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January 26, 2017

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Planning and Land Use Management Committee
Los Angeles City Hall
200 N. Spring Street
Los Angeles, CA 90012

Re: City Planning Case Nos: CPC-2015-2662-VZC-ZAD-CDO-SPR, and
ENV-2013-3747-EIR

Council File Nos: 16-1458, 16-1458-S1

Project Address: 11750-11770 Wilshire Boulevard

On November 17, 2016, the City Planning Commission certified the EIR and approved CPC-2015-2662-VZC-ZAD-CDO-SPR, for the construction of a 34-story residential building with a total of 376 multi-family dwelling units. The project is utilizing a ministerial Density Bonus by setting aside 5 percent of the dwelling units, equal to 16 units, for Very Low Income households in exchange for a 20 percent Density Bonus to achieve an additional 63 units in lieu of the by-right density of 313 base dwelling units. The project incorporates an approximately 40,544 square-foot privately maintained, publicly accessible open space area on a 2.8-acre site. The existing 42,900 square-foot single-story supermarket building will be demolished to accommodate the new residential building and the existing 364,791 square-foot, 17-story office building will remain.

Appeals of the City Planning Commission's actions and recommendations of ENV-2013-3747-EIR and CPC-2015-2662-VZC-ZAD-CDO-SPR were filed on December 12, 2016 and December 14, 2016. The appeals were filed by: Craig M. Collins, representative for the Golden State Environmental Justice Alliance (GSEJA).

APPEAL ANALYSIS

The Appellant's statements are duplicative of their November 16, 2016 appeal letter to the City Planning Commission, which in and of itself is duplicative of their June 13, 2016 Draft EIR comment letter. The Appellant does not provide any new information or substantial evidence to justify the recirculation of the EIR or to otherwise dispute the findings of the EIR. A more detailed response to each of the Appellant's statements from the June 13, 2016 letter can be found in the Final EIR Response to Comment Letter No. 4. Below are responses to the Appellant's November 16, 2016 City Planning Commission appeal letter:

Appellant's Statements: Timing of City Planning Commission Submission

- Not enough time was given to submit documents prior to the Commission Meeting.

Staff Response

Notification of the November 17, 2016, City Planning Commission hearing was conducted in accordance with City requirements. The 10-day notice is set forth in Los Angeles Municipal Code (LAMC) Section 17.06 and is consistent with longstanding City practice. As set forth on the Planning Commission's agenda for the November 17, 2016, meeting:

Written submissions are governed by Rule 10 of the Los Angeles City Planning Commission Rules and Operating Procedures, a copy of which is posted online at http://planning.lacity.org/Forms_Procedures/CPCPolicy.pdf. Day of hearing submissions (20 copies must be provided) are limited to 2 pages plus accompanying photographs. Submissions that do not comply with these rules will be stamped "File Copy. Non-Complying Submission." Non-complying submissions will be placed into the official case file, but they will not be delivered to or considered by the CPC, and will not be included in the official administrative record for the item at issue.

Nonetheless, although the commenter's submission was over 2 pages in length, it was accepted for submission and responses are provided herein.

Appellant's Statements: Baseline Determination

- The Court of Appeal wrongly decided the *North County Advocates v. City of Carlsbad* case (North County) contrary to the *Communities for a Better Environment vs. South Coast Air Quality Management District* case (CBE). Therefore, the City does not have the discretion to determine the project's baseline (i.e., allowing trip credits for the historic supermarket use on the project site).

Staff Response

In the CBE case cited by the Appellant, the California Supreme Court held that "[n]either CEQA nor the CEQA Guidelines mandates a uniform, inflexible rule" for determination of the existing conditions baseline. A lead agency has the discretion to decide "exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all CEQA factual determinations, for support by substantial evidence."¹ Thus, the City, as lead agency, has the discretion to choose a different baseline if its decision is supported by substantial evidence.²

As set forth in Section VI, Baseline Discussion, of the Draft EIR (DEIR), taking trip credits for the historic market use is not only consistent with the LADOT's long-standing practice, it is required under the West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP),³ an ordinance adopted by the City Council that applies to the project site. The project's Traffic Study takes into account the operation of the supermarket, pursuant to the requirements of the WLA TIMP, as well as LADOT established practices that allow trip credits for an existing use if the existing use was active for at least six months during the past two years.⁴

The trip credits used in the DEIR were based on a pre-existing supermarket use and established trip generation rates set forth by the Institute of Transportation Engineers (ITE). This approach

1 *Communities for a Better Environment vs. South Coast Air Quality Management Distr.* (2010) 48 Cal.4th 310, 327–328.

2 *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439.

3 Ordinance No. 171,492, adopted March 8, 1997.

4 LADOT's Traffic Study Policies and Procedures, June 2013.

and methodology calls for the imputation of the trips and a credit for a longstanding use even though it was not in operation at the time that the CEQA analysis commenced. Therefore, the Transportation Study appropriately imputed trips to the supermarket in establishing the baseline. The Appellant does not provide substantial evidence that this baseline methodology is inappropriate.

Appellant's Statements: Sustainability Features

- The project will have greenhouse gas impacts – therefore, the project should be required to use Energy Star labeled products and appliances.
- The Draft EIR was misleading because it stated that permeable pavement would be included “where appropriate.” This pavement is not a sustainability feature.

Staff Response

The Appellant states that the project has greenhouse gas (GHG) impacts. However, as indicated in Section IV.C, Greenhouse Gas Emissions, of the DEIR, the project has a less-than-significant GHG impact. The Appellant provides no evidence to the contrary. The project will have Energy Star Appliances including dishwashers as indicated in Project Design Feature K.1-1, which is a condition of approval for the project. Energy efficient equipment will be provided under California Code of Regulations (CCR) Title 24 standards. In addition, the project will comply with Project Design Feature C-1, which states that the “design of the new buildings shall incorporate features to be capable of achieving at least Silver certification under the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED)-CS® or LEED-NC® Rating System.”

Regarding permeable pavement, the Final EIR clarified that the entire project site sits over a four-level, subterranean parking structure, so there is effectively no portion of the site at grade which is directly over “earth” which would benefit from permeable pavement. Instead, raised planters and mounded areas will recapture rainwater. Notwithstanding, Project Design Feature K.1-1 states that the project shall incorporate other water conservation measures, including the use of drought-tolerant plants and indigenous species, and the use of weather-based irrigation controller with rain shutoff. Therefore, contrary to the Appellant’s statements, the project will incorporate several sustainability features.

Appellant's Statements: Shading and Size of Development

- The project’s residential tower at 380 feet would dwarf several high rise structures located in the vicinity of the project site.
- The project would have shading impacts because it is not exempt from aesthetics impacts under SB 743 and therefore exceeds shade/shadow thresholds in the *2006 LA City CEQA Thresholds Guide*.

Staff Response

As discussed in Section IV.A, Aesthetics/Visual Character and Views of the Draft EIR, the project site is located along the high-density Wilshire Boulevard corridor. The proposed residential building would reach a maximum height of approximately 349 feet to the top of the parapet. Its recessed rooftop structures at 380 feet will not be perceptible from the ground level. There are five high-rise buildings in the project vicinity including the Barrington Plaza buildings to the east (at 281 feet, 168 feet and 165 feet) and to the north (11755 Wilshire Boulevard) at 334 feet, only 15 feet less than the residential tower. Therefore, contrary to the Appellant’s statements, the project will not “dwarf” surrounding development. Moreover, there is no height limit for the project site.

Contrary to the Appellant's statement, the project is a transit priority project under SB 743 and its aesthetic impacts including shade/shadow impacts are therefore not considered significant under CEQA. Taking effect in 2014, SB 743 added Public Resources Code Section 21099, which provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." Therefore, SB 743 supersedes the *2006 LA City CEQA Thresholds Guide*. As set forth in Section IV.A.2, Light, Glare, and Shading, of the Draft EIR, the project is a residential project on an infill site within a transit priority area. Zoning Information File No. 2452 (ZI) and ZIMAS confirm that the project site is located in a Transit Priority Area, and therefore qualifies as a transit priority project under SB 743. The ZI states that aesthetics impacts would still need to be addressed if expressly required in a specific plan or Community Design Overlay. However, neither the West Los Angeles Transportation Improvement and Mitigation Specific Plan or the West Wilshire Boulevard Community Design Overlay require a project's shade and shadow impacts to be addressed. Notwithstanding, the Draft EIR provided a full shade/shadow analysis for informational purposes only. Nevertheless, that project's aesthetic impacts are exempted pursuant to SB 743 and the Appellant provides no evidence to the contrary.

Appellant's Statements: Air Quality Analysis

- The DEIR should have addressed the cumulative risk to adjacent residents from the diesel particulate matter (DPM) from construction along with their other exposures by conducting a health risk assessment.
- SWAPE (Soil Water Air Protection Enterprises) discloses that construction of the project could have an overall health risk impact on infants and children of 1040 new cancers in a million, over the South Coast Air Quality Management District (SCAQMD) standard of 10 in a million.

Staff Response

Contrary to the Appellant's statements, potential impacts from toxic air contaminants (TACs) during construction, including from diesel particulate (DPM) emissions associated with heavy equipment, were evaluated on page IV.B-35 of the DEIR. Furthermore, other emission sources, including NO_x, were analyzed. As shown on Table IV.B-4 (page IV.B-34), Table IV.B-5 (page IV.B-36), Table IV.B-6 (page IV.B-38), and Table IV.B-8 (page IV.B-40) of the DEIR, the project does not exceed local or regional emissions thresholds for NO_x, CO, PM₁₀ and PM_{2.5} during construction and operation.

Furthermore, DPM has no acute exposure factors (i.e., no short-term effects) and, therefore, the discussion appropriately focused on long-term exposure that could lead to carcinogenic risk. The SCAQMD Handbook does not recommend analysis of TACs from short-term construction activities. Specifically, the rationale for not requiring a health risk assessment (HRA) for construction activities is the limited duration of exposure. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. Specifically, "Individual Cancer Risk" is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. Given the short-term construction schedule of approximately 30 months, the project does not result in a long-term (i.e., 70-year) source of TACs emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction. Because there is such a short-term exposure period (30 out of 840 months of a 70-year lifetime), a health risk assessment was not required for the project and the Draft EIR correctly concluded construction TACs emissions results in a less-than-significant impact.

In reference to present and future cancer risks to the residents within the project area, there was no quantitative analysis required for future cancer risk within the project area as the project was

determined to be consistent with the recommendations regarding the siting of new sensitive land uses near potential sources of TACs emissions provided in CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005). Specifically, the project site is not located within 500 feet from a roadway that serves more than 100,000 vehicles per day. The Appellant provides no evidence of which roadway or volume along the roadway that would meet this criterion. The I-405 Freeway is located approximately one mile to the east of the site. The busiest roadway within 500 feet of the project site is Wilshire Boulevard. Based on peak-hour volumes from the intersection adjacent to the project site, the average daily traffic volumes along Wilshire Boulevard are approximately 50,000 vehicles per day, which does not exceed the CARB threshold of 100,000 vehicles per day. The Appellant has failed to provide evidence that a health risk assessment is required given the project site location.

Notwithstanding the fact that the health risk assessment is not necessary for the reasons stated above, the Appellant submits a screening-level analysis from SWAPE, not an actual health risk assessment. A major limitation of the SWAPE analysis is that it relied on a "screening level" model to evaluate health risks, which does not take into account site specific conditions, including, but not limited to, meteorological data. Page 4-25 of the Office of Environmental Health Hazard Assessment (OEHHA)'s *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* states: "[s]creening models are normally used when no representative meteorological data are available and may be used as a preliminary estimate to determine if a more detailed assessment is warranted." Screening level results that show a potential significant impact are relevant to the extent that they demonstrate that additional analysis using a refined mode should be conducted. Specifically, the SWAPE analysis was conducted using a screening level model (AERSCREEN) which provides overly conservative results in terms of assessing impacts. Additional analysis was not conducted by SWAPE or otherwise provided by the Appellant. Therefore, relying on a screening-level analysis to determine impacts is not reliable and the Appellant does not provide evidence to the contrary.

In addition, the SWAPE analysis uses the OEHHA protocol, the use of which is not supported by substantial evidence. Specifically, the OEHHA protocol is required for stationary source emissions, not mobile construction emissions, and was created to explicitly consider the risks of air toxics on infants and children.⁵ Although OEHHA adopted a new version of the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Guidance Manual) in March 2015, it is not appropriate to use the Guidance Manual to assess the project's short term construction impacts. The Guidance Manual was developed by OEHHA, in conjunction with CARB, for use in implementing the Air Toxics "Hot Spots" Program (Health and Safety Code Section 44360 et. seq.) and is intended to apply to certain stationary sources, such as power plants or industrial uses that emit toxic air contaminants. The new Guidance Manual does not provide specific recommendations for evaluation of short-term use of mobile sources (e.g., heavy-duty diesel construction equipment). Moreover, SCAQMD has not developed any recommendations on its use for CEQA analyses for potential construction impacts. Therefore, the DEIR properly relied on the *L.A. CEQA Thresholds Guide* for determining the project's potential impacts related to TAC emissions during construction. Case law also supports the conclusion that the OEHHA protocol is not required.⁶

5 Office Of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, Preface Page 1 and Introduction Page 1-1, February 2015.

6 In its November 29, 2016 ruling, the California Court of Appeals upheld the environmental review for the Golden State Warrior's San Francisco stadium plan against a lawsuit that argued that stricter air quality standards like OEHHA should have been used in that environmental review. See page 48 of that ruling. On January 17, 2017, the California Supreme Court denied the appellants' petition for review of the First District Court of Appeal's decision in *Mission Bay Alliance v. Office of Community Investment and Infrastructure, et al. (GSW Arena LLC, et al., Real Parties in Interest)* (2016) 6 Cal.App.5th 160; Supreme Court Case No. S239371.

Contrary to the Appellant's statements that the SWAPE analysis shows a significant cancer impact, the SWAPE is flawed, relying on inaccurate data. Specifically, the SWAPE analysis inflates cancer risk by using a residential exposure duration of 30 years, instead of a 70-year lifetime based on the use of standard risk assessment methodology identified above. SWAPE's analysis also incorrectly assumes that construction would occur on the entire site, but the office building on the project site will be retained – thus reducing the total area of construction area. For informational purposes, a HRA dated January 2017, attached herein, was conducted for short-term DPM emission exposure from the 30 months of anticipated construction. The HRA demonstrates that health risks from the project would be a maximum of 6.2 in a million for adjacent residences south of the project site, which is below the significance threshold of 10 in a million. This HRA assumes an outdoor exposure for the entire length of construction and does not account for any reductions from the time spent indoors where air quality tends to be better. Thus, this analysis is overstated. In conclusion, DPM construction emissions would result in a less than significant impact. The Appellant fails to provide evidence to the contrary.

Appellant's Statements: Greenhouse Gas Emissions

- A 15% reduction in trip counts from local transit should not have been included in the calculation of the No-Action Taken (NAT) scenario because “no action has been taken and the proposed building is where it is.”
- An 85.4% reduction in area source emissions due to the non-inclusion of hearths is inappropriate because hearths would be physically impossible to install to begin with and would violate SCAQMD rules.
- The DEIR does not describe the source of the reduction from the NAT Scenario for water and wastewater.
- No reductions for CALGreen Code should be included and would not “reach this number anyway.”
- The NAT Scenario is subject to question because after the California Supreme Court's opinion in *Center for Biological Diversity et al., v. California Department of Fish and Wildlife*, the City should not assume that a local land used project should be compared to AB 32 standards or that compliance with regulatory programs is the standard – rather, more efficiency than the statewide average is required.

Staff Response

The Appellant asserts that the project should not have taken a 15% reduction in trip counts due to the use of local transit. However, the Appellant makes a strange argument that this is not allowed because the project has not yet been built. However, the point of the NAT comparison analysis, as explained on page IV.C-32 of the DEIR, is to calculate what difference in GHG emissions a project would have over existing conditions in the absence of greenhouse gas emissions reduction measures. The Appellant also claims that the local transit reduction is not appropriate because of the location of the project. However, the project is located along Wilshire Boulevard, a major transit corridor with a dedicated Bus Rapid Transit bus lane. Specifically, the project site is served by Metro Local 4 and Rapid 704, which had a collective estimated ridership of 17,604,510 in 2015. Notwithstanding their flawed logic, the reduction for transit/walk-ins shown in Table IV.J-4 in Section IV.J. Traffic, Access, and Parking, of the Draft EIR accounts not only for transit usage to and from the project site, but also for those who may walk to and from the project site from the surrounding office buildings, residential areas, institutions, commercial buildings, or other transit stops. The transit/walk-in estimates are reasonable given the proximity to the aforementioned Metro Rapid Bus lines, Wilshire Bus Rapid Transit lanes, as well as numerous other transit routes and stops in the surrounding area of the project. In addition, the guidelines outlined in the LADOT *Traffic Study Policies and Procedures* allow for a transit/walk-in credit of 15 percent for a development within 0.25 mile walking distance of a Metro Rapid Bus

stop. The trip generation estimates outlined in the Transportation Study were based on ITE Trip Generation methodology, other trip-generation studies, professional engineering guidelines and engineering judgment, which allow trip-generation rates to be modified to reflect the presence of public transportation service, ridesharing or TDM measures, enhanced pedestrian and bicycle trip making opportunities, or other special characteristics of the site or surrounding area. For these reasons, in the professional opinions of LADOT and the traffic consultant, the transit/walk-in percentage credits applied to the project are appropriate, and the commenter provides no evidence to the contrary. LADOT's concurrence with this assessment is evidenced by both the MOU contained in Appendix A to the Transportation Study and the related Transportation Assessment Letter in Appendix J.2 of the Draft EIR. Therefore, the conclusions of the transit/walk-in reduction are based on substantial evidence in the record.

In addition, at least 4 percent of the residential units would be set aside for very low-income residents (16 of the 376 units). CalEEMod applies a percent VMT reduction based on the percentage of units that are deed-restricted below market housing. This reduction in VMT is calculated internal to CalEEMod based on the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*. This results in an additional 1.5 percent reduction for a total VMT reduction of 16.5 percent.

Regarding their statement that the 85.4% reduction for area source emissions is inappropriate, again the Appellant fails to understand the intent of the NAT comparison analysis. As explained on page IV.C-39 of the DEIR, the NAT scenario was calculated using the CalEEMod emissions inventory model, which *includes* hearths and landscape maintenance equipment. The NAT scenario is what the emissions would be in the *in the absence of* GHG emissions reductions measures and policies, such as SCAQMD's Healthy Hearts Initiative and SCAQMD Rule 445.⁷ Therefore, the Appellant's statement about the reduction is wrong because it is based on a misunderstanding of the NAT comparison analysis. Finally, contrary to the Appellant's statements, the source of the reduction from the NAT Scenario for water and wastewater is found on page IV.C-42 of the DEIR, which states that in compliance with the CALGreenCode, a 20% minimum reduction in water usage and wastewater generation was applied. As discussed in the CalEEMod User Manual, Appendix A: Calculation Details for CalEEMod, CalEEMod includes the 2008 CALGreen Code (CCR Title 24 part 6 Energy Efficiency Standards) in the energy use modeling. Therefore, as explained on page IV.C-41 of the DEIR, the 15 percent reduction is appropriate because it complies with the regulatory requirements of the CALGreen Code (i.e., the 2008 CALGreen Code) that is included in CalEEMod. The Appellant provides no evidence to the contrary.

Contrary to the Appellant's statement, the DEIR did not use the NAT comparison analysis as the standard with which to measure GHG impacts. Rather, the significance determination for GHG impacts was made based on whether the project was found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions: Executive Orders S-3-05 and B-30-15; SB 375; SCAG's Sustainable Communities Strategy; and the City of Los Angeles Green Building Ordinance. As noted on page IV.C-35 of the DEIR, CEQA Guidelines Section 15064.4 does not establish a threshold of significance for a project's climate change impacts, and neither CARB, SCAQMD, nor the City of Los Angeles have adopted a project-level significance threshold that are applicable to the project. Therefore, the City, as lead agency, selected a significance threshold based on recent direction from the California Supreme Court in *Center for Biological Diversity et al., v. California Department of Fish and Wildlife, and The Newhall Land and Farming Company*, 62 Cal.4th 204 (2015). In the latter case, the Supreme Court set out various pathways to compliance and, contrary to the Appellant's statement, did not define one sole standard for assessing GHG impacts. Rather, the Court stated that, among various pathways, a lead agency could assess a project's climate change impacts and consistency with AB 32's goals by looking to compliance with regulatory programs designed to reduce GHG emission from particular

7 FAQ Healthy Hearths, <http://www.aqmd.gov/healthyhearths/faq>, accessed December 29, 2016.

activities. Executive Orders S-3-05 and B 30-15, SB 375, SCAG's Sustainable Communities Strategy, and the City of Los Angeles Green Building Ordinance are all regulatory programs applicable to the project that are designed to reduce GHG emissions. Therefore, consistent with direction from the Supreme Court, the DEIR assessed the project's consistency with these programs in determining whether the project's impacts to climate change would be significant. The Appellant provides no evidence that analysis of consistency with regulations is an inappropriate methodology.

Appellant's Statements: Water Infrastructure

- Concerning fire protection impacts, the DEIR did not address whether there is sufficient water pressure in the current infrastructure to meet the Los Angeles Fire Department (LAFD) requirements.
- The project should have already coordinated with LADWP to ensure that necessary improvements are implemented with impacts to infrastructure and public services evaluated in the DEIR.

Staff Response

Contrary to the Appellant's statements, potential fire protection service impacts were adequately analyzed in the DEIR in Section IV.I.2, Public Services—Fire Protection. As explained on page IV.I.2-16 of the DEIR, there are less-than-significant impacts on fire flow requirements. The project will be required to comply with Project Design Feature K.1-2, which states that the project applicant will coordinate with LADWP to ensure that necessary improvements to the off-site fire water system are implemented so that the system is able to provide the required fire flow, as determined by LAFD. Contrary to the Appellant's statement, this PDF is a commitment to action and is a condition of approval for the project. Therefore, the Appellant's assertion that this action should "have been done already" is incorrect. Furthermore, as part of the City's ministerial building permit process, within its Master Model, LADWP accounts for other related projects in the vicinity when reviewing infrastructure capacity and the ability to accommodate a given project. In addition, the project is also subject to the City's routine construction permitting process, which includes coordinating with LADWP to ensure that local fire flow infrastructure meets current code standards for the type and intensity of land uses involved. Finally, the project will be required to comply with Project Design Feature I.2-1, which states that prior to the issuance of a building permit, the project applicant shall submit a plot plan to the LAFD for approval that includes various design features, including, but not limited to: access for LAFD apparatus and personnel; access roads, including fire lanes; installation of required fire hydrants. Therefore, the project has less-than-significant impacts on fire protection services and the Appellant provides no evidence to the contrary.

Appellant's Statements: Traffic

- The *2006 LA City CEQA Thresholds Guide* requires that "neighborhood intrusion" impacts for both Granville and Stoner Avenues be assessed.
- The traffic impacts at Barrington Avenue and Wilshire Boulevard and along Stoner Avenue and Granville Avenue without supermarket taken as the baseline are significant and require mitigation.

Staff Response

Contrary to the Appellant's assertion that the *2006 LA City CEQA Thresholds Guide* required a neighborhood intrusion analysis, as outlined on page IV.J-29 of Section IV.J, Traffic, Access, and Parking, of the DEIR, the screening criterion in the *2006 LA CEQA Thresholds Guide* is whether

a project would generate more than 120 daily vehicle trips on a local residential street. As the project would result in a net decrease in daily traffic to/from the project site, including along the study residential street segments, the criteria is not met and a neighborhood intrusion analysis is not required. Nonetheless, impacts to three residential street segments, including both Granville and Stoner Avenues, were analyzed according to LADOT's *Traffic Study Policies and Procedures*. As shown in Table IV.J-7 of the DEIR, the project results in a net decrease in daily traffic and impacts on the analyzed street segments are less than significant. The Appellant provides no evidence to the contrary.

Section VI, Baseline Discussion, of the Draft EIR provides a discussion of the theoretical operational effects of the project that would occur if there was no historical supermarket use on the project site and no existing supermarket building. Under this hypothetical scenario, the project traffic would exceed the operational significance thresholds at Intersection 4, Barrington Avenue and Wilshire Boulevard and at two street segments (Stoner Avenue north of Texas Avenue and Granville Avenue north of Texas Avenue). As discussed, the scenario with no historical supermarket use overstates traffic volumes and was provided for informational purposes only. The theoretical increase in traffic is not considered to be a significant impact under CEQA. As stated above in the first Staff Response above, the Transportation Study and DEIR appropriately imputed trips to the supermarket in establishing the baseline. The Appellant does not provide substantial evidence that this methodology is inappropriate.

Appellant's Statements: Alternatives Analysis

- The City rejected an alternative site because the developer does not own it; however, this is only a factor to consider.

Staff Response

As explained in Section V, Alternatives, of the Draft EIR, in accordance with Section 15126.6(f) of the State CEQA Guidelines, the primary reason for rejecting an alternative site from further analysis was that it is not expected that the applicant can reasonably acquire, control or have access to a suitable alternative site that would provide for the uses and square footage proposed by the project. However, contrary to the Appellant's assertion that this was the only factor that City considered, CEQA Guidelines Section 15126.6(C) allows an alternative analysis to include an evaluation of how the alternative meets project objectives. The DEIR analyzed how each of the alternatives would meet the project objectives and whether it would avoid the project's significant and unavoidable impact. Therefore, the Appellant is incorrect in stating that the City rejected alternatives based solely on the inability of the developer to acquire an alternative site.

Appellant's Statements: Energy Impacts

- The DEIR did not contain an adequate analysis of the project's energy impacts in violation of Appendix F of the CEQA Guidelines.

Staff Response

The Appellant is wrong. A full analysis of the project's energy impacts was presented in the Draft EIR Section VII – Other CEQA Considerations beginning on page VII-12, which concluded that the project has less-than-significant energy impacts during construction and operation.

Conclusion

The Appellant has failed to provide substantial evidence to dispute the City's analysis of the project in the EIR and does not adequately disclose how the City erred in its actions relative to the EIR and the approval of the associated entitlements. As such, Planning staff respectfully recommends that the appeal be denied in part and granted in part to allow staff to include the conclusions of the Health Risk Assessment as described herein and to further clarify the traffic baseline.

Sincerely,



Alejandro A. Huerta
Planning Assistant
Major Projects, Department of City Planning

Attachment:

Health Risk Assessment

HEALTH RISK ASSESSMENT

Landmark Apartments

Prepared by:

Eyestone Environmental, LLC

January 2017

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APPENDICES

- Appendix 1 Carcinogenic and Non-Carcinogenic Risk Calculations**
- Appendix 2 Emission Calculations and CalEEMod Output File**
- Appendix 3 DPM Construction HRA AERMOD Annual Scalar Concentration
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1.0 Executive Summary

1.1 Findings

This report provides an analysis of potential health risk impacts related to the proposed construction of the Landmark Apartments (Project) in the City of Los Angeles, California. The analyses evaluated the incremental change in health risk concentration exposure from diesel exhaust/diesel particulate matter (DPM) emitted by heavy-duty construction equipment during Project construction. The findings of the analysis are as follows:

- For carcinogenic exposures, the increase in risk is calculated to be 6.2 in one million, which is less than the applicable threshold of 10 in one million for sensitive receptors in close proximity to the Project Site, resulting in a less-than-significant impact.
- For chronic non-carcinogenic exposures, the increase in the respiratory hazard index was estimated to be 0.1 which is less than the applicable threshold of a chronic index of 1.0 for sensitive receptors in close proximity to the Project site, resulting in a less-than-significant impact.

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2.0 Introduction

The Office of Environmental Health Hazard Assessment (OEHHA) adopted a new version of the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Guidance Manual) in March of 2015.¹ It should be noted that the Guidance Manual was adopted approximately one year after the filing of the NOP for the proposed Project, dated March 6, 2014. The Guidance Manual was developed by OEHHA, in conjunction with the California Air Resources Board (CARB), for use in implementing the Air Toxics “Hot Spots” Program (Health and Safety Code Section 44360 et. seq.). The Air Toxics “Hot Spots” Program requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics “Hot Spots” Program are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. CARB acknowledges that the Guidance Manual does not include guidance for CEQA and that it would be “handled by individual [Air Pollution Control] Districts.”²

The intent in developing the Guidance Manual was to provide health risk assessment (HRA) procedures for use in the Air Toxics Hot Spots Program or for the permitting of new or modified stationary sources. Air districts are to determine which facilities will prepare an HRA based on a prioritization process. The Guidance Manual provides recommendations related to cancer risk evaluation of short-term projects. As discussed in Section 8.2.10 of the Guidance Manual, “[t]he local air pollution control districts sometimes use the risk assessment guidelines for the Hot Spots program in permitting decisions for short-term projects such as construction or waste site remediation.” Short-term projects that would require a permitting decision by South Coast Air Quality Management District (SCAQMD) typically would be limited to site remediation (e.g., stationary soil vapor extractors) and would not be applicable to the Project. The new Guidance Manual does not provide specific recommendations for evaluation of short-term use of mobile sources (e.g., heavy-duty diesel construction equipment).

¹ *Office of Environmental Health Hazard Assessment, Air Toxicology and Epidemiology, Adoption of Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. March 6, 2015, www.oehha.ca.gov/air/hot_spots/hotspots2015.html.*

² *CARB, Risk Management Guidance for Stationary Sources of Air Toxics, July 23, 2015, p. 19, www.arb.ca.gov/toxics/rma/rmgssat.pdf.*

Eyestone Environmental, LLC (Eyestone) coordinated with the SCAQMD to determine if SCAQMD adopted the new version of the Guidance Manual for use in analysis of construction health risk impacts under CEQA. Jillian Wong, Ph.D., SCAQMD CEQA Program Supervisor, provided the following information regarding use of the Guidance Manual.³

At this time we do not have recommendations for how to conduct a HRA for CEQA purposes using the revised OEHHA guidelines, but have been tasked with going through a public process to develop those recommendations to bring to the Board for approval. We have not formed the working group yet. However, you should consult with the lead agency to ensure that the analysis and intended methodologies are sufficient as substantial evidence for the CEQA document. The revised OEHHA methodology is being used by SCAQMD for determining operational health impacts for permitting applications and also for all CEQA projects where SCAQMD is the lead agency.

As acknowledged by the SCAQMD, the revised Guidance Manual is only being used where SCAQMD is the lead agency (e.g., for the adoption of rules, regulations or plans) or in determining operational health impacts for permitting applications under SCAQMD Rule 1401 (New Source Review of Toxic Air Contaminants). Examples of projects subject to SCAQMD Rule 1401 include power plants, refineries, chrome plating facilities, and gasoline stations. The City of Los Angeles is the lead agency and proposed construction activities would not be subject to SCAQMD Rule 1401. As such, the methodology utilized in this HRA remains consistent with currently available SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (SCAQMD Guidance).⁴

Per SCAQMD's recommendation, consultation with the lead agency was conducted. The *L.A. City CEQA Thresholds Guide* (Thresholds Guide) states that "impacts from toxic air contaminants can occur during either the construction or operational phases of a project. During certain construction activities, potential releases of toxic air contaminants could occur during site remediation activities or during building demolition. Toxic air contaminants may also be released during industrial or manufacturing processes, or other

³ Jillian Wong, Ph.D., SCAQMD CEQA Program Supervisor, Personal Communication via email, August 8, 2016.

⁴ SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, 2003, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.

activities that involve the use, storage, processing, or disposal of toxic materials.”⁵ The Thresholds Guide does not specifically recommend an HRA for short-term DPM emissions from construction activities. The Thresholds Guide also sets forth the following factors for consideration on a case-by-case basis in making a determination of significance with regard to toxic air contaminants: the regulatory framework for the toxic material(s) and process(es) involved; the proximity of the toxic air contaminants to sensitive receptors; the quantity, volume, and toxicity of the contaminants expected to be emitted; the likelihood and potential level of exposure; and the degree to which project design will reduce the risk of exposure. Based on this information, the methodology utilized in the Draft EIR remains consistent with City of Los Angeles guidance for preparation of HRAs.

OEHHA's new Guidance Manual provides Age Sensitivity Factors (ASFs) to account for potential increased sensitivity of early-in-life exposure to carcinogens. A review of relevant guidance was conducted to determine applicability of the use of early life exposure adjustments to identified carcinogens. For risk assessments conducted under the auspices of The Air Toxics “Hot Spots” Information and Assessment Act (AB 2588, Connelly, Statutes of 1987; Health and Safety Code Section 44300 et seq.) a weighting factor is applied to all carcinogens regardless of purported mechanism of action. The use of these factors would not be applicable to this HRA as neither the Lead Agency nor SCAQMD have developed recommendations on whether these factors should be used for CEQA analyses of potential DPM construction impacts. For this assessment, the HRA relied upon United States Environmental Protection Agency (USEPA) guidance relating to the use of early life exposure adjustment factors (Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens, EPA/630/R-003F) whereby adjustment factors are only considered when carcinogens act “through the mutagenic mode of action.” The USEPA has identified 19 compounds that elicit a mutagenic mode of action for carcinogenesis. For DPM, polycyclic aromatic hydrocarbons (PAHs) and their derivatives, which are known to exhibit a mutagenic mode of action, comprise less than 1 percent of the exhaust particulate mass. To date, the USEPA reports that whole diesel engine exhaust has not been shown to elicit a mutagenic mode of action. Therefore, early life exposure adjustments were not considered in this HRA.

As SCAQMD and the City of Los Angeles have not provided guidance on use of the new Guidance Manual at this time, any additional analysis of short-term construction health risk impacts using this guidance would not be warranted.

Although a construction HRA is not required per the Thresholds Guide, for informational purposes only, an HRA has been prepared in accordance with current

⁵ *City of Los Angeles, CEQA Thresholds Guide, 2006, p. B.3-2.*

SCAQMD Guidance in response to public comments and to provide the City with additional supporting evidence that the Project would result in a less-than-significant health risk impact from construction of the Project.

3.0 Health Risk Assessment

This section of the HRA includes a discussion of the assessment process, source identification and characterization, identification of chemicals of concern, risk characterization, and conclusions. As discussed above in Section 2.0, the HRA was conducted in accordance with SCAQMD Guidance and Final-Localized Significance Threshold Methodology (LST Guidelines).^{6,7} DPM modeled concentrations were used to calculate cancer risk and chronic hazard index at each relevant receptor. The acute hazard index was not quantified since an inhalation Reference Exposure Level (REL) has not been determined by the OEHHA for DPM.

3.1 The Assessment Process

The risk assessment process is typically described as consisting of four basic steps: (1) hazard identification; (2) exposure assessment; (3) dose-response assessment; and (4) risk characterization. In the first step, hazard identification involves determining the potential health effect which may be associated with emitted pollutants. The purpose is to identify qualitatively whether a pollutant is a potential human carcinogen or is associated with other types of adverse health effects. Depending on the chemical, these health effects may include short-term ailments or chronic diseases. The dose-response assessment is designed to characterize the relationship between the amount or dose of a chemical and its toxicological effect on the human body. Responses to toxic chemicals will vary depending on the amount and length of exposure. For example, short-term exposure to low concentrations of chemicals may produce no noticeable effect, but continued exposure to the same levels of chemicals over a long period of time may eventually cause harm. The purpose of the exposure assessment is to estimate the extent of exposure to each substance for which risk will be evaluated. This involves emission quantification, modeling of environmental transport, identification of chemicals of concern, identification of exposure routes, identification of exposed populations, and estimation of long-term exposure levels. Risk characterization is an integration of the health effects and public exposure

⁶ SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, 2003, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.

⁷ SCAQMD, *Final-Localized Significance Threshold Methodology*, 2008.

information developed for emitted pollutants to provide a quantitative probability of adverse health effects.

3.2 Source Identification and Characterization

3.2.1 Source Identification

As indicated above, the primary source of potential air toxics associated with proposed Project construction is DPM from on-site heavy-duty construction equipment. The SCAQMD recommends that an HRA be conducted for substantial sources of long-term DPM operational sources (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.⁸ While Project construction would not represent a long-term source of DPM emissions,⁹ the SCAQMD Guidance was used for purposes of modeling parameters and assumptions.

3.2.2 Source Characterization

As described in detail in Section II, Project Description, of the Draft EIR, Project construction is anticipated to occur over approximately 30 months. Construction of the Project would commence with demolition of the existing supermarket structure. It is estimated that approximately 15,600 cubic yards (cy) of demolition material, including building material and concrete, would be exported from the Project Site during the demolition phase. Partial demolition of the subterranean parking garage would then be completed in order to install a pile foundation system for the residential building. As shown in Figure II-15 in Section II, Project Description, of the Draft EIR, the demolition would occur within an approximately 13,300-square-foot area in the parking garage. Pile installation would require an export of approximately 16,000 cy of soil from below the existing foundation of the parking garage. Following installation of the pile foundation system, building construction, paving/concrete installation, and landscape installation would occur. In addition, up to 3,000 cy of soil import may be required to provide for landscaping installation in the open space area and perimeter planters.

Total DPM emissions over the duration of Project construction were calculated using the SCAQMD recommended California Emissions Estimator Model (CalEEMod) and consistent with the methodology for calculating criteria pollutant emissions provided in

⁸ SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions*, August 2003.

⁹ *Project construction is short term—only 30 months. Moreover, the Project is residential, commercial, and open spaces uses, none of which are associated with heavy-duty truck use or significant DPM emissions.*

Section IV.B, Air Quality, of the Draft EIR. The calculations of the emissions generated during Project construction activities reflect the types and quantities of construction equipment and haul trucks that would be used to complete the proposed construction activities. As the assumptions used in the air quality analysis were developed to characterize a worst-case peak day of construction by phase, equipment usage assumptions were modified to reflect average daily use. As an example, the heavy-duty construction equipment mix provided in the air quality analysis for the Parking Structure Upgrade reflects all equipment needed for the largest concrete pour day. Thus, average daily DPM emissions from the Parking Structure Upgrade would be substantially less since concrete pours would not occur every day during that phase and the average concrete pour would require less heavy-duty construction equipment.

Subsequent to completion of the Final EIR, SCAQMD released CalEEMod 2016.3.1 on October 14, 2016. Therefore, the calculation of DPM emissions was conducted using this newly released version of CalEEMod. Also, the CalEEMod output files provided in Appendix D of the Draft EIR had a construction start date of January 1, 2015. For purposes of this HRA, the construction start date was changed to January 1, 2017 as it would better reflect the target start date of construction. Please refer to Appendix 2 of this HRA for the CalEEMod output file for the calculation of total DPM emissions over Project construction.

3.3 Identification of Chemicals of Concern

DPM was evaluated for potential health effects in two categories, carcinogenic and non-carcinogenic. Most regulatory agencies consider carcinogens to pose a risk of cancer at all exposure levels (i.e., a “no-threshold” assumption); that is, any increase in dose is assumed to be associated with an increase in the probability of developing cancer. In contrast, non-carcinogens generally are thought to produce adverse health effects only when some minimum exposure level is reached (i.e., a threshold).

3.4 Exposure Quantification

Consistent with SCAQMD’s Localized Significance Threshold (LST) Methodology, this HRA used USEPA’s Regulatory Model AERMOD to assess the downwind extent of DPM concentrations from proposed construction activities. AERMOD accounts for a variety of refined, site-specific conditions that facilitate an accurate assessment of Project impacts. AERMOD’s air dispersion algorithms are based upon a planetary boundary layer turbulence structure and scaling concepts, including the treatment of surface and elevated sources in simple and complex terrain.

Exhaust emissions from construction equipment were treated as a set of side-by-side elevated volume sources. The release height was assumed to be five meters. This represents the mid-range of the expected plume rise from frequently used construction equipment during daytime atmospheric conditions. All construction exhaust emissions were assumed to take place over a 30-month duration on weekdays between 8 A.M. to 4 P.M. (8-hour period).

Plume depletion due to dry removal mechanisms was assumed (i.e., DRYDPLT) for DPM. DPM emissions were assigned particle size bins of 2.5 and 10 $\mu\text{g}/\text{m}^3$ with corresponding weight fractions of 0.92 and 0.08. A particle density of 2.3 grams per cubic centimeter was assigned to all size bins.

Air dispersion models require additional input parameters including local meteorology and receptors. Due to the sensitivity to individual meteorological parameters such as wind speed and direction, the USEPA recommends that meteorological data used as input into dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. In response to this recommendation, meteorological data from the SCAQMD West Los Angeles-VA Hospital monitoring station (Source Receptor Area 2) were used to represent local weather conditions and prevailing winds. The meteorological monitoring station is located at the intersection of Wilshire Boulevard and Sawtelle in the City of Los Angeles, approximately 0.5 mile east of the Project Site.

A fence line grid and a radial receptor grid were used to represent adjacent and nearby sensitive land uses. Receptors were spaced five meters apart along the fence line and a radial receptor grid was centered on the source and built in ten degree increments at the following downwind distances from the proposed project boundary: 25, 50, 100, and 200 meters. All receptors were placed within the breathing zone at two meters above ground level, which is recommended by SCAQMD where receptors are within 200 meters of the source of emissions. Elevations for both sources and receptors were included using the AERMOD terrain processor with a geocoded aerial.

A graphical representation of the source-receptor grid network is presented in Appendix 3.

3.5 Risk Characterization

3.5.1 Carcinogenic Chemical Risk

As discussed above, carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Any exposure, therefore, will have

some associated risk. Health risks associated with exposure to carcinogenic compounds at sensitive land uses in close proximity to the proposed Project can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The URF is a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It represents an upper bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu\text{g}/\text{m}^3$) over a 70 year lifetime.

The equation used to calculate the potential excess cancer risk is:

$$\text{Risk}_i = C_i \times \text{CP}_i \times \text{DBR} \times \text{EVF}$$

Where:

- Risk_i = Lifetime Excess Cancer Risk from exposure to chemical_i
- C_i = Representative Air Concentration for chemical_i ($\mu\text{g}/\text{m}^3$)
- CP_i = Cancer Potency_i ($\text{mg}/\text{kg}\text{-day}$)⁻¹
- DBR = Daily Breathing Rate (L/kg body weight-day)
- EVF = Exposure Value Factor (unitless)

An estimate of an individual's incremental excess cancer risk from exposure to Project construction DPM emissions is calculated by summing the chemical-specific excess cancer risks.

3.5.2 Non-Carcinogenic Chemical Risk

The potential for chronic non-carcinogenic health effects is evaluated by calculating the total hazard index (HI) for the Project construction DPM emissions. This HI represents the sum of the hazard quotients (HQs) developed for each individual project-related chemical, where a HQ is the ratio of the representative air concentration of the chemical to the chemical specific non-cancer REL. The non-cancer RELs represent the daily average exposure concentration at (or below) which no adverse health effects are anticipated. The equations used to calculate the chemical-specific HQs and HIs are:

$$\begin{aligned} \text{HQ}_i &= C_i/\text{REL}_i \\ \text{HI} &= \sum \text{HQ}_i \end{aligned}$$

Where:

- HQ_i = Hazard Quotient for chemical_i
C_i = Average Daily Air Concentration for chemical_i (µg/m³)
REL_i = Noncancer Reference Exposure Level for chemical_i (µg/m³)
HI = Hazard Index

3.6 Conclusions

The results from the health risk calculations provide an estimate of the potential risks and hazards to individuals through inhalation of Project construction DPM emissions over a 30-month duration. The estimated risks and hazards include: lifetime excess cancer risk estimates, and cumulative chronic HI estimates for the receptor locations of concern.

As shown in Appendix 1, the results of the HRA yields a maximum off-site individual cancer risk of 6.2 in a million at the residences located to directly south of the Project site. The maximum chronic risk of 0.01 occurs within this same residential area south of the Project site. As the Project would not emit carcinogenic or toxic air contaminants that result in impacts which exceed the maximum individual cancer risk of ten in one million or the chronic index of 1.0, Project-related toxic emission impacts would be less than significant.

4.0 Uncertainty Assessment

Evaluating carcinogenic pollutant concentrations based on OEHHA methodology and SCAQMD Guidance has an implied uncertainty. These methodologies were developed to provide a conservative health risk estimate. The conservative nature of this methodology relies on a number of inputs designed to prevent an underestimation of risk. The following discusses the conservative nature of the risk assessment analysis assumptions utilized in this analysis.

The cancer risk from DPM occurs mainly through inhalation. Output from the dispersion analysis was used to estimate the DPM concentrations. The cancer risk estimate is then calculated based on those estimated DPM concentrations using the risk methodology promulgated by OEHHA. The risk assessment guidelines established by SCAQMD and included in the analysis are designed to produce conservative (high) estimates of the risk posed by DPM, due to the following factors:

- As a conservative measure, the SCAQMD does not recognize indoor adjustments for residential uses. However, studies have shown that the typical person spends approximately 87 percent of their time indoors, 5 percent of their time outdoors, and 7 percent of their time in vehicles. A DPM exposure assessment showed that an average indoor concentration was 2.0 $\mu\text{g}/\text{m}^3$, compared with an outdoor concentration of 3.0 $\mu\text{g}/\text{m}^3$.¹
- OEHHA has a toxicity database that lists TACs and their URFs. A URF describes the cancer potency of a particular TAC and is used to estimate cancer risk.⁴ Most of these URFs are extrapolated from animal studies based on continuous exposure to particular toxin. This method can have some significant uncertainties. For example, a chemical that is carcinogenic by one route of exposure is considered to be carcinogenic for all routes of exposure at its maximum potency. Also, it is not realistic for a receptor to be exposed to a continuous concentration of TACs over time. In reality, receptors are exposed to constantly changing concentration levels that would expose receptors to lower levels of TACs over time than analyzed in this analysis.
- The use of the SCAQMD meteorological data set and conservative exposure assumptions (e.g., assumes receptor would be located outside in the same

¹ South Coast Air Quality Management District (SCAQMD), *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions*, 2002.

location 24 hours per day for the entire construction duration) amongst others, likely also lead to overestimated risks.

As such, uncertainty in the health risk analysis is conservative in nature and is designed to prevent any undisclosed impacts to human health. Concentrations reported in this report represent a worst-case scenario that is likely an over estimation of actual pollutant concentrations.

Appendix 1

Carcinogenic and Non-Carcinogenic Risk Calculations

Landmark Apartments
DPM Risk Calculations Offsite Exposure (Construction)

Landmark Apartments (Off-site Sensitive Receptor)

Source <i>(a)</i>	Mass GLC				Weight Fraction <i>(d)</i>	Contaminant <i>(e)</i>	Carcinogenic Hazard			Noncarcinogenic Hazard / Toxicological Endpoints*		
	$(\mu\text{g}/\text{m}^3)$ <i>(1 g/s)</i>	DPM Emissions <i>(g/s)</i>	Adjusted Concentration <i>(\mu\text{g}/\text{m}^3)</i> <i>(mg/m3)</i>				URF $(\mu\text{g}/\text{m}^3)^{-1}$ <i>(f)</i>	CPF $(\text{mg}/\text{kg}/\text{day})^{-1}$ <i>(g)</i>	RISK <i>(h)</i>	REL $(\mu\text{g}/\text{m}^3)$ <i>(i)</i>	RfD $(\text{mg}/\text{kg}/\text{day})$ <i>(j)</i>	RESP <i>(k)</i>
Construction DPM (Construction Duration)	28.19000	0.01556	0.43874	4.4E-04	1.00E+00	Diesel Exhaust Particulate	3.0E-04	1.1E+00	6.2E-06	5.0E+00	1.4E-03	7.3E-03
Total									6.2E-06	3.6E+04	1.0E+01	7.28E-03

DPM Total

6.2 in a million

* Key to Toxicological Endpoints

Note:

Exposure factors used to calculate contaminant intake

RESP	Respiratory System	exposure frequency (days/year)	365
CNS/PNS	Central/Peripheral Nervous System	exposure duration (years)	3.5
CV/BL	Cardiovascular/Blood System	inhalation rate (m3/day)	0.3
KIDN	Kidney	averaging time(cancer) (days)	25550
GI/LV	Gastrointestinal System/Liver	averaging time(noncancer) (days)	14600
REPRO	Reproductive System (e.g., teratogenic and developmental effects)		
EYES	Eye irritation and/or other effects		

Appendix 2

Emission Calculations and CalEEMod Output File

Construction DPM Emissions Calculations (Total over Construction Duration)

Construction Months	Start Date	End Date	Total Number of Construction Days	Total On-Site Haul Truck and Off-Road DPM Emissions (total tons)	Average Daily DPM Emissions (lbs/day)	Model Input (grams per second)
30	1/1/2017	6/30/2019	650	0.321	0.988	0.016

Notes

Please see attached CalEEMod output file.

Model Input (grams per second) are calculated to reflect only construction days (five days per week). The model input is calculated based on the following: Total DPM Emissions / Total Number of Construction Days x 2,000 lbs/ton / 8 hours per day / 60 minutes per hour / 60 seconds per minute x 453.54 grams per pound.

Landmark Apartments - Los Angeles-South Coast County, Annual

Landmark Apartments
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	5.40	1000sqft	0.12	5,400.00	0
Condo/Townhouse High Rise	376.00	Dwelling Unit	5.88	376,000.00	1075
Strip Mall	4.70	1000sqft	0.11	4,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9	Operational Year	2019		

Utility Company Los Angeles Department of Water & Power

CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Site Specific

Off-road Equipment - SP

Off-road Equipment - SP

Off-road Equipment - SP

Off-road Equipment - SP

Off-road Equipment - SP

Off-road Equipment - SP

Trips and VMT - SP

Demolition -

Grading -

Construction Off-road Equipment Mitigation - SP

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstructionPhase	NumDays	20.00	86.00
tblConstructionPhase	NumDays	10.00	43.00
tblFleetMix	FleetMixLandUseSubType	Health Club	Condo/Townhouse High Rise
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse High Rise	Health Club
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tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Demolition

tblOffRoadEquipment	PhaseName		Demolition
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tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
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tblTripsAndVMT	WorkerTripNumber	274.00	0.00
tblTripsAndVMT	WorkerTripNumber	55.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr										MT/yr						
2017						0.1434											
2018						0.1386											
2019						0.0392											
Maximum						0.1434											

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/31/2017	5	22	
2	Grading	Grading	2/1/2017	2/28/2017	5	20	
3	Parking Structural Upgrade	Site Preparation	3/1/2017	4/30/2017	5	43	
4	Building Construction	Building Construction	5/1/2017	2/28/2019	5	479	
5	Architectural Coating	Architectural Coating	9/1/2018	2/28/2019	5	129	
6	Paving	Paving	3/1/2019	6/30/2019	5	86	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 761,400; Residential Outdoor: 253,800; Non-Residential Indoor: 15,150; Non-Residential Outdoor: 5,050; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	4.00	78	0.48
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Cranes	1	4.00	231	0.29
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Welders	1	4.00	46	0.45
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Cranes	2	8.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Parking Structural Upgrade	Cement and Mortar Mixers	1	4.00	9	0.56
Parking Structural Upgrade	Concrete/Industrial Saws	1	4.00	81	0.73
Parking Structural Upgrade	Cranes	1	4.00	231	0.29
Parking Structural Upgrade	Plate Compactors	1	4.00	8	0.43
Parking Structural Upgrade	Pumps	1	4.00	84	0.74
Parking Structural Upgrade	Rubber Tired Dozers	0	4.00	247	0.40
Parking Structural Upgrade	Tractors/Loaders/Backhoes	0	4.00	97	0.37
Parking Structural Upgrade	Welders	1	4.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Pumps	1	4.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Architectural Coating	Air Compressors	2	4.00	78	0.48
Paving	Cement and Mortar Mixers	1	4.00	9	0.56
Paving	Pavers	1	4.00	130	0.42
Paving	Paving Equipment	1	4.00	132	0.36
Paving	Rollers	1	4.00	80	0.38
Paving	Skid Steer Loaders	2	8.00	65	0.37
Paving	Tractors/Loaders/Backhoes	1	4.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	0.00	0.00	227.00	14.70	6.90	0.10	LD_Mix	HDT_Mix	HHDT
Grading	7	0.00	0.00	1,143.00	14.70	6.90	0.10	LD_Mix	HDT_Mix	HHDT

Parking Structural Upgrade	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust						0.0000											
Off-Road						0.0163											
Total						0.0163											

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling						1.0000e-005											
Vendor						0.0000											
Worker						0.0000											
Total						1.0000e-005											

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust						0.0000											
Off-Road						0.0120											
Total						0.0120											

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	tons/yr										MT/yr					
Hauling																
Vendor																
Worker																
Total																

3.4 Parking Structural Upgrade - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																
Off-Road																
Total																

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																
Total																

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																
Total																

3.5 Building Construction - 2019

Unmitigated Construction On-Site

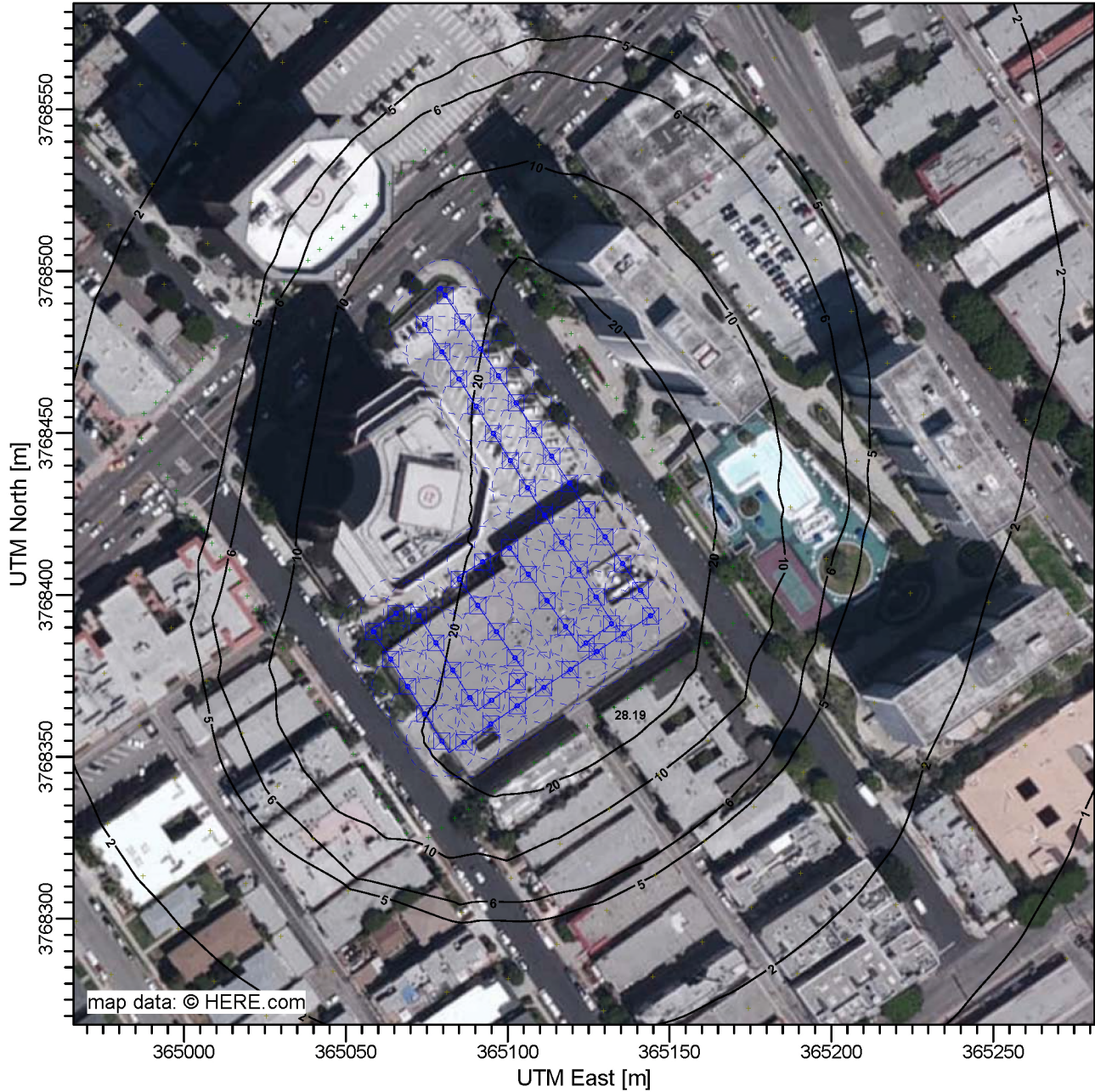
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																

Appendix 3

DPM Construction HRA AERMOD Annual
Scalar Concentration Isopleth and Output File

PROJECT TITLE:

Landmark Apartments Health Risk Assessment DPM Exhaust



COMMENTS:

One gram per second scalar emissions calculation.

SOURCES:

1

RECEPTORS:

616

OUTPUT TYPE:

Concentration

MAX:

28.2 ug/m³

SCALE:

1:1,983

0 0.05 km

DATE:

12/15/2016

PROJECT NO.:

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.2.0
** Lakes Environmental Software Inc.
** Date: 12/14/2016
** File: C:\Users\HESI\Dropbox\Landmark Apts\HRAIDPM\DPM.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLE ONE C:\Users\HESI\Dropbox\Landmark Apts\HRAIDPM\DPM.isc
  MODEL OPT CONC DDEP FLAT ELEV
  AVERTIME PERIOD
  URBANOPT 9862049
  POLLUTID DPM
  FLAGPOLE 2.00
  RUNORNOT RUN
  ERRORFIL DPM.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
**
** Line Source Represented by Separated Volume Sources
** LINE VOLUME Source ID = DPM
** DESCR SRC Diesel Particulate-Exhaust
** PREFIX
** Length of Side = 5.00
** Configuration = Separated
** Emission Rate = 1.0
** Elevated
** Vertical Dimension = 1.40
** SZINIT = 0.33
** Nodes = 13
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** 365115.021, 3768374.076, 86.50, 5.00, 4.62
** 365081.891, 3768351.289, 85.86, 5.00, 4.62
** 365058.028, 3768389.557, 86.07, 5.00, 4.62
** 365070.287, 3768397.322, 86.34, 5.00, 4.62
** 365090.749, 3768364.383, 86.23, 5.00, 4.62
** 365105.971, 3768375.362, 86.45, 5.00, 4.62
** 365084.510, 3768405.557, 86.67, 5.00, 4.62
** 365100.232, 3768415.040, 86.90, 5.00, 4.62
** 365122.441, 3768383.847, 86.59, 5.00, 4.62
** 365132.422, 3768391.333, 86.56, 5.00, 4.62
** 365073.031, 3768485.660, 87.73, 5.00, 4.62
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LOCATION L0000003 VOLUME 365091.633 3768475.986 87.61
LOCATION L0000004 VOLUME 365097.124 3768467.700 87.48
LOCATION L0000005 VOLUME 365102.615 3768459.413 87.41
LOCATION L0000006 VOLUME 365108.107 3768451.127 87.31

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LOCATION L0000007 VOLUME 365113.598 3768442.840 87.18
LOCATION L0000008 VOLUME 365119.089 3768434.554 87.07
LOCATION L0000009 VOLUME 365124.580 3768426.267 86.93
LOCATION L0000010 VOLUME 365130.071 3768417.981 86.79
LOCATION L0000011 VOLUME 365135.562 3768409.694 86.65
LOCATION L0000012 VOLUME 365141.053 3768401.408 86.49
LOCATION L0000013 VOLUME 365144.148 3768393.601 86.39
LOCATION L0000014 VOLUME 365135.891 3768388.066 86.53
LOCATION L0000015 VOLUME 365127.634 3768382.531 86.59
LOCATION L0000016 VOLUME 365119.376 3768376.995 86.57
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LOCATION L0000033 VOLUME 365102.273 3768380.565 86.57
LOCATION L0000034 VOLUME 365096.514 3768388.668 86.65
LOCATION L0000035 VOLUME 365090.755 3768396.771 86.71
LOCATION L0000036 VOLUME 365084.996 3768404.873 86.73
LOCATION L0000037 VOLUME 365092.304 3768410.258 86.88
LOCATION L0000038 VOLUME 365100.628 3768414.483 86.96
LOCATION L0000039 VOLUME 365106.394 3768406.385 86.87
LOCATION L0000040 VOLUME 365112.159 3768398.287 86.79
LOCATION L0000041 VOLUME 365117.925 3768390.189 86.71
LOCATION L0000042 VOLUME 365124.165 3768385.140 86.62
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LOCATION L0000048 VOLUME 365106.143 3768433.071 87.15
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** Source Parameters **
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 SO FINISHED
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 ** AERMOD Receptor Pathway

 **
 **
 RE STARTING
 INCLUDED DPM.rou
 RE FINISHED
 **

 ** AERMOD Meteorology Pathway

 **
 **
 ME STARTING
 SURFFILE Metwsla7.sfc
 PROFILE Metwsla7.PFL
 SURFDATA 0 2005
 UAIRDATA 3190 2005
 SITE DATA 99999 2005
 PROFBASE 97.0 METERS
 ME FINISHED
 **

 ** AERMOD Output Pathway

**
 **
 OU STARTING
 ** Auto-Generated Plottiles
 PLOTFILE PERIOD ALL DPM.AD\PE00GALL.PLT 31
 SUMMFILE DPM.sum
 OU FINISHED

*** Message Summary For AERMOD Model Setup ***

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

A Total of	0 Fatal Error Message(s)
A Total of	1 Warning Message(s)
A Total of	0 Informational Message(s)

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

***** WARNING MESSAGES *****
 ME W396 1016 MEOpen: AERMET Version Out-dated or Non-standard; Version: 12345

 *** SETUP Finishes Successfully ***

***** AERMOD - VERSION 15181 *** ** C:\Users\HES\Dropbox\Landmark Apts\HRA\DPM\DPM.isc ** 12/14/16
 *** AERMET - VERSION 12345 *** ** 22:21:11

PAGE 1
 **MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** MODEL SETUP OPTIONS SUMMARY ***

**Model Is Setup For Calculation of Average CONcentration Values.
 **Model Is Setup For Calculation of Dry DEPosition Values.

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

**Model Uses URBAN Dispersion Algorithm for the SBL for 54 Source(s).
 for Total of 1 Urban Area(s):
 Urban Population = 9662049.0 ; Urban Roughness Length = 1.000 m

**Model Allows User-Specified Options:
 1. Stack-tip Downwash.
 2. Allow FLAT/ELEV Terrain Option by Source,
 with 0 FLAT and 54 ELEV Source(s).
 3. Use Calms Processing Routine.
 4. Use Missing Data Processing Routine.
 5. No Exponential Decay.
 6. Urban Roughness Length of 1.0 Meter Used.

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: DPM

**Model Calculates PERIOD Averages Only

**This Run Includes: 54 Source(s); 1 Source Group(s); and 616 Receptor(s)

with: 0 POINT(s), including

0 POINTCAP(s) and 0 POINTHOR(s)
 and: 54 VOLUME source(s)
 and: 0 AREA type source(s)
 and: 0 LINE source(s)
 and: 0 OPENPIT source(s)

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

**The AERMET Input Meteorological Data Version Date: 12345

**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) = 97.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
 Concentration: Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.1000E+07
 Output Units = MICROGRAMS/M**3
 Deposition: Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 3600.0
 Output Units = GRAMS/M**2

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Detailed Error/Message File: DPM.err

**File for Summary of Results: DPM.sum

*** AERMOD - VERSION 15181 *** C:\Users\HESI\Dropbox\Landmark Apts\HRA\DPMDPM.isc *** 12/14/16
 *** AERMET - VERSION 12345 *** 22:21:11

PAGE 2

**MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	CATS.	NUMBER EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN	EMISSION RATE	SCALAR VARY BY
L0000001	2	0.18519E-01	365080.7	3768492.6	87.8	5.00	4.62	0.33	YES	HRDOW	
L0000002	2	0.18519E-01	365086.1	3768484.3	87.7	5.00	4.62	0.33	YES	HRDOW	
L0000003	2	0.18519E-01	365091.6	3768476.0	87.6	5.00	4.62	0.33	YES	HRDOW	
L0000004	2	0.18519E-01	365097.1	3768467.7	87.5	5.00	4.62	0.33	YES	HRDOW	
L0000005	2	0.18519E-01	365102.6	3768459.4	87.4	5.00	4.62	0.33	YES	HRDOW	
L0000006	2	0.18519E-01	365108.1	3768451.1	87.3	5.00	4.62	0.33	YES	HRDOW	
L0000007	2	0.18519E-01	365113.6	3768442.8	87.2	5.00	4.62	0.33	YES	HRDOW	
L0000008	2	0.18519E-01	365119.1	3768434.6	87.1	5.00	4.62	0.33	YES	HRDOW	
L0000009	2	0.18519E-01	365124.6	3768426.3	86.9	5.00	4.62	0.33	YES	HRDOW	
L0000010	2	0.18519E-01	365130.1	3768418.0	86.8	5.00	4.62	0.33	YES	HRDOW	
L0000011	2	0.18519E-01	365135.6	3768409.7	86.6	5.00	4.62	0.33	YES	HRDOW	
L0000012	2	0.18519E-01	365141.1	3768401.4	86.5	5.00	4.62	0.33	YES	HRDOW	
L0000013	2	0.18519E-01	365144.1	3768393.6	86.4	5.00	4.62	0.33	YES	HRDOW	
L0000014	2	0.18519E-01	365135.9	3768388.1	86.5	5.00	4.62	0.33	YES	HRDOW	
L0000015	2	0.18519E-01	365127.6	3768382.5	86.6	5.00	4.62	0.33	YES	HRDOW	
L0000016	2	0.18519E-01	365119.4	3768377.0	86.6	5.00	4.62	0.33	YES	HRDOW	
L0000017	2	0.18519E-01	365111.2	3768371.4	86.5	5.00	4.62	0.33	YES	HRDOW	
L0000018	2	0.18519E-01	365103.0	3768365.8	86.4	5.00	4.62	0.33	YES	HRDOW	
L0000019	2	0.18519E-01	365094.8	3768360.1	86.3	5.00	4.62	0.33	YES	HRDOW	
L0000020	2	0.18519E-01	365086.6	3768354.5	86.0	5.00	4.62	0.33	YES	HRDOW	
L0000021	2	0.18519E-01	365079.6	3768354.9	85.9	5.00	4.62	0.33	YES	HRDOW	
L0000022	2	0.18519E-01	365074.4	3768363.3	86.0	5.00	4.62	0.33	YES	HRDOW	
L0000023	2	0.18519E-01	365069.1	3768371.8	86.1	5.00	4.62	0.33	YES	HRDOW	
L0000024	2	0.18519E-01	365063.9	3768380.2	86.1	5.00	4.62	0.33	YES	HRDOW	
L0000025	2	0.18519E-01	365058.6	3768388.6	86.2	5.00	4.62	0.33	YES	HRDOW	

L0000026	2	0.18519E-01	365065.5	3768394.3	86.3	5.00	4.62	0.33	YES	HRDOW	
L0000027	2	0.18519E-01	365072.5	3768393.7	86.4	5.00	4.62	0.33	YES	HRDOW	
L0000028	2	0.18519E-01	365077.8	3768385.2	86.3	5.00	4.62	0.33	YES	HRDOW	
L0000029	2	0.18519E-01	365083.0	3768376.8	86.3	5.00	4.62	0.33	YES	HRDOW	
L0000030	2	0.18519E-01	365088.3	3768368.3	86.3	5.00	4.62	0.33	YES	HRDOW	
L0000031	2	0.18519E-01	365095.0	3768367.5	86.3	5.00	4.62	0.33	YES	HRDOW	
L0000032	2	0.18519E-01	365103.1	3768373.3	86.5	5.00	4.62	0.33	YES	HRDOW	
L0000033	2	0.18519E-01	365102.3	3768380.6	86.6	5.00	4.62	0.33	YES	HRDOW	
L0000034	2	0.18519E-01	365096.5	3768388.7	86.6	5.00	4.62	0.33	YES	HRDOW	
L0000035	2	0.18519E-01	365090.8	3768396.8	86.7	5.00	4.62	0.33	YES	HRDOW	
L0000036	2	0.18519E-01	365085.0	3768404.9	86.7	5.00	4.62	0.33	YES	HRDOW	
L0000037	2	0.18519E-01	365092.3	3768410.3	86.9	5.00	4.62	0.33	YES	HRDOW	
L0000038	2	0.18519E-01	365100.6	3768414.5	87.0	5.00	4.62	0.33	YES	HRDOW	
L0000039	2	0.18519E-01	365106.4	3768406.4	86.9	5.00	4.62	0.33	YES	HRDOW	
L0000040	2	0.18519E-01	365112.2	3768398.3	86.8	5.00	4.62	0.33	YES	HRDOW	

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**MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	CATS.	NUMBER EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE RELEASE ELEV. (METERS)	INIT. HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN	EMISSION RATE	SCALAR VARY BY
L0000041	2	0.18519E-01	365117.9	3768390.2	86.7	5.00	4.62	0.33	YES	HRDOW	
L0000042	2	0.18519E-01	365124.2	3768385.1	86.6	5.00	4.62	0.33	YES	HRDOW	
L0000043	2	0.18519E-01	365132.1	3768391.1	86.6	5.00	4.62	0.33	YES	HRDOW	
L0000044	2	0.18519E-01	365127.3	3768399.4	86.7	5.00	4.62	0.33	YES	HRDOW	
L0000045	2	0.18519E-01	365122.0	3768407.8	86.8	5.00	4.62	0.33	YES	HRDOW	
L0000046	2	0.18519E-01	365116.7	3768416.2	87.0	5.00	4.62	0.33	YES	HRDOW	
L0000047	2	0.18519E-01	365111.4	3768424.7	87.0	5.00	4.62	0.33	YES	HRDOW	
L0000048	2	0.18519E-01	365106.1	3768433.1	87.1	5.00	4.62	0.33	YES	HRDOW	
L0000049	2	0.18519E-01	365100.8	3768441.5	87.3	5.00	4.62	0.33	YES	HRDOW	
L0000050	2	0.18519E-01	365095.5	3768449.9	87.3	5.00	4.62	0.33	YES	HRDOW	
L0000051	2	0.18519E-01	365090.3	3768458.3	87.4	5.00	4.62	0.33	YES	HRDOW	
L0000052	2	0.18519E-01	365085.0	3768466.7	87.5	5.00	4.62	0.33	YES	HRDOW	
L0000053	2	0.18519E-01	365079.7	3768475.1	87.6	5.00	4.62	0.33	YES	HRDOW	
L0000054	2	0.18519E-01	365074.4	3768483.5	87.7	5.00	4.62	0.33	YES	HRDOW	

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**MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 , L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 ,

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 **MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

URBAN ID	URBAN POP	SOURCE IDs
9862049	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

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*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000001 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
 0.92000, 0.08000,
 PARTICLE DIAMETER (MICRONS) =
 2.50000, 10.00000,
 PARTICLE DENSITY (G/CM**3) =
 2.30000, 2.30000,

*** SOURCE ID = L0000002 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
 0.92000, 0.08000,
 PARTICLE DIAMETER (MICRONS) =
 2.50000, 10.00000,
 PARTICLE DENSITY (G/CM**3) =
 2.30000, 2.30000,

*** SOURCE ID = L0000003 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
 0.92000, 0.08000,
 PARTICLE DIAMETER (MICRONS) =
 2.50000, 10.00000,
 PARTICLE DENSITY (G/CM**3) =

2.30000, 2.30000,
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 **MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000004 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
 0.92000, 0.08000,
 PARTICLE DIAMETER (MICRONS) =
 2.50000, 10.00000,
 PARTICLE DENSITY (G/CM**3) =
 2.30000, 2.30000,

*** SOURCE ID = L0000005 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
 0.92000, 0.08000,
 PARTICLE DIAMETER (MICRONS) =
 2.50000, 10.00000,
 PARTICLE DENSITY (G/CM**3) =
 2.30000, 2.30000,

*** SOURCE ID = L0000006 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
 0.92000, 0.08000,
 PARTICLE DIAMETER (MICRONS) =
 2.50000, 10.00000,
 PARTICLE DENSITY (G/CM**3) =
 2.30000, 2.30000,

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 **MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000007 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
 0.92000, 0.08000,
 PARTICLE DIAMETER (MICRONS) =
 2.50000, 10.00000,
 PARTICLE DENSITY (G/CM**3) =
 2.30000, 2.30000,

*** SOURCE ID = L0000008 ; SOURCE TYPE = VOLUME ***

**MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000009 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000010 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000011 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000012 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000013 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000014 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000015 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000016 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000017 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,
*** SOURCE ID = L0000018 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,
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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000019 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000020 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000021 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,
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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000022 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000023 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000024 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000025 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000026 ; SOURCE TYPE = VOLUME ***
MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =

2.30000, 2.30000,

*** SOURCE ID = L0000027 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000028 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000029 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000030 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000031 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000032 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000033 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000034 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000035 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000036 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,
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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000037 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000038 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000039 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000041 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000042 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000043 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000044 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,
PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000045 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,
PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,
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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000046 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000047 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000048 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000049 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =

2.30000, 2.30000,

*** SOURCE ID = L0000050 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000051 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** SOURCE PARTICULATE/GAS DATA ***

*** SOURCE ID = L0000052 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000053 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =
2.30000, 2.30000,

*** SOURCE ID = L0000054 ; SOURCE TYPE = VOLUME ***

MASS FRACTION =
0.92000, 0.08000,

PARTICLE DIAMETER (MICRONS) =
2.50000, 10.00000,

PARTICLE DENSITY (G/CM**3) =

*MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *
SOURCE ID = L0000054 ; SOURCE TYPE = VOLUME ;
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
SCALAR

(364958.8, 3768692.5, 90.8, 90.8, 2.0); (365242.3, 3768654.8, 89.7, 89.7, 2.0);
(365253.4, 3768638.8, 89.1, 89.1, 2.0); (365264.5, 3768622.8, 88.6, 88.6, 2.0);
(365275.6, 3768606.8, 88.1, 88.1, 2.0); (365286.7, 3768590.8, 87.8, 87.8, 2.0);
(365297.8, 3768574.9, 87.5, 87.5, 2.0); (365308.9, 3768558.9, 87.1, 87.1, 2.0);
(365320.0, 3768542.9, 86.6, 86.6, 2.0); (365331.1, 3768526.9, 86.1, 86.1, 2.0);
(365342.2, 3768510.9, 85.6, 85.6, 2.0); (365267.1, 3768692.9, 91.2, 91.2, 2.0);
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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 .0000E+00
9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 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
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
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
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*MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)
(365089.6, 3768560.2, 88.1, 88.1, 2.0); (365070.8, 3768562.2, 88.1, 88.1, 2.0);
(365109.7, 3768539.9, 87.8, 87.8, 2.0); (365120.8, 3768522.9, 87.6, 87.6, 2.0);
(365131.9, 3768507.0, 87.5, 87.5, 2.0); (365143.0, 3768491.0, 87.3, 87.3, 2.0);
(365154.1, 3768475.0, 87.2, 87.2, 2.0); (365165.2, 3768459.0, 86.9, 86.9, 2.0);
(365176.3, 3768443.0, 86.8, 86.8, 2.0); (365187.4, 3768427.1, 86.5, 86.5, 2.0);
(365198.5, 3768411.1, 86.4, 86.4, 2.0); (365107.2, 3768576.2, 88.0, 88.0, 2.0);
(365070.1, 3768586.0, 88.3, 88.3, 2.0); (365130.2, 3768553.2, 87.5, 87.5, 2.0);
(365141.3, 3768537.2, 87.2, 87.2, 2.0); (365152.4, 3768521.2, 87.0, 87.0, 2.0);
(365163.5, 3768505.3, 87.0, 87.0, 2.0); (365174.6, 3768489.3, 86.9, 86.9, 2.0);
(365185.7, 3768473.3, 86.8, 86.8, 2.0); (365196.8, 3768457.3, 86.8, 86.8, 2.0);
(365207.9, 3768441.3, 86.7, 86.7, 2.0); (365219.0, 3768425.4, 86.6, 86.6, 2.0);
(365126.2, 3768591.4, 87.6, 87.6, 2.0); (365099.3, 3768607.3, 88.4, 88.4, 2.0);
(365071.1, 3768610.3, 88.7, 88.7, 2.0); (365041.5, 3768600.3, 88.4, 88.4, 2.0);
(365150.7, 3768567.5, 86.8, 86.8, 2.0); (365161.8, 3768551.5, 86.5, 86.5, 2.0);
(365172.9, 3768535.5, 86.3, 86.3, 2.0); (365184.0, 3768519.5, 86.3, 86.3, 2.0);
(365195.1, 3768503.5, 86.3, 86.3, 2.0); (365206.2, 3768487.6, 86.3, 86.3, 2.0);
(365217.3, 3768471.6, 86.2, 86.2, 2.0); (365228.4, 3768455.6, 86.2, 86.2, 2.0);
(365239.5, 3768439.6, 86.2, 86.2, 2.0); (365145.8, 3768606.2, 87.3, 87.3, 2.0);
(365117.2, 3768623.1, 88.5, 88.5, 2.0); (365072.8, 3768634.8, 89.2, 89.2, 2.0);
(365041.2, 3768624.2, 89.0, 89.0, 2.0); (365171.3, 3768581.7, 86.2, 86.2, 2.0);
(365182.4, 3768565.7, 86.1, 86.1, 2.0); (365193.5, 3768549.8, 86.1, 86.1, 2.0);
(365204.6, 3768533.8, 86.1, 86.1, 2.0); (365215.7, 3768517.8, 86.1, 86.1, 2.0);
(365226.8, 3768501.8, 86.1, 86.1, 2.0); (365237.9, 3768485.8, 86.0, 86.0, 2.0);
(365249.0, 3768469.9, 86.0, 86.0, 2.0); (365260.1, 3768453.9, 85.7, 85.7, 2.0);
(365185.9, 3768635.3, 88.4, 88.4, 2.0); (365155.2, 3768653.5, 89.2, 89.2, 2.0);
(365124.5, 3768671.6, 90.0, 90.0, 2.0); (365076.9, 3768684.1, 90.4, 90.4, 2.0);
(365043.1, 3768672.8, 90.1, 90.1, 2.0); (365009.3, 3768661.5, 89.8, 89.8, 2.0);
(365212.3, 3768610.2, 87.6, 87.6, 2.0); (365223.4, 3768594.3, 87.2, 87.2, 2.0);
(365234.5, 3768578.3, 87.2, 87.2, 2.0); (365245.6, 3768562.3, 87.1, 87.1, 2.0);
(365256.7, 3768546.3, 87.0, 87.0, 2.0); (365267.8, 3768530.3, 86.9, 86.9, 2.0);
(365278.9, 3768514.4, 86.8, 86.8, 2.0); (365290.0, 3768498.4, 86.5, 86.5, 2.0);
(365301.1, 3768482.4, 86.0, 86.0, 2.0); (365226.4, 3768664.2, 89.8, 89.8, 2.0);
(365210.5, 3768673.6, 90.0, 90.0, 2.0); (365194.5, 3768683.0, 90.1, 90.1, 2.0);
(365178.6, 3768692.4, 90.2, 90.2, 2.0); (365162.7, 3768701.9, 90.6, 90.6, 2.0);
(365146.8, 3768711.3, 90.9, 90.9, 2.0); (365130.9, 3768720.7, 91.2, 91.2, 2.0);
(365115.0, 3768730.1, 91.6, 91.6, 2.0); (365081.5, 3768733.7, 91.8, 91.8, 2.0);
(365064.0, 3768721.8, 91.6, 91.6, 2.0); (365046.5, 3768721.9, 91.3, 91.3, 2.0);
(365029.0, 3768716.0, 91.0, 91.0, 2.0); (365011.4, 3768710.1, 90.8, 90.8, 2.0);
(364993.9, 3768704.2, 90.7, 90.7, 2.0); (364976.3, 3768698.4, 90.8, 90.8, 2.0);

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*MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN
*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)
(365250.8, 3768702.5, 91.1, 91.1, 2.0); (365234.5, 3768712.2, 91.1, 91.1, 2.0);
(365218.2, 3768721.8, 90.9, 90.9, 2.0); (365202.0, 3768731.5, 90.8, 90.8, 2.0);
(365185.7, 3768741.1, 91.0, 91.0, 2.0); (365169.4, 3768750.7, 91.2, 91.2, 2.0);
(365153.2, 3768760.4, 91.6, 91.6, 2.0); (365136.9, 3768770.0, 92.0, 92.0, 2.0);
(365120.6, 3768779.6, 92.4, 92.4, 2.0); (365086.4, 3768783.2, 92.9, 92.9, 2.0);
(365068.5, 3768777.2, 92.7, 92.7, 2.0); (365050.5, 3768771.2, 92.3, 92.3, 2.0);
(365032.6, 3768765.2, 91.9, 91.9, 2.0); (365014.7, 3768759.2, 91.5, 91.5, 2.0);
(364996.8, 3768753.2, 91.2, 91.2, 2.0); (364978.8, 3768747.1, 91.2, 91.2, 2.0);
(364960.9, 3768741.1, 91.4, 91.4, 2.0); (364943.0, 3768735.1, 91.7, 91.7, 2.0);
(364925.0, 3768729.1, 91.9, 91.9, 2.0); (365283.3, 3768683.3, 91.0, 91.0, 2.0);
(365294.5, 3768667.3, 90.5, 90.5, 2.0); (365305.5, 3768651.3, 89.9, 89.9, 2.0);
(365316.6, 3768635.3, 89.1, 89.1, 2.0); (365327.8, 3768619.4, 88.5, 88.5, 2.0);
(365338.8, 3768603.4, 88.0, 88.0, 2.0); (365350.0, 3768587.4, 87.6, 87.6, 2.0);
(365361.1, 3768571.4, 87.1, 87.1, 2.0); (365372.2, 3768555.4, 86.7, 86.7, 2.0);
(365383.3, 3768539.5, 86.3, 86.3, 2.0); (365307.9, 3768721.6, 92.3, 92.3, 2.0);
(365291.4, 3768731.4, 92.3, 92.3, 2.0); (365274.8, 3768741.2, 92.1, 92.1, 2.0);
(365258.3, 3768750.9, 91.9, 91.9, 2.0); (365241.8, 3768760.7, 91.8, 91.8, 2.0);
(365225.3, 3768770.5, 91.6, 91.6, 2.0); (365208.7, 3768780.3, 91.5, 91.5, 2.0);
(365192.2, 3768790.1, 91.4, 91.4, 2.0); (365175.7, 3768799.8, 91.5, 91.5, 2.0);
(365159.2, 3768809.6, 92.0, 92.0, 2.0); (365142.6, 3768819.4, 92.4, 92.4, 2.0);
(365126.1, 3768829.2, 93.0, 93.0, 2.0); (365091.4, 3768832.9, 93.6, 93.6, 2.0);
(365073.2, 3768826.8, 93.6, 93.6, 2.0); (365055.0, 3768820.7, 93.2, 93.2, 2.0);
(365036.8, 3768814.5, 92.8, 92.8, 2.0); (365018.6, 3768808.4, 92.3, 92.3, 2.0);
(365000.4, 3768802.3, 91.9, 91.9, 2.0); (364982.1, 3768796.2, 91.6, 91.6, 2.0);
(364964.0, 3768790.1, 91.7, 91.7, 2.0); (364945.7, 3768784.0, 92.1, 92.1, 2.0);
(364927.5, 3768777.9, 92.4, 92.4, 2.0); (364909.3, 3768771.8, 92.7, 92.7, 2.0);
(364891.1, 3768765.7, 93.0, 93.0, 2.0); (365324.4, 3768711.8, 92.1, 92.1, 2.0);
(365335.5, 3768695.8, 91.5, 91.5, 2.0); (365346.6, 3768679.8, 90.8, 90.8, 2.0);
(365357.7, 3768663.9, 90.1, 90.1, 2.0); (365368.8, 3768647.9, 89.4, 89.4, 2.0);
(365379.9, 3768631.9, 88.7, 88.7, 2.0); (365391.0, 3768615.9, 88.0, 88.0, 2.0);
(365402.1, 3768599.9, 87.4, 87.4, 2.0); (365413.2, 3768584.0, 86.8, 86.8, 2.0);
(365424.3, 3768568.0, 86.2, 86.2, 2.0); (365197.4, 3768384.4, 86.1, 86.1, 2.0);
(365177.0, 3768365.7, 85.8, 85.8, 2.0); (365161.8, 3768355.1, 86.1, 86.1, 2.0);
(365146.6, 3768344.4, 86.1, 86.1, 2.0); (365131.4, 3768333.8, 86.0, 86.0, 2.0);
(365116.2, 3768323.2, 85.6, 85.6, 2.0); (365101.0, 3768312.5, 85.0, 85.0, 2.0);
(365095.8, 3768301.9, 84.2, 84.2, 2.0); (365213.5, 3768366.6, 86.2, 86.2, 2.0);
(365224.4, 3768400.5, 86.6, 86.6, 2.0); (365191.4, 3768345.2, 84.4, 84.4, 2.0);
(365176.2, 3768334.6, 84.6, 84.6, 2.0); (365161.0, 3768323.9, 84.7, 84.7, 2.0);
(365145.7, 3768313.3, 84.7, 84.7, 2.0); (365130.5, 3768302.7, 84.2, 84.2, 2.0);
(365115.3, 3768292.0, 83.7, 83.7, 2.0); (365100.1, 3768281.4, 83.0, 83.0, 2.0);
(365228.6, 3768347.4, 86.2, 86.2, 2.0); (365244.1, 3768371.6, 86.4, 86.4, 2.0);
(365248.7, 3768397.6, 86.5, 86.5, 2.0); (365205.7, 3768324.7, 80.9, 86.5, 2.0);
(365190.5, 3768314.1, 82.5, 83.3, 2.0); (365175.3, 3768303.5, 82.9, 82.9, 2.0);
(365160.1, 3768292.8, 82.8, 82.8, 2.0); (365144.8, 3768282.2, 82.5, 82.5, 2.0);
(365129.6, 3768271.5, 82.1, 82.1, 2.0); (365114.4, 3768260.9, 81.7, 81.7, 2.0);
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(365243.5, 3768327.8, 84.6, 85.9, 2.0); (365259.9, 3768353.5, 85.9, 85.9, 2.0);
(365273.1, 3768394.2, 86.5, 86.5, 2.0); (365266.6, 3768424.0, 85.9, 85.9, 2.0);
(365220.0, 3768304.2, 80.0, 86.5, 2.0); (365204.8, 3768293.6, 80.6, 86.5, 2.0);
(365189.6, 3768283.0, 81.0, 81.0, 2.0); (365174.4, 3768272.3, 81.1, 81.1, 2.0);
(365159.2, 3768261.7, 81.0, 81.0, 2.0); (365144.0, 3768251.1, 80.8, 80.8, 2.0);
(365128.8, 3768240.4, 80.7, 80.7, 2.0); (365272.7, 3768287.7, 79.4, 85.9, 2.0);
(365290.3, 3768315.3, 81.5, 83.2, 2.0); (365308.0, 3768342.9, 81.9, 85.8, 2.0);
(365322.0, 3768386.4, 80.0, 86.6, 2.0); (365315.1, 3768418.4, 81.2, 86.6, 2.0);
(365308.1, 3768450.4, 84.5, 84.5, 2.0); (365248.7, 3768263.3, 77.8, 85.9, 2.0);
(365233.5, 3768252.6, 77.9, 77.9, 2.0); (365218.2, 3768242.0, 77.7, 77.7, 2.0);
(365203.0, 3768231.3, 77.9, 77.9, 2.0); (365187.8, 3768220.7, 77.9, 77.9, 2.0);
(365172.6, 3768210.1, 78.0, 78.0, 2.0); (365157.4, 3768199.4, 78.0, 78.0, 2.0);
(365301.7, 3768247.2, 74.7, 85.9, 2.0); (365320.0, 3768275.8, 76.8, 76.8, 2.0);
(365338.2, 3768304.4, 78.6, 78.6, 2.0); (365356.5, 3768333.0, 78.8, 78.8, 2.0);
(365371.2, 3768378.2, 80.2, 80.2, 2.0); (365364.0, 3768411.4, 81.5, 81.5, 2.0);
(365356.7, 3768444.6, 83.1, 83.1, 2.0); (365349.5, 3768477.8, 84.6, 84.6, 2.0);
(365277.3, 3768222.3, 74.0, 74.0, 2.0); (365262.1, 3768211.6, 74.2, 74.2, 2.0);
(365246.9, 3768201.0, 74.3, 74.3, 2.0); (365231.7, 3768190.4, 74.2, 74.2, 2.0);
(365216.5, 3768179.7, 74.3, 74.3, 2.0); (365201.3, 3768169.1, 74.3, 74.3, 2.0);
(365186.0, 3768158.5, 74.5, 74.5, 2.0); (365330.5, 3768206.6, 73.7, 73.7, 2.0);
(365349.2, 3768235.8, 75.4, 75.4, 2.0); (365367.9, 3768265.1, 76.5, 76.5, 2.0);
(365386.6, 3768294.3, 77.6, 77.6, 2.0); (365405.3, 3768323.6, 78.4, 78.4, 2.0);
(365420.3, 3768369.8, 80.0, 80.0, 2.0); (365412.9, 3768403.8, 81.4, 81.4, 2.0);
(365405.5, 3768437.7, 82.7, 82.7, 2.0); (365398.1, 3768471.6, 83.9, 83.9, 2.0);
(365390.7, 3768505.5, 85.1, 85.1, 2.0); (365306.0, 3768181.3, 71.4, 71.4, 2.0);
(365290.8, 3768170.7, 70.3, 70.3, 2.0); (365275.5, 3768160.0, 69.0, 74.6, 2.0);
(365260.3, 3768149.4, 67.8, 77.6, 2.0); (365245.1, 3768138.8, 67.5, 78.6, 2.0);
(365229.9, 3768128.1, 67.3, 79.0, 2.0); (365214.7, 3768117.5, 67.4, 79.0, 2.0);
(365353.9, 3768165.8, 72.8, 73.7, 2.0); (365378.3, 3768195.5, 74.8, 74.8, 2.0);
(365397.3, 3768225.2, 75.3, 75.3, 2.0); (365416.3, 3768254.9, 76.1, 76.1, 2.0);
(365435.3, 3768284.7, 76.8, 76.8, 2.0); (365454.3, 3768314.4, 78.0, 78.0, 2.0);
(365469.5, 3768361.3, 79.9, 79.9, 2.0); (365462.0, 3768395.8, 80.9, 80.9, 2.0);
(365454.4, 3768430.2, 82.3, 82.3, 2.0); (365446.9, 3768464.6, 83.6, 83.6, 2.0);
(365439.4, 3768499.1, 84.6, 84.6, 2.0); (365431.8, 3768533.5, 85.5, 85.5, 2.0);
(365334.6, 3768140.3, 69.0, 74.1, 2.0); (365319.4, 3768129.7, 68.0, 68.0, 2.0);
(365304.2, 3768119.0, 67.4, 67.4, 2.0); (365289.0, 3768108.4, 67.0, 67.0, 2.0);
(365273.8, 3768097.8, 66.6, 66.6, 2.0); (365258.6, 3768087.1, 66.3, 66.3, 2.0);
(365243.3, 3768076.5, 66.4, 66.4, 2.0); (365050.7, 3768308.4, 84.0, 84.0, 2.0);
(365039.8, 3768324.7, 84.3, 84.3, 2.0); (365028.8, 3768341.0, 84.8, 84.8, 2.0);
(365017.9, 3768357.3, 85.2, 85.2, 2.0); (365007.0, 3768373.6, 85.6, 85.6, 2.0);
(364996.1, 3768389.8, 85.8, 85.8, 2.0); (364985.1, 3768406.1, 86.0, 86.0, 2.0);
(364974.2, 3768422.4, 86.0, 86.0, 2.0); (364963.3, 3768438.7, 86.0, 86.0, 2.0);
(365046.1, 3768283.9, 82.8, 82.8, 2.0); (365081.2, 3768277.3, 82.8, 82.8, 2.0);
(365029.9, 3768294.5, 83.1, 83.1, 2.0); (365019.0, 3768310.8, 83.5, 83.5, 2.0);
(365008.1, 3768327.1, 84.0, 84.0, 2.0); (364997.2, 3768343.4, 84.5, 84.5, 2.0);

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

(364986.2, 3768359.6, 84.9, 84.9, 2.0); (364975.3, 3768375.9, 85.2, 85.2, 2.0);
(364964.4, 3768392.2, 85.3, 85.3, 2.0); (364953.5, 3768408.5, 85.4, 85.4, 2.0);
(364942.5, 3768424.8, 85.4, 85.4, 2.0); (365025.3, 3768269.9, 82.2, 82.2, 2.0);
(365041.5, 3768259.3, 82.0, 82.0, 2.0); (365076.6, 3768252.7, 81.9, 81.9, 2.0);
(365095.5, 3768256.8, 81.8, 81.8, 2.0); (365009.2, 3768280.6, 82.4, 82.4, 2.0);
(364998.2, 3768296.9, 82.8, 82.8, 2.0); (364987.3, 3768313.1, 83.1, 83.1, 2.0);
(364976.4, 3768329.4, 83.6, 83.6, 2.0); (364965.5, 3768345.7, 84.1, 84.1, 2.0);
(364954.5, 3768362.0, 84.5, 84.5, 2.0); (364943.6, 3768378.3, 84.6, 84.6, 2.0);
(364932.7, 3768394.5, 84.8, 84.8, 2.0); (364921.8, 3768410.8, 84.8, 84.8, 2.0);
(365004.6, 3768256.0, 81.6, 81.6, 2.0); (365020.7, 3768245.4, 81.5, 81.5, 2.0);
(365036.9, 3768234.7, 81.1, 81.1, 2.0); (365072.0, 3768228.2, 81.0, 81.0, 2.0);
(365090.9, 3768232.2, 81.1, 81.1, 2.0); (365109.8, 3768236.3, 80.9, 80.9, 2.0);
(364988.4, 3768266.7, 81.6, 81.6, 2.0); (364977.5, 3768282.9, 81.9, 81.9, 2.0);

(364966.6, 3768299.2, 82.2, 82.2, 2.0); (364955.6, 3768315.5, 82.6, 82.6, 2.0);
(364944.7, 3768331.8, 83.0, 83.0, 2.0); (364933.8, 3768348.0, 83.5, 83.5, 2.0);
(364922.9, 3768364.3, 83.8, 83.8, 2.0); (364912.0, 3768380.6, 84.0, 84.0, 2.0);
(364901.0, 3768396.9, 84.2, 84.2, 2.0); (364963.1, 3768228.1, 80.0, 80.0, 2.0);
(364979.2, 3768217.5, 80.1, 80.1, 2.0); (364995.4, 3768206.9, 80.0, 80.0, 2.0);
(365011.6, 3768196.2, 79.8, 79.8, 2.0); (365027.7, 3768185.6, 79.4, 79.4, 2.0);
(365062.8, 3768179.0, 79.3, 79.3, 2.0); (365081.7, 3768183.1, 79.5, 79.5, 2.0);
(365100.6, 3768187.2, 79.4, 79.4, 2.0); (365119.6, 3768191.3, 79.0, 79.0, 2.0);
(365138.5, 3768195.4, 78.6, 78.6, 2.0); (364946.9, 3768238.8, 80.0, 80.0, 2.0);
(364936.0, 3768255.1, 80.1, 80.1, 2.0); (364925.0, 3768271.4, 80.3, 80.3, 2.0);
(364914.1, 3768287.6, 80.7, 80.7, 2.0); (364903.2, 3768303.9, 81.2, 81.2, 2.0);
(364892.3, 3768320.2, 81.7, 81.7, 2.0); (364881.3, 3768336.5, 82.3, 82.3, 2.0);
(364870.4, 3768352.8, 82.8, 82.8, 2.0); (364859.5, 3768369.0, 83.1, 83.1, 2.0);
(364921.5, 3768200.3, 78.7, 78.7, 2.0); (364937.7, 3768189.6, 78.6, 78.6, 2.0);
(364953.9, 3768179.0, 78.5, 78.5, 2.0); (364970.0, 3768168.4, 78.3, 78.3, 2.0);
(364986.2, 3768157.7, 78.1, 78.1, 2.0); (365002.4, 3768147.1, 77.6, 77.6, 2.0);
(365018.5, 3768136.4, 77.3, 77.3, 2.0); (365053.6, 3768129.9, 76.7, 76.7, 2.0);
(365072.5, 3768134.0, 76.7, 76.7, 2.0); (365091.5, 3768138.0, 76.7, 76.7, 2.0);
(365110.4, 3768142.1, 76.5, 76.5, 2.0); (365129.3, 3768146.2, 76.4, 76.4, 2.0);
(365148.2, 3768150.3, 76.0, 76.0, 2.0); (365167.1, 3768154.4, 75.4, 75.4, 2.0);
(364905.4, 3768210.9, 78.8, 78.8, 2.0); (364894.5, 3768227.2, 79.1, 79.1, 2.0);
(364883.5, 3768243.5, 79.6, 79.6, 2.0); (364872.6, 3768259.8, 80.1, 80.1, 2.0);
(364861.7, 3768276.0, 80.5, 80.5, 2.0); (364850.8, 3768292.3, 81.0, 81.0, 2.0);
(364839.8, 3768308.6, 81.5, 81.5, 2.0); (364828.9, 3768324.9, 81.8, 81.8, 2.0);
(364818.0, 3768341.2, 82.2, 82.2, 2.0); (364800.0, 3768172.4, 78.0, 78.0, 2.0);
(364896.2, 3768161.8, 77.7, 77.7, 2.0); (364912.3, 3768151.1, 77.3, 77.3, 2.0);
(364928.5, 3768140.5, 76.9, 76.9, 2.0); (364944.7, 3768129.9, 76.7, 76.7, 2.0);
(364960.8, 3768119.2, 76.3, 76.3, 2.0); (364977.0, 3768108.6, 76.0, 76.0, 2.0);
(364993.2, 3768097.9, 75.7, 75.7, 2.0); (365009.3, 3768087.3, 75.4, 75.4, 2.0);
(365044.4, 3768080.7, 75.2, 75.2, 2.0); (365063.3, 3768084.8, 75.1, 75.1, 2.0);
(365082.3, 3768089.9, 74.8, 74.8, 2.0); (365101.2, 3768093.0, 74.1, 74.1, 2.0);
(365120.1, 3768097.1, 73.7, 73.7, 2.0); (365139.0, 3768101.1, 74.1, 74.1, 2.0);

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

(365157.9, 3768105.2, 73.7, 73.7, 2.0); (365176.9, 3768109.3, 72.8, 73.5, 2.0);
(365195.8, 3768113.4, 69.7, 76.7, 2.0); (364863.9, 3768183.1, 78.4, 78.4, 2.0);
(364852.9, 3768199.4, 79.0, 79.0, 2.0); (364842.0, 3768215.6, 79.6, 79.6, 2.0);
(364831.1, 3768231.9, 80.1, 80.1, 2.0); (364820.2, 3768248.2, 80.5, 80.5, 2.0);
(364809.2, 3768264.5, 80.8, 80.8, 2.0); (364798.3, 3768280.8, 81.0, 81.0, 2.0);
(364787.4, 3768297.0, 81.3, 81.3, 2.0); (364776.5, 3768313.3, 81.6, 81.6, 2.0);
(364838.5, 3768144.6, 77.3, 77.3, 2.0); (364854.7, 3768133.9, 76.9, 76.9, 2.0);
(364870.8, 3768123.3, 76.3, 76.3, 2.0); (364887.0, 3768112.6, 75.8, 75.8, 2.0);
(364903.2, 3768102.0, 75.2, 75.2, 2.0); (364919.3, 3768091.3, 74.8, 74.8, 2.0);
(364935.5, 3768080.7, 74.4, 74.4, 2.0); (364951.7, 3768070.1, 74.4, 74.4, 2.0);
(364967.8, 3768059.4, 74.4, 74.4, 2.0); (364984.0, 3768048.8, 74.1, 74.1, 2.0);
(365000.2, 3768038.1, 73.6, 73.6, 2.0); (365035.2, 3768031.6, 73.2, 73.2, 2.0);
(365054.2, 3768035.7, 73.9, 73.9, 2.0); (365073.1, 3768039.7, 73.8, 73.8, 2.0);
(365092.0, 3768043.8, 73.4, 73.4, 2.0); (365110.9, 3768047.9, 72.3, 73.9, 2.0);
(365129.8, 3768052.0, 71.0, 73.7, 2.0); (365148.8, 3768056.1, 70.1, 70.1, 2.0);
(365167.7, 3768060.2, 69.2, 73.6, 2.0); (365186.6, 3768064.2, 68.2, 74.4, 2.0);
(365205.5, 3768068.3, 67.6, 74.1, 2.0); (365224.4, 3768072.4, 67.0, 67.0, 2.0);
(364822.3, 3768155.2, 77.8, 77.8, 2.0); (364811.4, 3768171.5, 78.4, 78.4, 2.0);
(364800.5, 3768187.8, 78.9, 78.9, 2.0); (364789.6, 3768204.0, 79.4, 79.4, 2.0);
(364778.6, 3768220.3, 79.6, 79.6, 2.0); (364767.7, 3768236.6, 79.9, 79.9, 2.0);
(364756.8, 3768252.9, 80.2, 80.2, 2.0); (364745.9, 3768269.2, 80.6, 80.6, 2.0);
(364735.0, 3768285.4, 81.1, 81.1, 2.0); (364967.0, 3768470.8, 86.1, 86.1, 2.0);
(364980.4, 3768483.4, 86.4, 86.4, 2.0); (364993.8, 3768496.0, 86.7, 86.7, 2.0);
(365007.2, 3768508.6, 86.9, 86.9, 2.0); (365020.7, 3768521.2, 87.2, 87.2, 2.0);
(365034.1, 3768533.7, 87.5, 87.5, 2.0); (365047.5, 3768546.3, 87.8, 87.8, 2.0);
(364942.1, 3768473.7, 85.6, 85.6, 2.0); (364963.3, 3768501.7, 86.1, 86.1, 2.0);
(364976.7, 3768514.2, 86.4, 86.4, 2.0); (364990.1, 3768526.8, 86.8, 86.8, 2.0);

(365003.6, 3768539.4, 87.1, 87.1, 2.0); (365017.0, 3768552.0, 87.4, 87.4, 2.0);
(365030.4, 3768564.6, 87.8, 87.8, 2.0); (365043.8, 3768577.1, 88.0, 88.0, 2.0);
(364925.0, 3768491.9, 85.3, 85.3, 2.0); (364913.6, 3768444.3, 84.8, 84.8, 2.0);
(364946.2, 3768519.9, 85.9, 85.9, 2.0); (364959.6, 3768532.5, 86.2, 86.2, 2.0);
(364973.0, 3768545.1, 86.6, 86.6, 2.0); (364986.5, 3768557.6, 87.1, 87.1, 2.0);
(364999.9, 3768570.2, 87.5, 87.5, 2.0); (365013.3, 3768582.8, 88.0, 88.0, 2.0);
(364907.9, 3768510.2, 85.3, 85.3, 2.0); (364892.5, 3768479.3, 85.1, 85.1, 2.0);
(364888.8, 3768447.2, 84.8, 84.8, 2.0); (364929.1, 3768538.2, 85.9, 85.9, 2.0);
(364942.5, 3768550.7, 86.3, 86.3, 2.0); (364956.0, 3768563.3, 86.7, 86.7, 2.0);
(364969.4, 3768575.9, 87.1, 87.1, 2.0); (364982.8, 3768588.5, 87.6, 87.6, 2.0);
(364996.2, 3768601.0, 88.1, 88.1, 2.0); (365009.7, 3768613.6, 88.6, 88.6, 2.0);
(364873.8, 3768546.7, 86.3, 86.3, 2.0); (364858.3, 3768515.8, 86.2, 86.2, 2.0);
(364842.8, 3768485.0, 86.0, 86.0, 2.0); (364839.1, 3768452.8, 85.3, 85.3, 2.0);
(364847.3, 3768419.3, 84.3, 84.3, 2.0); (364894.9, 3768574.6, 86.7, 86.7, 2.0);
(364908.3, 3768587.2, 87.2, 87.2, 2.0); (364921.8, 3768599.8, 87.7, 87.7, 2.0);
(364935.2, 3768612.4, 88.2, 88.2, 2.0); (364948.6, 3768625.0, 88.8, 88.8, 2.0);
(364962.0, 3768637.5, 89.2, 89.2, 2.0); (364975.5, 3768650.1, 89.7, 89.7, 2.0);
(364839.6, 3768583.1, 87.3, 87.3, 2.0); (364824.1, 3768552.3, 87.0, 87.0, 2.0);

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*MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

(364808.6, 3768521.5, 86.7, 86.7, 2.0); (364789.4, 3768458.5, 85.5, 85.5, 2.0);
(364805.8, 3768391.4, 83.6, 83.6, 2.0); (364860.7, 3768611.1, 87.9, 87.9, 2.0);
(364874.2, 3768623.7, 88.7, 88.7, 2.0); (364897.6, 3768636.3, 89.5, 89.5, 2.0);
(364901.0, 3768648.9, 90.2, 90.2, 2.0); (364914.4, 3768661.4, 90.7, 90.7, 2.0);
(364927.9, 3768674.0, 90.9, 90.9, 2.0); (364941.3, 3768686.6, 90.9, 90.9, 2.0);
(364805.4, 3768619.6, 88.4, 88.4, 2.0); (364789.9, 3768588.8, 87.4, 87.4, 2.0);
(364774.4, 3768558.0, 86.2, 86.2, 2.0); (364758.9, 3768527.2, 85.7, 85.7, 2.0);
(364743.4, 3768496.3, 85.3, 85.3, 2.0); (364739.8, 3768464.2, 85.0, 85.0, 2.0);
(364747.9, 3768430.6, 84.5, 84.5, 2.0); (364756.1, 3768397.1, 83.7, 83.7, 2.0);
(364764.2, 3768363.6, 82.8, 82.8, 2.0); (364826.6, 3768647.6, 89.7, 89.7, 2.0);
(364840.0, 3768660.2, 90.6, 90.6, 2.0); (364853.4, 3768672.8, 91.1, 91.1, 2.0);
(364866.8, 3768685.4, 91.6, 91.6, 2.0); (364880.2, 3768697.9, 92.0, 92.0, 2.0);
(364893.7, 3768710.5, 92.0, 92.0, 2.0); (364907.1, 3768723.1, 92.1, 92.1, 2.0);
(364771.2, 3768656.1, 89.2, 89.2, 2.0); (364755.7, 3768625.3, 88.0, 88.0, 2.0);
(364740.2, 3768594.5, 87.1, 87.1, 2.0); (364724.7, 3768563.6, 86.3, 86.3, 2.0);
(364709.2, 3768532.8, 85.6, 85.6, 2.0); (364693.7, 3768502.0, 85.0, 85.0, 2.0);
(364690.1, 3768469.8, 84.4, 84.4, 2.0); (364698.2, 3768436.3, 84.1, 84.1, 2.0);
(364706.4, 3768402.8, 83.6, 83.6, 2.0); (364714.5, 3768369.2, 82.9, 82.9, 2.0);
(364722.7, 3768335.7, 82.1, 82.1, 2.0); (364792.4, 3768684.1, 90.6, 90.6, 2.0);
(364805.8, 3768696.7, 91.2, 91.2, 2.0); (364819.2, 3768709.3, 91.8, 91.8, 2.0);
(364832.6, 3768721.8, 92.3, 92.3, 2.0); (364846.1, 3768734.4, 92.6, 92.6, 2.0);
(364859.5, 3768747.0, 93.0, 93.0, 2.0); (364872.9, 3768759.6, 93.2, 93.2, 2.0);
(365071.5, 3768322.4, 84.8, 84.8, 2.0); (365177.9, 3768396.8, 86.1, 86.1, 2.0);
(365078.0, 3768540.6, 88.0, 88.0, 2.0); (364984.1, 3768452.6, 86.4, 86.4, 2.0);
(365075.5, 3768325.2, 85.0, 85.0, 2.0); (365079.6, 3768328.1, 85.2, 85.2, 2.0);
(365083.7, 3768331.0, 85.4, 85.4, 2.0); (365087.8, 3768333.8, 85.6, 85.6, 2.0);
(365091.9, 3768336.7, 85.7, 85.7, 2.0); (365096.0, 3768339.6, 85.9, 85.9, 2.0);
(365100.1, 3768342.4, 86.0, 86.0, 2.0); (365104.2, 3768345.3, 86.1, 86.1, 2.0);
(365108.3, 3768348.1, 86.2, 86.2, 2.0); (365112.4, 3768351.0, 86.3, 86.3, 2.0);
(365116.5, 3768353.9, 86.3, 86.3, 2.0); (365120.6, 3768356.7, 86.4, 86.4, 2.0);
(365124.7, 3768359.6, 86.4, 86.4, 2.0); (365128.8, 3768362.5, 86.4, 86.4, 2.0);
(365132.9, 3768365.3, 86.4, 86.4, 2.0); (365137.0, 3768368.2, 86.4, 86.4, 2.0);
(365141.1, 3768371.1, 86.4, 86.4, 2.0); (365145.2, 3768373.9, 86.4, 86.4, 2.0);
(365149.3, 3768376.8, 86.3, 86.3, 2.0); (365153.4, 3768379.6, 86.3, 86.3, 2.0);
(365157.5, 3768382.5, 86.2, 86.2, 2.0); (365161.6, 3768385.4, 86.1, 86.1, 2.0);
(365165.6, 3768388.2, 86.0, 86.0, 2.0); (365169.8, 3768391.1, 86.0, 86.0, 2.0);
(365173.8, 3768394.0, 86.0, 86.0, 2.0); (365175.2, 3768400.8, 86.1, 86.1, 2.0);
(365172.4, 3768404.8, 86.1, 86.1, 2.0); (365169.6, 3768408.8, 86.1, 86.1, 2.0);
(365166.8, 3768412.8, 86.2, 86.2, 2.0); (365164.1, 3768416.8, 86.3, 86.3, 2.0);
(365161.3, 3768420.8, 86.3, 86.3, 2.0); (365158.5, 3768424.8, 86.4, 86.4, 2.0);

(365155.7, 3768428.8, 86.5, 86.5, 2.0); (365153.0, 3768432.8, 86.6, 86.6, 2.0);
(365150.2, 3768436.8, 86.7, 86.7, 2.0); (365147.4, 3768440.8, 86.7, 86.7, 2.0);
(365144.6, 3768444.8, 86.8, 86.8, 2.0); (365141.9, 3768448.8, 86.9, 86.9, 2.0);
(365139.1, 3768452.8, 87.0, 87.0, 2.0); (365136.3, 3768456.8, 87.1, 87.1, 2.0);

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*MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

(365133.5, 3768460.8, 87.1, 87.1, 2.0); (365130.8, 3768464.8, 87.2, 87.2, 2.0);
(365128.0, 3768468.7, 87.3, 87.3, 2.0); (365125.2, 3768472.7, 87.4, 87.4, 2.0);
(365122.4, 3768476.7, 87.4, 87.4, 2.0); (365119.7, 3768480.7, 87.5, 87.5, 2.0);
(365116.9, 3768484.7, 87.5, 87.5, 2.0); (365114.1, 3768488.7, 87.6, 87.6, 2.0);
(365111.3, 3768492.7, 87.7, 87.7, 2.0); (365108.6, 3768496.7, 87.7, 87.7, 2.0);
(365105.8, 3768500.7, 87.8, 87.8, 2.0); (365103.0, 3768504.7, 87.8, 87.8, 2.0);
(365100.2, 3768508.7, 87.9, 87.9, 2.0); (365097.5, 3768512.7, 87.9, 87.9, 2.0);
(365094.7, 3768516.7, 88.0, 88.0, 2.0); (365091.9, 3768520.7, 88.0, 88.0, 2.0);
(365089.1, 3768524.7, 88.0, 88.0, 2.0); (365086.4, 3768528.7, 88.0, 88.0, 2.0);
(365083.6, 3768532.7, 88.0, 88.0, 2.0); (365080.8, 3768536.6, 88.0, 88.0, 2.0);
(365074.4, 3768537.3, 88.0, 88.0, 2.0); (365070.8, 3768533.9, 88.0, 88.0, 2.0);
(365067.2, 3768530.5, 87.9, 87.9, 2.0); (365063.6, 3768527.1, 87.9, 87.9, 2.0);
(365060.0, 3768523.7, 87.9, 87.9, 2.0); (365056.3, 3768520.3, 87.8, 87.8, 2.0);
(365052.7, 3768516.9, 87.7, 87.7, 2.0); (365049.1, 3768513.6, 87.7, 87.7, 2.0);
(365045.5, 3768510.2, 87.6, 87.6, 2.0); (365041.9, 3768506.8, 87.6, 87.6, 2.0);
(365038.3, 3768503.4, 87.5, 87.5, 2.0); (365034.7, 3768500.0, 87.4, 87.4, 2.0);
(365031.0, 3768496.6, 87.4, 87.4, 2.0); (365027.4, 3768493.2, 87.3, 87.3, 2.0);
(365023.8, 3768489.9, 87.3, 87.3, 2.0); (365020.2, 3768486.5, 87.2, 87.2, 2.0);
(365016.6, 3768483.1, 87.1, 87.1, 2.0); (365013.0, 3768479.7, 87.1, 87.1, 2.0);
(365009.4, 3768476.3, 87.1, 87.1, 2.0); (365005.8, 3768472.9, 87.0, 87.0, 2.0);
(365002.1, 3768469.5, 86.9, 86.9, 2.0); (364998.5, 3768466.1, 86.8, 86.8, 2.0);
(364994.9, 3768462.8, 86.6, 86.6, 2.0); (364991.3, 3768459.4, 86.5, 86.5, 2.0);
(364987.7, 3768456.0, 86.5, 86.5, 2.0); (364986.8, 3768448.5, 86.4, 86.4, 2.0);
(364989.5, 3768444.5, 86.5, 86.5, 2.0); (364992.2, 3768440.4, 86.4, 86.4, 2.0);
(364995.0, 3768436.3, 86.4, 86.4, 2.0); (364997.7, 3768432.3, 86.4, 86.4, 2.0);
(365000.5, 3768429.2, 86.4, 86.4, 2.0); (365003.2, 3768424.1, 86.4, 86.4, 2.0);
(365005.9, 3768420.0, 86.4, 86.4, 2.0); (365008.6, 3768416.0, 86.4, 86.4, 2.0);
(365011.4, 3768411.9, 86.4, 86.4, 2.0); (365014.1, 3768407.8, 86.3, 86.3, 2.0);
(365016.8, 3768403.8, 86.3, 86.3, 2.0); (365019.6, 3768399.7, 86.2, 86.2, 2.0);
(365022.3, 3768395.6, 86.2, 86.2, 2.0); (365025.0, 3768391.6, 86.2, 86.2, 2.0);
(365027.8, 3768387.5, 86.1, 86.1, 2.0); (365030.5, 3768383.4, 86.1, 86.1, 2.0);
(365033.2, 3768379.4, 86.0, 86.0, 2.0); (365036.0, 3768375.3, 85.9, 85.9, 2.0);
(365038.7, 3768371.2, 85.8, 85.8, 2.0); (365041.4, 3768367.1, 85.7, 85.7, 2.0);
(365044.1, 3768363.1, 85.6, 85.6, 2.0); (365046.9, 3768359.0, 85.5, 85.5, 2.0);
(365049.6, 3768354.9, 85.3, 85.3, 2.0); (365052.3, 3768350.9, 85.2, 85.2, 2.0);
(365055.1, 3768346.8, 85.2, 85.2, 2.0); (365057.8, 3768342.7, 85.1, 85.1, 2.0);
(365060.5, 3768338.7, 85.1, 85.1, 2.0); (365063.3, 3768334.6, 85.0, 85.0, 2.0);
(365066.0, 3768330.5, 84.9, 84.9, 2.0); (365068.7, 3768326.4, 84.9, 84.9, 2.0);

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*MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

1111111111 1111111111 1111111111 1111111111 1111111111
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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

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

1.54, 3.09, 5.14, 8.23, 10.80,
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X-COORD (M) Y-COORD (M) CONC X-COORD (M) Y-COORD (M) CONC

**** PAGE 86
**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

Table with 6 columns: X-COORD (M), Y-COORD (M), CONC, X-COORD (M), Y-COORD (M), CONC. Contains multiple rows of discrete receptor point data.

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

Surface file: Metwsla7.sfc Met Version: 12345
Profile file: Metwsla7.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2005 Year: 2005

First 24 hours of scalar data
YR MO DY HR H0 U* W* DT/DZ ZICNV ZIMCH M-O LEN Z0 BOWEN ALB REF WS WD HT REF TA HT IPCOD PRATE RH
SFCP CCVR

Table with 20 columns representing meteorological data for the first 24 hours. Includes parameters like wind speed, temperature, humidity, etc.

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

First hour of profile data
YR MO DY HR HEIGHT F WDIR WSPD AMB_TMP sigmaA sigmaW sigmaV
05 01 01 01 5.5 0 -999. -99.0 281.2 99.0 -99.00 -99.00
05 01 01 01 9.11 321. 0.50 -999.0 99.0 -99.00 -99.00

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 ,L0000002 ,L0000003 ,L0000004 ,L0000005 ,
L0000006 ,L0000007 ,L0000008 ,L0000009 ,L0000010 ,L0000011 ,L0000012 ,L0000013 ,
L0000014 ,L0000015 ,L0000016 ,L0000017 ,L0000018 ,L0000019 ,L0000020 ,L0000021 ,
L0000022 ,L0000023 ,L0000024 ,L0000025 ,L0000026 ,L0000027 ,L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

**** PAGE 87
**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 ,L0000002 ,L0000003 ,L0000004 ,L0000005 ,
L0000006 ,L0000007 ,L0000008 ,L0000009 ,L0000010 ,L0000011 ,L0000012 ,L0000013 ,
L0000014 ,L0000015 ,L0000016 ,L0000017 ,L0000018 ,L0000019 ,L0000020 ,L0000021 ,

Table with 6 columns: X-COORD (M), Y-COORD (M), CONC, X-COORD (M), Y-COORD (M), CONC. Contains discrete receptor point data for the second period.

365319.99	3768542.90	1.07441	365331.09	3768526.92	0.94303
365342.20	3768510.94	0.81954	365267.07	3768692.92	1.13322
365250.80	3768702.55	1.16001	365234.53	3768712.19	1.16581
365218.25	3768721.82	1.15064	365201.98	3768731.46	1.11581
365185.70	3768741.09	1.06431	365169.43	3768750.72	0.99967
365153.16	3768760.36	0.92581	365136.88	3768769.99	0.84699
365120.61	3768779.63	0.76669	365086.40	3768783.25	0.66670
365068.47	3768777.23	0.63847	365050.54	3768771.22	0.60424
365032.61	3768765.20	0.56531	365014.68	3768759.18	0.52357
364996.75	3768753.17	0.48061	364978.82	3768747.15	0.43762
364960.89	3768741.14	0.39623	364942.96	3768735.12	0.35783
364925.03	3768729.11	0.32370	365283.35	3768683.28	1.08740
365294.45	3768667.30	1.08186	365305.55	3768651.32	1.05772
365316.65	3768635.34	1.01596	365327.75	3768619.36	0.95823
365338.85	3768603.38	0.88814	365349.96	3768587.40	0.80959
365361.06	3768571.42	0.72811	365372.16	3768555.44	0.64701
365383.26	3768539.46	0.57050	365307.89	3768721.59	0.83030
365291.36	3768731.37	0.86230	365274.84	3768741.16	0.88228
365258.31	3768750.94	0.88929	365241.79	3768760.72	0.88294
365225.27	3768770.51	0.86396	365208.74	3768780.29	0.83372
365192.22	3768790.07	0.79416	365175.69	3768799.85	0.74746
365159.17	3768809.64	0.69547	365142.64	3768819.42	0.64092
365126.12	3768829.20	0.58559	365091.39	3768832.88	0.51684
365073.18	3768826.77	0.49780	365054.98	3768820.66	0.47495
365036.77	3768814.55	0.44892	365018.56	3768808.44	0.42054
365000.36	3768802.34	0.39076	364982.15	3768796.23	0.36056
364963.95	3768790.12	0.33019	364945.74	3768784.01	0.30094
364927.54	3768777.90	0.27398	364909.33	3768771.79	0.24974
364891.12	3768765.69	0.22820	365324.41	3768711.81	0.78849
365335.51	3768695.83	0.77470	365346.62	3768679.85	0.75041
365357.72	3768663.87	0.71656	365368.82	3768647.89	0.67475
365379.92	3768631.91	0.62702	365391.02	3768615.93	0.57551
365402.12	3768599.95	0.52269	365413.22	3768583.97	0.47082
365424.32	3768567.99	0.42151	365197.41	3768384.39	5.31399
365177.05	3768365.71	7.59097	365161.84	3768355.07	9.09523
365146.63	3768344.43	9.97320	365131.41	3768333.80	9.81834
365116.20	3768323.16	8.88233	365100.99	3768312.53	7.26744

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

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 DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
365085.77	3768301.89	5.32087	365213.45	3768366.58	3.10107
365224.44	3768400.48	3.10653	365191.38	3768345.22	4.11600
365176.16	3768334.58	4.69392	365160.95	3768323.94	4.99748
365145.74	3768313.31	4.94094	365130.52	3768302.67	4.53700
365115.31	3768292.04	3.88357	365100.10	3768281.40	3.15210
365228.63	3768347.43	2.00099	365244.06	3768371.57	1.82438
365248.71	3768397.64	1.94880	365205.70	3768324.73	2.44038
365190.49	3768314.09	2.67071	365175.28	3768303.46	2.78544
365160.06	3768292.82	2.75893	365144.85	3768282.18	2.95935
365129.64	3768271.55	2.33073	365114.42	3768260.91	2.01576
365243.47	3768327.75	1.44236	365259.92	3768353.50	1.31661
365273.12	3768394.17	1.30256	365266.59	3768424.03	1.68414
365220.03	3768304.24	1.58807	365204.81	3768293.60	1.69132
365189.60	3768282.97	1.74020	365174.39	3768272.33	1.72518

365159.17	3768261.69	1.64884	365143.96	3768251.06	1.52396
365128.75	3768240.42	1.36928	365272.70	3768287.69	0.77046
365290.34	3768315.28	0.75966	365307.97	3768342.87	0.71485
365322.11	3768386.45	0.71894	365315.12	3768418.44	0.87126
365308.12	3768450.42	1.05434	365248.67	3768263.26	0.79912
365233.46	3768252.62	0.82648	365218.25	3768241.99	0.83747
365203.04	3768231.35	0.83118	365187.82	3768220.72	0.80799
365172.61	3768210.08	0.77019	365157.40	3768199.44	0.72154
365301.68	3768247.22	0.46220	365319.97	3768275.83	0.46912
365338.25	3768304.44	0.45635	365356.54	3768333.05	0.42965
365371.20	3768378.25	0.42765	365363.95	3768411.42	0.50118
365356.70	3768444.59	0.59403	365349.45	3768477.76	0.70512
365277.32	3768222.28	0.46614	365262.11	3768211.64	0.47546
365246.90	3768201.01	0.47853	365231.68	3768190.37	0.47511
365216.47	3768179.74	0.46558	365201.26	3768169.10	0.45054
365186.05	3768158.47	0.43111	365330.54	3768206.57	0.30224
365349.24	3768235.83	0.31102	365367.94	3768265.09	0.30953
365386.64	3768294.35	0.29882	365405.34	3768323.61	0.28175
365420.34	3768369.83	0.27876	365412.92	3768403.76	0.31792
365405.51	3768437.69	0.36735	365398.09	3768471.61	0.42941
365390.67	3768505.54	0.50120	365305.97	3768181.30	0.30015
365290.76	3768170.67	0.30337	365275.55	3768160.03	0.30351
365260.33	3768149.40	0.30086	365245.12	3768138.76	0.29595
365229.91	3768128.12	0.28877	365214.70	3768117.49	0.27963
365359.33	3768165.82	0.21017	365378.32	3768195.53	0.21784
365397.31	3768225.24	0.21998	365416.30	3768254.95	0.21649

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . , .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
365435.29	3768284.66	0.20827	365454.28	3768314.37	0.19681
365469.50	3768361.30	0.19398	365461.97	3768395.75	0.21673
365454.44	3768430.20	0.24471	365446.91	3768464.65	0.28022
365439.38	3768499.09	0.32399	365431.85	3768533.54	0.37223
365334.62	3768140.32	0.20705	365319.41	3768129.69	0.20836
365304.20	3768119.05	0.20831	365288.98	3768108.42	0.20691
365273.77	3768097.78	0.20413	365258.56	3768087.15	0.20019
365243.34	3768076.51	0.19523	365050.69	3768308.45	4.78603
365039.77	3768324.73	5.91345	365028.84	3768341.01	6.43351
365017.92	3768357.29	6.05506	365007.00	3768373.56	5.11774
364996.07	3768389.84	4.10840	364985.15	3768406.12	3.26723
364974.22	3768422.40	2.61344	364963.30	3768438.68	2.11013
365046.10	3768283.88	2.66593	365081.18	3768277.32	2.83419
365029.93	3768294.52	2.76360	365019.01	3768310.80	3.16025
365008.08	3768327.08	3.36514	364997.16	3768343.36	3.31472
364986.24	3768359.63	3.03793	364975.31	3768375.91	2.65233
364964.39	3768392.19	2.26433	364953.47	3768408.47	1.90827
364942.54	3768424.75	1.60459	365025.34	3768269.95	1.76086
365041.50	3768259.30	1.67254	365076.59	3768252.74	1.73740
365095.50	3768256.83	1.91180	365009.17	3768280.59	1.77380
364998.25	3768296.87	1.95222	364987.32	3768313.15	2.05074
364976.40	3768329.43	2.04934	364965.48	3768345.70	1.95519
364954.55	3768361.98	1.79704	364943.63	3768378.26	1.60829
364932.71	3768394.54	1.41476	364921.78	3768410.82	1.23188
365004.58	3768256.01	1.23159	365020.74	3768245.37	1.20003

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365036.91 3768234.73 1.13462      365071.99 3768228.17 1.16248
365090.91 3768232.25 1.26501      365109.83 3768236.34 1.33805
364988.41 3768266.66 1.22484      364977.49 3768282.94 1.31942
364966.57 3768299.22 1.37516      364955.64 3768315.49 1.38356
364944.72 3768331.77 1.34630      364933.79 3768348.05 1.27209
364922.87 3768364.33 1.17449      364911.95 3768380.61 1.06566
364901.02 3768396.89 0.95476      364963.06 3768228.15 0.68435
364979.22 3768217.51 0.68201      364995.39 3768206.87 0.66744
365011.56 3768196.22 0.64170      365027.72 3768185.58 0.60705
365062.80 3768179.02 0.61298      365081.72 3768183.10 0.65557
365100.64 3768187.19 0.69060      365119.56 3768191.27 0.71462
365138.48 3768195.36 0.72537      364946.89 3768238.80 0.67442
364935.97 3768255.08 0.71020      364925.05 3768271.36 0.73351
364914.12 3768287.63 0.74215      364903.20 3768303.91 0.73593
364892.28 3768320.19 0.71603      364881.35 3768336.47 0.68480
**** AERMOD - VERSION 15181 ***   C:\Users\HESI\Dropbox\L\landmark Apts\HRA\DPMDPM\Disc   *** 12/14/16
*** AERMET - VERSION 12345 ***   ***   22:21:11

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

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X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
364870.43	3768352.75	0.64563	364859.50	3768369.03	0.60151
364921.54	3768200.29	0.42782	364937.71	3768189.65	0.42988
364953.87	3768179.01	0.42684	364970.04	3768168.36	0.41882
364986.20	3768157.72	0.40627	365002.37	3768147.07	0.38983
365018.53	3768136.43	0.37032	365053.62	3768129.87	0.37140
365072.53	3768133.96	0.39246	365091.45	3768138.04	0.41075
365110.37	3768142.13	0.42526	365129.29	3768146.21	0.43502
365148.21	3768150.30	0.43945	365167.13	3768154.38	0.43811
364905.38	3768210.94	0.42088	364894.45	3768227.22	0.43795
364883.53	3768243.49	0.44984	364872.60	3768259.77	0.45582
364861.68	3768276.05	0.45568	364850.76	3768292.33	0.44955
364839.83	3768308.61	0.43799	364828.91	3768324.89	0.42204
364817.99	3768341.17	0.40266	364880.02	3768172.43	0.28956
364896.19	3768161.79	0.29190	364912.35	3768151.14	0.29180
364928.52	3768140.50	0.28930	364944.68	3768129.86	0.28444
364960.85	3768119.21	0.27742	364977.01	3768108.57	0.28850
364993.18	3768097.93	0.25798	365009.34	3768087.28	0.24619
365044.43	3768080.72	0.24601	365063.35	3768084.81	0.25774
365082.26	3768088.89	0.26823	365101.18	3768092.98	0.27710
365120.10	3768097.06	0.28395	365139.02	3768101.15	0.28861
365157.94	3768105.23	0.29067	365176.86	3768109.32	0.29006
365195.78	3768113.40	0.28609	364863.86	3768183.00	0.28493
364852.93	3768199.36	0.29430	364842.01	3768215.63	0.30118
364831.09	3768231.91	0.30526	364820.16	3768248.19	0.30637
364809.24	3768264.47	0.30454	364798.32	3768280.75	0.29993
364787.39	3768297.03	0.29277	364776.47	3768313.31	0.28352
364838.50	3768144.57	0.20753	364854.67	3768133.93	0.20945
364870.83	3768123.29	0.21009	364887.00	3768112.64	0.20945
364903.16	3768102.00	0.20752	364919.33	3768091.35	0.20436
364935.50	3768080.71	0.20007	364951.66	3768070.06	0.19472
364967.83	3768059.42	0.18850	364983.99	3768048.78	0.18155
365000.16	3768038.13	0.17401	365035.24	3768031.57	0.17354
365054.16	3768035.66	0.18061	365073.08	3768039.74	0.18709
365092.00	3768043.83	0.19281	365110.91	3768047.91	0.19752
365129.83	3768052.00	0.20107	365148.75	3768056.08	0.20336
365167.67	3768060.17	0.20433	365186.59	3768064.25	0.20390

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365205.51 3768068.34 0.20225      365224.43 3768072.42 0.19932
364822.34 3768155.22 0.20441      364811.42 3768171.49 0.21011
364800.49 3768187.77 0.21446      364789.57 3768204.05 0.21733
364778.64 3768220.33 0.21861      364767.72 3768236.61 0.21828
**** AERMOD - VERSION 15181 ***   C:\Users\HESI\Dropbox\L\landmark Apts\HRA\DPMDPM\Disc   *** 12/14/16
*** AERMET - VERSION 12345 ***   ***   22:21:11

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

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X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
364756.80	3768252.89	0.21635	364745.87	3768269.17	0.21292
364734.95	3768285.45	0.20817	364666.97	3768470.85	1.99492
364980.39	3768483.43	2.30587	364993.82	3768496.01	2.65985
365007.24	3768508.59	3.04277	365020.66	3768521.16	3.41176
365034.09	3768533.74	3.73375	365047.51	3768546.32	3.97959
364942.13	3768473.68	1.40386	364963.30	3768501.68	1.62510
364976.72	3768514.25	1.80439	364990.15	3768526.83	1.98085
365003.57	3768539.41	2.15356	365017.00	3768551.98	2.31740
365030.42	3768564.56	2.46267	365043.84	3768577.14	2.57118
364925.04	3768491.93	1.06414	364913.62	3768444.34	1.07561
364946.21	3768519.92	1.18410	364959.63	3768532.50	1.28457
364973.05	3768545.07	1.38005	364986.48	3768557.65	1.47272
364999.90	3768570.23	1.56450	365013.33	3768582.80	1.65586
364907.94	3768510.17	0.82214	364892.45	3768479.35	0.78206
364888.78	3768447.17	0.81064	364929.11	3768538.16	0.89090
364942.54	3768550.74	0.94998	364955.96	3768563.32	1.00702
364969.39	3768575.89	1.06279	364982.81	3768588.47	1.12085
364996.24	3768601.05	1.18048	365009.66	3768613.63	1.23904
364873.76	3768546.66	0.51411	364858.26	3768515.83	0.50512
364842.77	3768485.01	0.48303	364839.10	3768452.83	0.49926
364847.26	3768419.31	0.55396	364894.93	3768574.65	0.53825
364908.35	3768587.23	0.56139	364921.78	3768599.81	0.58549
364935.20	3768612.38	0.61007	364948.63	3768624.96	0.63652
364962.05	3768637.54	0.66603	364975.47	3768650.11	0.69768
364839.57	3768583.15	0.34347	364824.08	3768552.32	0.34416
364808.59	3768521.50	0.33833	364793.09	3768490.67	0.32608
364789.43	3768458.49	0.33514	364797.59	3768424.97	0.36674
364805.75	3768391.45	0.38968	364860.74	3768611.14	0.35261
364874.17	3768623.72	0.36295	364887.59	3768636.29	0.37376
364901.02	3768648.87	0.38550	364914.44	3768661.45	0.39962
364927.86	3768674.02	0.41671	364941.29	3768686.60	0.43588
364805.39	3768619.64	0.24280	364789.89	3768588.81	0.24728
364774.40	3768557.98	0.24936	364758.91	3768527.16	0.24483
364743.41	3768496.33	0.23583	364739.75	3768464.16	0.23991
364747.91	3768430.63	0.25867	364756.07	3768397.11	0.27353
364764.23	3768363.59	0.28287	364826.56	3768647.63	0.24508
364839.98	3768660.20	0.25045	364853.41	3768672.78	0.25706
364866.83	3768685.36	0.26424	364880.25	3768697.94	0.27265
364893.68	3768710.51	0.28279	364907.10	3768723.09	0.29384
364771.20	3768656.12	0.17985	364755.71	3768625.30	0.18416

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*** AERMET - VERSION 12345 ***   ***   22:21:11

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,

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L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , ... ,

365067.19 3768530.49 7.45532 365063.57 3768527.11 7.47041
365059.96 3768523.72 7.42743 365056.34 3768520.33 7.32724
365052.73 3768516.95 7.17724 365049.12 3768513.56 6.98236
365045.50 3768510.17 6.74638 365041.89 3768506.79 6.48889
365038.27 3768503.40 6.21765 365034.66 3768500.02 5.93128
365031.05 3768496.63 5.63530 365027.43 3768493.24 5.33929
365023.82 3768489.86 5.05320 365020.20 3768486.47 4.77930
365016.59 3768483.09 4.51844 365012.97 3768479.70 4.27075
365009.36 3768476.31 4.03843 365005.75 3768472.93 3.82605
365002.13 3768469.54 3.63061 364998.52 3768466.15 3.44884
364994.90 3768462.77 3.27823 364991.29 3768459.38 3.11843
364987.67 3768456.00 2.96794 364986.79 3768448.54 3.00803
364989.52 3768444.47 3.20457 364992.25 3768440.40 3.42199
364994.98 3768436.33 3.65789 364997.71 3768432.26 3.91624
365000.45 3768428.19 4.19732 365003.18 3768424.12 4.50436
365005.91 3768420.05 4.84958 365008.64 3768415.98 5.23502
365011.37 3768411.91 5.66822 365014.10 3768407.84 6.15801
365016.83 3768403.77 6.72286 365019.56 3768399.70 7.36361
365022.29 3768395.63 8.09199 365025.02 3768391.56 8.91254
365027.72 3768387.50 9.81823 365030.49 3768383.43 10.79042
365033.22 3768379.36 11.81472 365035.95 3768375.29 12.83722
365038.68 3768371.22 13.77546 365041.41 3768367.15 14.58564
365044.14 3768363.08 15.22205 365046.87 3768359.01 15.64737
365049.60 3768354.94 15.86554 365052.33 3768350.87 15.79352
365055.06 3768346.80 15.45235 365057.80 3768342.73 14.84261
365060.53 3768338.66 13.97624 365063.26 3768334.59 12.94318
365065.99 3768330.52 11.80096 365068.72 3768326.45 10.62224

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
364740.22	3768594.47	0.18624	364724.72	3768563.64	0.18592
364709.23	3768532.82	0.18277	364693.74	3768501.99	0.17663
364690.07	3768469.82	0.17913	364698.23	3768436.30	0.19125
364706.39	3768402.77	0.20132	364714.55	3768369.25	0.20838
364722.71	3768335.73	0.21159	364792.37	3768684.11	0.18055
364805.80	3768696.69	0.18418	364819.22	3768709.27	0.18802
364832.65	376871.85	0.19232	364846.07	3768734.42	0.19747
364859.49	3768747.00	0.20309	364872.92	3768759.58	0.20962
365071.45	3768322.38	9.49554	365177.94	3768396.83	10.96947
365078.03	3768504.65	7.06897	364984.06	3768452.61	8.22545
365075.55	3768325.24	10.99515	365079.64	3768328.11	12.72617
365083.74	3768330.97	14.66240	365087.83	3768333.83	16.81751
365091.93	3768336.70	18.98800	365096.02	3768339.56	20.97481
365100.12	3768342.42	22.70308	365104.22	3768345.29	24.20922
365108.31	3768348.15	25.44108	365112.41	3768351.01	26.36436
365116.50	3768353.88	27.01079	365120.60	3768356.74	27.49245
365124.70	3768359.60	27.78852	365128.79	3768362.47	28.08651
365132.89	3768365.33	28.19220	365136.98	3768368.20	28.00072
365141.08	3768371.06	27.40740	365145.17	3768373.92	26.41074
365149.27	3768376.79	24.97876	365153.37	3768379.65	23.07044
365157.46	3768382.51	20.87898	365161.56	3768385.38	18.55674
365165.65	3768388.24	16.33205	365169.75	3768391.10	14.31209
365173.84	3768393.97	12.50012	365175.16	3768400.83	12.55348
365172.39	3768404.82	14.30516	365169.61	3768408.81	16.18496
365166.84	3768412.81	18.07931	365164.06	3768416.81	19.92470
365161.29	3768420.80	21.62955	365158.51	3768424.79	23.14531
365155.74	3768428.79	24.42617	365152.96	3768432.79	25.48614
365150.19	3768436.78	26.32272	365147.41	3768440.77	26.96767
365144.64	3768444.77	27.41320	365141.86	3768448.77	27.69605
365139.09	3768452.76	27.82197	365136.31	3768456.75	27.81759
365133.54	3768460.75	27.68004	365130.76	3768464.75	27.44319
365127.98	3768468.74	27.11800	365125.21	3768472.73	26.70455
365122.43	3768476.73	26.21373	365119.66	3768480.73	25.64064
365116.88	3768484.72	24.99414	365114.11	3768488.71	24.24712
365111.33	3768492.71	23.38600	365108.56	3768496.71	22.38311
365105.78	3768500.70	21.22484	365103.01	3768504.69	19.88340
365100.23	3768508.69	18.35811	365097.46	3768512.69	16.68813
365094.68	3768516.68	14.96020	365091.91	3768520.67	13.25927
365089.13	3768524.67	11.67842	365086.36	3768528.67	10.27101
365083.58	3768532.66	9.03998	365080.81	3768536.65	7.97865

***** AERMOD - VERSION 15181 *** ** C:\Users\HESI\Dropbox\Landmark Apts\HRAIDPMDPM.isc *** 12/14/16
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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , ... ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** DEPO OF DPM IN GRAMS/M**2 **

X-COORD (M)	Y-COORD (M)	DEPO	X-COORD (M)	Y-COORD (M)	DEPO
365089.61	3768560.21	5.83714	365070.80	3768562.20	4.59091
365109.66	3768538.93	9.57509	365120.76	3768522.95	12.48323
365131.87	3768506.97	14.68028	365142.97	3768490.99	15.84061
365154.07	3768475.01	16.05980	365165.17	3768459.03	15.00516
365176.27	3768443.05	12.57805	365187.37	3768427.07	9.17997
365198.47	3768411.09	5.98250	365107.16	3768576.24	4.84552
365070.14	3768585.96	3.20182	365130.19	3768553.20	6.80294
365141.30	3768537.22	8.04750	365152.40	3768521.24	8.91286
365163.50	3768505.26	9.32797	365174.60	3768489.28	9.14015
365185.70	3768473.30	8.31828	365196.80	3768457.32	6.94676
365207.90	3768441.34	5.29029	365219.00	3768425.36	3.75718
365126.20	3768591.39	3.96899	365099.35	3768607.29	3.06161
365071.13	3768610.27	2.41369	365041.54	3768600.34	1.91977
365150.73	3768567.46	4.91611	365161.83	3768551.48	5.44054
365172.93	3768535.50	5.76880	365184.03	3768519.52	5.86611
365195.13	3768503.54	5.63520	365206.23	3768487.56	5.09513
365217.33	3768471.58	4.30212	365228.43	3768455.60	3.41169
365239.54	3768439.62	2.57637	365145.84	3768606.18	3.24851
365117.19	3768623.14	2.72896	365072.77	3768634.80	1.89934
365041.22	3768624.21	1.54166	365171.26	3768581.72	3.66132
365182.36	3768565.74	3.92109	365193.46	3768549.76	4.06495
365204.56	3768533.78	4.03069	365215.66	3768517.80	3.81224
365226.76	3768501.82	3.42258	365237.87	3768485.84	2.91706
365248.97	3768469.86	2.37399	365260.07	3768453.88	1.86795

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , ... ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
365074.42	3768537.26	7.24489	365070.80	3768533.88	7.37588

365185.88 3768635.31 2.30642 365155.19 3768653.48 2.13031
 365124.50 3768671.65 1.76487 365076.91 3768684.15 1.27757
 365043.10 3768672.80 1.07469 365009.28 3768661.46 0.83969
 365212.32 3768610.25 2.39259 365223.42 3768594.27 2.41782
 365234.52 3768578.29 2.39083 365245.63 3768562.31 2.28188
 365256.73 3768546.33 2.10236 365267.83 3768530.35 1.86876
 365278.93 3768514.37 1.60784 365290.03 3768490.39 1.34491
 365301.13 3768482.41 1.10532 365226.37 3768664.18 1.64131
 365210.46 3768673.60 1.65045 365194.55 3768683.02 1.61911
 365178.64 3768692.44 1.55355 365162.72 3768701.86 1.46237
 365146.81 3768711.28 1.34947 365130.90 3768720.70 1.22304
 365114.99 3768730.12 1.09362 365081.54 3768733.66 0.92329
 365064.01 3768727.78 0.86645 365046.48 3768721.89 0.79842
 365028.95 3768716.01 0.72395 365011.41 3768710.13 0.64778
 364993.88 3768704.25 0.57393 364976.35 3768698.37 0.50507
 364958.82 3768692.48 0.44329 365242.29 3768654.76 1.59674

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** DEPO OF DPM IN GRAMS/M**2 **

X-COORD (M)	Y-COORD (M)	DEPO	X-COORD (M)	Y-COORD (M)	DEPO
365253.39	3768638.78	1.60357	365264.49	3768622.80	1.57602
365275.59	3768606.82	1.50831	365286.69	3768590.84	1.41357
365297.79	3768574.86	1.29155	365308.89	3768558.88	1.15031
365319.99	3768542.90	1.00296	365331.09	3768526.92	0.86081
365342.20	3768510.94	0.73015	365267.07	3768692.92	1.18629
365250.80	3768702.55	1.21595	365234.53	3768712.19	1.22451
365218.25	3768721.82	1.20770	365201.98	3768731.46	1.17037
365185.70	3768741.09	1.11685	365169.43	3768750.72	1.05036
365153.16	3768760.36	0.97425	365136.88	3768769.99	0.91336
365120.61	3768779.63	0.80650	365086.40	3768783.25	0.69627
365068.47	3768777.23	0.65985	365050.54	3768771.22	0.61574
365032.61	3768765.20	0.56689	365014.68	3768759.18	0.51553
364996.75	3768753.17	0.46422	364978.82	3768747.15	0.41509
364960.89	3768741.14	0.36929	364942.96	3768735.12	0.32783
364925.03	3768729.11	0.29129	365283.35	3768683.28	1.13173
365294.45	3768667.30	1.11490	365305.55	3768651.32	1.07596
365316.65	3768635.34	1.01692	365327.75	3768619.36	0.94504
365338.85	3768603.38	0.86233	365349.96	3768587.40	0.77372
365361.06	3768571.42	0.68321	365372.16	3768555.44	0.59588
365383.26	3768539.46	0.51491	365307.89	3768721.59	0.87314
365291.36	3768731.37	0.90947	365274.84	3768741.16	0.93155
365258.31	3768750.94	0.93869	365241.79	3768760.72	0.93188
365225.27	3768770.51	0.91063	365208.74	3768780.29	0.87798
365192.22	3768790.07	0.83504	365175.69	3768799.85	0.78477
365159.17	3768809.64	0.73222	365142.64	3768819.42	0.67535
365126.12	3768829.20	0.61741	365091.39	3768832.88	0.54206
365073.18	3768848.77	0.51814	365054.98	3768850.66	0.48862
365036.77	3768868.55	0.45515	365018.56	3768868.44	0.41945
365000.36	3768888.34	0.38302	364982.15	3768886.23	0.34714
364963.95	3768903.12	0.31299	364945.74	3768901.02	0.28102
364927.54	3768922.90	0.25187	364909.33	3768915.79	0.22591
364891.12	3768942.69	0.20326	365324.41	3768711.81	0.82316
365335.51	3768695.83	0.80036	365346.62	3768679.85	0.76578
365357.72	3768663.87	0.72141	365368.82	3768647.89	0.66914
365379.92	3768631.91	0.61170	365391.02	3768615.93	0.55201

365402.12 3768599.95 0.49249 365413.22 3768583.97 0.43546
 365424.32 3768567.99 0.38261 365197.41 3768384.39 4.80960
 365177.05 3768365.71 7.00657 365161.84 3768355.07 8.48492
 365146.63 3768344.43 9.34416 365131.41 3768333.80 9.17192
 365116.20 3768323.16 8.25494 365100.99 3768312.53 6.66353
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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** DEPO OF DPM IN GRAMS/M**2 **

X-COORD (M)	Y-COORD (M)	DEPO	X-COORD (M)	Y-COORD (M)	DEPO
365085.77	3768301.89	4.71268	365213.45	3768366.58	2.63345
365224.44	3768400.48	2.75506	365191.38	3768345.22	3.50673
365176.16	3768334.58	4.05014	365160.95	3768323.94	4.33738
365145.74	3768313.31	4.28312	365130.52	3768302.67	3.89870
365115.31	3768292.04	3.28254	365100.10	3768281.40	2.61244
365228.63	3768347.43	1.63389	365244.06	3768371.57	1.50256
365248.71	3768397.64	1.65429	365205.70	3768324.73	2.03712
365190.49	3768314.09	2.18510	365175.28	3768303.46	2.27255
365160.06	3768292.82	2.24944	365144.85	3768282.18	2.11864
365129.64	3768271.55	1.89952	365114.42	3768260.91	1.63481
365243.47	3768327.75	1.13637	365259.92	3768353.50	1.05013
365273.12	3768394.17	1.07535	365266.59	3768424.03	1.44513
365220.03	3768304.24	1.30021	365204.81	3768293.60	1.37663
365189.60	3768282.97	1.41094	365174.39	3768272.33	1.39671
365159.17	3768261.69	1.33279	365143.96	3768251.06	1.23020
365128.75	3768240.42	1.10043	365272.70	3768287.69	0.61381
365290.34	3768315.28	0.59361	365307.97	3768342.87	0.55883
365322.11	3768386.45	0.58292	365315.12	3768418.44	0.72175
365308.12	3768450.42	0.89479	365248.67	3768263.26	0.64774
365233.46	3768252.62	0.66978	365218.25	3768241.99	0.68015
365203.04	3768231.35	0.67366	365187.82	3768220.72	0.65392
365172.61	3768210.08	0.62161	365157.40	3768199.44	0.58063
365301.68	3768247.22	0.37634	365319.97	3768275.83	0.37695
365338.25	3768304.44	0.36134	365356.54	3768333.05	0.34016
365371.20	3768378.25	0.33940	365363.95	3768411.42	0.40367
365356.70	3768444.59	0.49056	365349.45	3768477.76	0.60414
365277.32	3768222.28	0.38073	365262.11	3768211.64	0.38801
365246.90	3768201.01	0.39040	365231.68	3768190.37	0.38756
365216.47	3768179.74	0.37949	365201.26	3768169.10	0.36675
365186.05	3768158.47	0.35010	365330.54	3768206.57	0.24463
365349.24	3768235.83	0.24944	365367.94	3768265.09	0.24649
365386.64	3768294.35	0.23611	365405.34	3768323.61	0.22164
365420.34	3768369.83	0.21920	365412.92	3768403.76	0.25246
365405.51	3768437.69	0.29806	365398.09	3768471.61	0.35947
365390.67	3768505.54	0.43465	365305.97	3768181.30	0.24528
365290.76	3768170.67	0.24865	365275.55	3768160.03	0.24943
365260.33	3768149.40	0.24761	365245.12	3768138.76	0.24360
365229.91	3768128.12	0.23764	365214.70	3768117.49	0.23002
365359.33	3768165.82	0.16926	365378.32	3768195.53	0.17371
365397.31	3768225.24	0.17504	365416.30	3768254.95	0.17137

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L000001 , L000002 , L000003 , L000004 , L000005 ,
L000006 , L000007 , L000008 , L000009 , L000010 , L000011 , L000012 , L000013 ,
L000014 , L000015 , L000016 , L000017 , L000018 , L000019 , L000020 , L000021 ,
L000022 , L000023 , L000024 , L000025 , L000026 , L000027 , L000028 , ... ,

364870.43 3768352.75 0.49700 364859.50 3768369.03 0.46301
364921.54 3768200.29 0.33290 364937.71 3768189.65 0.33471
364953.87 3768179.01 0.33261 364970.04 3768168.36 0.32685
364986.20 3768157.72 0.31769 365002.37 3768147.07 0.30587
365018.53 3768136.43 0.29111 365053.62 3768129.87 0.29411
365072.53 3768133.96 0.31169 365091.45 3768138.04 0.32720
365110.37 3768142.13 0.33991 365129.29 3768146.21 0.34873
365148.21 3768150.30 0.35346 365167.13 3768154.38 0.35396
364905.38 3768210.94 0.32688 364894.45 3768227.22 0.33982
364883.53 3768243.49 0.34819 364872.60 3768259.77 0.35186
364861.68 3768276.05 0.35105 364850.76 3768292.33 0.34573
364839.83 3768308.61 0.33631 364828.91 3768324.89 0.32393
364817.99 3768341.17 0.30905 364880.02 3768172.43 0.22410
364896.19 3768161.79 0.22638 364912.35 3768151.14 0.22691
364928.52 3768140.50 0.22563 364944.68 3768129.86 0.22217
364960.85 3768119.21 0.21735 364977.01 3768108.57 0.21069
364993.18 3768097.93 0.20281 365009.34 3768087.28 0.19390
365044.43 3768080.72 0.19450 365063.35 3768084.81 0.20436
365082.26 3768088.89 0.21373 365101.18 3768092.98 0.22217
365120.10 3768097.06 0.22860 365139.02 3768101.15 0.23218
365157.94 3768105.23 0.23457 365176.86 3768109.32 0.23524
365195.78 3768113.40 0.23445 364863.86 3768183.08 0.21992
364852.93 3768199.36 0.22651 364842.01 3768215.63 0.23130
364831.09 3768231.91 0.23400 364820.16 3768248.19 0.23465
364809.24 3768264.47 0.23315 364798.32 3768280.75 0.22964
364787.39 3768297.03 0.22418 364776.47 3768313.31 0.21719
364838.50 3768144.57 0.16005 364854.67 3768133.93 0.16196
364870.83 3768123.28 0.16301 364887.00 3768112.64 0.16308
364903.16 3768102.00 0.16215 364919.33 3768091.35 0.16010
364935.50 3768080.71 0.15709 364951.66 3768070.06 0.15280
364967.83 3768059.42 0.14791 364983.99 3768048.78 0.14270
365000.16 3768038.13 0.13712 365035.24 3768031.57 0.13742
365054.16 3768035.66 0.14280 365073.08 3768039.74 0.14834
365092.00 3768043.83 0.15358 365110.91 3768047.91 0.15855
365129.83 3768052.00 0.16262 365148.75 3768056.08 0.16520
365167.67 3768060.17 0.16658 365186.59 3768064.25 0.16672
365205.51 3768068.34 0.16558 365224.43 3768072.42 0.16333
364822.34 3768155.22 0.15721 364811.42 3768171.49 0.16130
364800.49 3768187.77 0.16438 364789.57 3768204.05 0.16638
364778.64 3768220.33 0.16734 364767.72 3768236.61 0.16708

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****MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L000001 , L000002 , L000003 , L000004 , L000005 ,
L000006 , L000007 , L000008 , L000009 , L000010 , L000011 , L000012 , L000013 ,
L000014 , L000015 , L000016 , L000017 , L000018 , L000019 , L000020 , L000021 ,
L000022 , L000023 , L000024 , L000025 , L000026 , L000027 , L000028 , ... ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** DEPO OF DPM IN GRAMS/M**2 **

X-COORD (M) Y-COORD (M) DEPO X-COORD (M) Y-COORD (M) DEPO

365435.29 3768284.66 0.16413 365454.28 3768314.37 0.15410
365469.50 3768361.30 0.15155 365461.97 3768395.75 0.17085
365454.44 3768430.20 0.19605 365446.91 3768464.65 0.23044
365439.38 3768499.09 0.27503 365431.85 3768533.54 0.32679
365334.62 3768140.32 0.16919 365319.41 3768129.69 0.17065
365304.20 3768119.05 0.17075 365288.98 3768108.42 0.16966
365273.77 3768097.78 0.16745 365258.56 3768087.15 0.16422
365243.34 3768076.51 0.16009 365050.69 3768308.45 4.18747
365039.77 3768324.73 5.31758 365028.84 3768341.01 5.82435
365017.92 3768357.29 5.40400 365007.00 3768373.56 4.46167
364996.07 3768389.84 3.49703 364985.15 3768406.12 2.72455
364974.22 3768422.40 2.14483 364963.30 3768438.68 1.70966
365046.10 3768283.88 2.17856 365081.18 3768277.32 2.33002
365029.93 3768294.52 2.26080 365019.01 3768310.80 2.61772
365008.08 3768327.08 2.80469 364997.16 3768343.36 2.75733
364986.24 3768359.63 2.50278 364975.31 3768375.91 2.16036
364964.39 3768392.19 1.82431 364953.47 3768408.47 1.52466
364942.54 3768424.75 1.27263 365025.34 3768269.95 1.40145
365041.50 3768259.30 1.33109 365076.59 3768252.74 1.39111
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364944.72 3768331.77 1.05027 364933.79 3768348.05 0.99074
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365011.56 3768196.22 0.50142 365027.72 3768185.58 0.47588
365062.80 3768179.02 0.48226 365081.72 3768183.10 0.51630
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****MODELOPTs: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

*** THE PERIOD (43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L000001 , L000002 , L000003 , L000004 , L000005 ,
L000006 , L000007 , L000008 , L000009 , L000010 , L000011 , L000012 , L000013 ,
L000014 , L000015 , L000016 , L000017 , L000018 , L000019 , L000020 , L000021 ,
L000022 , L000023 , L000024 , L000025 , L000026 , L000027 , L000028 , ... ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** DEPO OF DPM IN GRAMS/M**2 **

X-COORD (M) Y-COORD (M) DEPO X-COORD (M) Y-COORD (M) DEPO

X-COORD (M) Y-COORD (M) DEPO X-COORD (M) Y-COORD (M) DEPO

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364839.98 3768660.20 0.20562 364853.41 3768672.78 0.21376
364866.83 3768685.36 0.22297 364880.25 3768697.94 0.23363
364893.68 3768710.51 0.24598 364907.10 3768723.09 0.25986
364771.20 3768656.12 0.14371 364755.71 3768625.30 0.14561

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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*** THE PERIOD ( 43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** DEPO OF DPM IN GRAMS/M**2 **

X-COORD (M)	Y-COORD (M)	DEPO	X-COORD (M)	Y-COORD (M)	DEPO
364740.22	3768594.47	0.14625	364724.72	3768563.64	0.14526
364709.23	3768532.82	0.14228	364693.74	3768501.99	0.13713
364690.07	3768469.82	0.13875	364698.23	3768436.30	0.14774
364706.39	3768402.77	0.15506	364714.55	3768369.25	0.16006
364722.71	3768335.73	0.16217	364792.37	3768684.11	0.14661
364805.80	3768696.69	0.15108	364819.22	3768709.27	0.15601
364832.65	3768721.85	0.16162	364846.07	3768734.42	0.16809
364859.49	3768747.00	0.17544	364872.92	3768759.58	0.18384
365071.45	3768322.38	9.09807	365177.94	3768396.83	10.94925
365078.03	3768540.65	7.72797	364984.06	3768452.61	2.36092
365075.55	3768325.24	10.69818	365079.64	3768328.11	12.54903
365083.74	3768330.97	14.61202	365087.83	3768333.83	16.90828
365091.93	3768336.70	19.17765	365096.02	3768339.56	21.21496
365100.12	3768342.42	22.98098	365104.22	3768345.29	24.54523
365108.31	3768348.15	25.84519	365112.41	3768351.01	26.82939
365116.50	3768353.88	27.52064	365120.60	3768356.74	28.07058
365124.70	3768359.60	28.41719	365128.79	3768362.47	28.80754
365132.89	3768365.33	28.98790	365136.98	3768368.20	28.82896
365141.08	3768371.06	28.23680	365145.17	3768373.92	27.22237
365149.27	3768376.79	25.75319	365153.37	3768379.65	23.76477
365157.46	3768382.51	21.49460	365161.56	3768385.38	19.07142
365165.65	3768388.24	16.71354	365169.75	3768391.10	14.54919

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365173.84 3768393.97 12.59156 365175.16 3768400.83 12.82504
365172.39 3768404.82 14.95430 365169.61 3768408.81 17.29069
365166.84 3768412.81 19.68408 365164.06 3768416.81 22.03900
365161.29 3768420.80 24.22511 365158.51 3768424.79 26.17068
365155.74 3768428.79 27.81487 365152.96 3768432.79 29.17579
365150.19 3768436.78 30.25296 365147.41 3768440.77 31.08869
365144.64 3768444.77 31.67590 365141.86 3768448.77 32.06432
365139.09 3768452.76 32.25893 365136.31 3768456.75 32.29281
365133.54 3768460.75 32.16732 365130.76 3768464.75 31.92494
365127.98 3768468.74 31.57939 365125.21 3768472.73 31.13342
365122.43 3768476.73 30.60325 365119.66 3768480.73 29.98325
365116.88 3768484.72 29.28457 365114.11 3768488.71 28.47482
365111.33 3768492.71 27.53529 365108.56 3768496.71 26.42408
365105.78 3768500.70 25.11601 365103.01 3768504.69 23.56527
365100.23 3768508.69 21.75566 365097.46 3768512.69 19.72280
365094.68 3768516.68 17.57673 365091.91 3768520.67 15.43393
365089.13 3768524.67 13.43950 365086.36 3768528.67 11.67703
365083.58 3768532.66 10.14511 365080.81 3768536.65 8.83565
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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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*** THE PERIOD ( 43824 HRS) DRY DEPOSITION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** DEPO OF DPM IN GRAMS/M**2 **

X-COORD (M)	Y-COORD (M)	DEPO	X-COORD (M)	Y-COORD (M)	DEPO
365074.42	3768537.26	7.90220	365070.80	3768533.88	8.01075
365067.19	3768530.49	8.04019	365063.57	3768527.11	7.97416
365059.96	3768523.72	7.82430	365056.34	3768520.33	7.60133
365052.73	3768516.95	7.32755	365049.12	3768513.56	7.01877
365045.50	3768510.17	6.68494	365041.89	3768506.79	6.34791
365038.27	3768503.40	6.01251	365034.66	3768500.02	5.67410
365031.05	3768496.63	5.33527	365027.43	3768493.24	5.00333
365023.82	3768489.86	4.68683	365020.20	3768486.47	4.38693
365016.59	3768483.09	4.10486	365012.97	3768479.70	3.84037
365009.36	3768476.31	3.59550	365005.75	3768472.93	3.37209
365002.13	3768469.54	3.16736	364998.52	3768466.15	2.97941
364994.90	3768462.77	2.80564	364991.29	3768459.38	2.64585
364987.67	3768456.00	2.49790	364986.79	3768448.54	2.52462
364989.52	3768444.47	2.70211	364992.25	3768440.40	2.89772
364994.98	3768436.33	3.11159	364997.71	3768432.26	3.34724
365000.45	3768428.19	3.60695	365003.18	3768424.12	3.89384
365005.91	3768420.05	4.21800	365008.64	3768415.98	4.58410
365011.37	3768411.91	5.00066	365014.10	3768407.84	5.47776
365016.83	3768403.77	6.03436	365019.56	3768399.70	6.67564
365022.29	3768395.63	7.41548	365025.02	3768391.56	8.26095
365027.76	3768387.50	9.20566	365030.49	3768383.43	10.23139
365033.22	3768379.36	11.32876	365035.95	3768375.29	12.44402
365038.68	3768371.22	13.48338	365041.41	3768367.15	14.40046
365044.14	3768363.08	15.14003	365046.87	3768359.01	15.65370
365049.60	3768354.94	15.95131	365052.33	3768350.87	15.91270
365055.06	3768346.80	15.57056	365057.80	3768342.73	14.92235
365060.53	3768338.66	13.98064	365063.26	3768334.59	12.85801
365065.99	3768330.52	11.61165	365068.72	3768326.45	10.32172

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**MODELOPTS: NonFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

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

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

Table with 10 rows showing highest values (1ST to 10TH) for various receptors and their coordinates.

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

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

** DEPO OF DPM IN GRAMS/M**2 **

GROUP ID DRY DEPO RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

Table with 10 rows showing highest values (1ST to 10TH) for various receptors and their coordinates.

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

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**MODELOPTs: NonDEFAULT CONC DDEP FLAT and ELEV FLGPOL DRYDPLT WETDPLT URBAN

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

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

A Total of 0 Fatal Error Message(s)
A Total of 6 Warning Message(s)
A Total of 775 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 42 Calm Hours Identified

A Total of 733 Missing Hours Identified (1.67 Percent)

Met Data File Includes 0.00 Millimeters (0.000 Inches) of Precipitation

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

*** NONE ***

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

ME W396 1016 MEOpen: AERMET Version Out-dated or Non-standard; Version: 12345
MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at: 08010101
MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at: 1 year gap
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 11010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 1 year gap
MX W496 43825 MAIN: Total precipitation in SURFFILE is zero (0.0) with WetDepos

*** AERMOD Finishes Successfully ***
