	age sensitivity factor	1
	averaging time (years)	70
	per million	1.0E+06
	fraction of time at home	1

exposure durations per age bin		exposure durations (year)
Construction Year	Risk Scalar [2]	16 < 70 Years
2018	1.00	1.00
2019	1.00	1.00
2020 P1	0.18	0.18
2020 P2	0.46	0.46
Total	2.63	2.63

[1] Inhalation rate taken as the 95th percentile breathing rates (OEHHA, 2015).

[2] Risk scalar determined for each year of construction to adjust receptor exposures to the exposure durations for each construction year (see App A - Construction Emissions).

[3] Chronic Hazards for DPM using the chronic reference exposure level (REL) for the Respiratory Toxicological Endpoint.