

## Errata 6

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# Archer Forward: Campus Preservation and Improvement Plan Final Environmental Impact Report

## A. Background and Introduction

In accordance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the City of Los Angeles prepared and circulated a Notice of Preparation for public comment to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties for a 30-day review period, beginning January 3, 2012. Subsequently, a Draft Environmental Impact Report (EIR) was prepared and, in accordance with CEQA, the Draft EIR was initially circulated for a 46-day public comment period beginning February 27, 2014, and ending April 14, 2014. In response to public comments, the comment period was extended an additional 15 days through April 29, 2014, to provide more time for responsible and trustee agencies, as well as the public, to comment on the Draft EIR. A Final EIR that included responses to comments on the Draft EIR and corrections and additions to the Draft EIR was prepared and distributed in November 2014. An Errata to the Final EIR (referred to as Errata 1) that described further refinements to the Project was also prepared and made available to the public in December 2014.

Subsequent to completion of the Final EIR, the City of Los Angeles Hearing Officer, on behalf of the City Planning Commission, conducted a public hearing on December 8, 2014 at which members of the public had an opportunity to present oral and written testimony regarding the Project. In order to provide the opportunity for additional comments, written comments were also accepted for an additional week after the public hearing. An Errata to the Final EIR (referred to as Errata 2) was then prepared in April 2015 to address commonly raised topics during the public hearing process and provide further clarification on other topics previously raised during the public comment period for the Draft EIR.

On April 23, 2015, the City Planning Commission, as the initial decision-maker, conducted a meeting at which members of the public had an opportunity to present oral and written testimony. Written comments were also received prior to the City Planning Commission meeting. The City Planning Commission found that the Project conforms to

the purpose and intent of the findings required for a conditional use under the Los Angeles Municipal Code and approved the Project with modified conditions at the City Planning Commission meeting. Based on a review of the oral and written testimony presented at the City Planning Commission meeting and the written comments received prior to the meeting, the City determined that the environmental issues raised regarding the EIR have already been addressed. An Errata to the Final EIR (referred to as Errata 3) was prepared in June 2015 following the City Planning Commission meeting that summarized the Project refinements made at the City Planning Commission meeting and provided additional clarifications. An additional Errata to the Final EIR (referred to as Errata 4) was also prepared in June 2015 to address specific corrections to the Final EIR.

Subsequent to the City Planning Commission, six appeals were submitted regarding the City Planning Commission's decision on the Project. Accordingly, the Planning and Land Use Management (PLUM) Committee conducted a public hearing on June 30, 2015 at which members of the public had an opportunity to present oral and written testimony. In response to the oral and written testimony presented at the PLUM Committee hearing, including the appeals, additional Project refinements were made by the PLUM Committee. An additional Errata to the Final EIR (referred to as Errata 5) was then prepared in July 2015, which described and evaluated the Project refinements made by the PLUM Committee.

This Errata to the Final EIR (referred to herein as Errata 6) addresses specific corrections to the Final EIR and provides additional clarifications regarding the proposed three-year construction schedule for the Project. The Draft EIR, Final EIR, Errata 1, Errata 2, Errata 3, Errata 4, Errata 5, and this Errata 6 comprise the EIR for the Project.

## **B. Corrections and Additions to the EIR**

Additional changes have been made to the EIR based on comments received. Such changes to the EIR are indicated under the appropriate EIR section or appendix heading. Deletions are shown with ~~striketrough~~ and additions are shown with underline.

## 1. Draft EIR

### IV.B. Air Quality

Draft EIR, Volume 1, Section IV.B, Air Quality, page IV.B-42, revise first paragraph as follows:

Although the SCAQMD CEQA Handbook does not recommend a health risk assessment for short-term construction emissions, an assessment of diesel particulate emissions was conducted to assess this potential risk using the same assumptions used for the localized analysis discussed above. As such, this analysis includes all diesel exhaust emissions associated with on-site heavy equipment and haul trucks during the construction period. The results of this analysis for the construction of the Project yield a maximum incremental increase in offsite individual cancer risk of ~~9.4~~5.7 in a million over the duration of construction and an excess cancer burden of 0.2, where the maximum impact occurs at residential uses directly northeast of the Project Site.<sup>1</sup> The chronic hazard index is approximately 0.01 and is less than the SCAQMD significance threshold of 1.0.<sup>2</sup> As the Project would not emit carcinogenic or toxic air contaminants that individually or collectively exceed the maximum individual cancer risk of ten in one million or result in an excess cancer burden of 0.5 or more, Project-related toxic emission impacts from construction activities would be less than significant and no mitigation would be required.

## 2. Final EIR

### Appendix F-2

Final EIR, Volume 6, Appendix F-2, Supplemental Air Quality Worksheets, Appendix F.1-1(d), Updated Construction Diesel Particular Matter (DPM) Exhaust Emissions Health Risk Assessment (HRA), Construction DPM HRA Methodology, page 2, revise paragraph as follows:

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<sup>1</sup> *Cancer burden is the estimated increase in the occurrence of cancer cases in a population as a result of exposure to TAC emissions. Cancer burden is calculated by multiplying the total population (in the zone of impact) greater than one in a million.*

<sup>2</sup> *Please note that diesel particulate matter does not have an acute exposure endpoint and, therefore, the SCAQMD acute index threshold of 1.0 is not applicable.*

The Final EIR also incorporates mitigation measures included in the Draft EIR and this Final EIR into the HRA. Specifically, the HRA incorporates Mitigation Measure B-4, which requires the use of Tier 3 construction equipment throughout the duration of proposed construction activities and front-end loaders used for Phase 1—Excavation and Grading which would meet Tier 4 interim standards, as discussed in Response to Comment No. 28-15. Mitigation Measure B-7 was also quantified in the HRA, which minimizes exhaust emissions by requiring trucks and vehicles in loading and unloading queues to have their engines turned off after five minutes when not in use. Based on refined assessment, the HRA demonstrates that health risks from the Project would be ~~5.0~~ 5.7 in a million for offsite receptors, which is below the applicable significance threshold (10 in one million). For potential onsite student and staff exposure at the School, the maximum mitigated cancer risk is ~~8.2~~ 9.4 and ~~4.9~~ 5.6 in a million, respectively, which is below the applicable significance threshold. It is noted that this risk 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. Consistent with the results of the health risk assessment included in the Draft EIR, potential impacts to sensitive receptors within the Project area (i.e., nearby residences and Archer's students) would be less than significant with incorporation of proposed mitigation measures. The above calculation of student health risk conservatively assumes that student programs would be provided on campus during the summer months of construction. However, given the construction schedule, no extended student activities are planned for the Project Site during the summer months of North Wing Improvements and Phase I Excavation and Grading and onsite student risk would decrease to ~~7.4~~ 8.5 in a million.

Final EIR, Volume 6, Appendix F-2, Supplemental Air Quality Worksheets, Appendix F.1-1(d), Updated Construction Diesel Particular Matter (DPM) Exhaust Emissions Health Risk Assessment (HRA), replace the Carcinogenic and Non Carcinogenic Risk Calculations with the revised Carcinogenic and Non Carcinogenic Risk Calculations attached to this Errata 6.

Final EIR, Volume 6, Appendix F-2, Supplemental Air Quality Worksheets, Appendix F.1-1(d), Updated Construction Diesel Particular Matter (DPM) Exhaust Emissions Health Risk Assessment (HRA), replace the DPM Construction HRA AERMOD Annual Scalar Concentration Isopleth with the revised DPM Construction HRA AERMOD Annual Scalar Concentration Isopleth attached to this Errata 6.

Final EIR, Volume 6, Appendix F-2, Supplemental Air Quality Worksheets, Appendix F.1-1(d), Updated Construction Diesel Particular Matter (DPM) Exhaust Emissions Health Risk Assessment (HRA), replace the DPM Construction HRA AERMOD Output File with the revised DPM Construction HRA AERMOD Output File attached to this Errata 6.

## **C. Three-Year Construction Schedule**

As detailed in Errata 2, in response to additional comments raised regarding the construction duration after release of the Final EIR, the Project was refined to be implemented within a three-year construction timeframe. The EIR analyzed the potential impacts under an accelerated construction schedule during which Project construction activities could be concurrent and completed within a shorter time period. See pages II-39, IV.B-43, IV.I-71 to IV.I-77, IV.I-120 to IV.I-121, IV.K-96 to IV.K-102, and Appendix C-3 of the Draft EIR. Also see pages I-42, I-83 to I-85, I-97 to I-98 of the Final EIR. Based on the analysis included in Errata 2, an accelerated construction schedule could be implemented within a three-year construction timeframe and would not result in new significant environmental impacts to air quality, noise, and traffic or an increase in the severity of those impacts beyond those set forth in the Draft EIR (refer to pages 9 to 16 and Appendix A of Errata 2).

As discussed in Errata 2, the three-year construction schedule tiers off of the accelerated construction schedule analyzed in the Draft EIR where all phases of the Project would be constructed concurrently. The analysis of the accelerated construction schedule assumed maximum construction activities occurring within the Project Site. The three-year construction schedule assumes no increase in maximum numbers of construction equipment, grading, construction truck and construction worker trips, or construction hours of operation above what were already evaluated for the peak construction day within the Draft EIR (see page 10 of Errata 2). Thus, while the intensity of activity on the peak construction days would be similar to those already analyzed in the Draft EIR, the difference between a three-year construction schedule and the schedule evaluated in the Draft EIR for the Project (six-year construction schedule) would be the number of days during which peak construction activities could occur.

As specifically explained in a memorandum prepared by Matt Construction regarding the three-year construction schedule (see *Archer Forward: Campus Preservation and Improvement Plan: 3-Year Construction Schedule* dated August 3, 2015 and attached as Appendix A of this Errata 6), Matt Construction conducted a planning exercise to determine

if the Project could be constructed in 36 months.<sup>3</sup> Under the three-year construction schedule, Matt Construction expects that the three-year construction schedule would commence with Preconstruction Activities followed by demolition of the existing North Wing and the residences on the Chaparal and Barrington Parcels. During demolition activities, shoring and site preparation of the Project Site would also occur. In addition, excavation and haul would begin. Excavation and haul is anticipated to occur over the summer months when Archer and other schools are not in session and would be of similar duration and construction intensity as the excavation and haul under the six-year construction schedule. During the excavation and haul, the Temporary Classroom Village would be installed and would involve minimal onsite activity because the modular classrooms are prefabricated. Construction of the North Wing Renovation and Phase 1 (underground parking garage, athletic field, and Multipurpose Facility) would then occur. Once Phase 1 is completed Phase 2 (Performing Arts Center and Visual Arts Center) would begin.

As additional overlap of construction activities would occur under a three-year construction schedule as compared to the six-year construction schedule, the maximum construction assumptions regarding construction equipment and construction truck or worker trips provided in the Draft EIR would be experienced on more days throughout the construction period. Nonetheless, as noted above, the three-year construction schedule would not result in an increase in the numbers of construction equipment, amount of grading, numbers of construction truck and construction worker trips, or construction hours of operation above that already evaluated for the peak construction day within the Draft EIR.

As discussed in the memorandum prepared by Matt Construction, while the construction duration has been reduced by expediting the sequencing of construction activities and providing for more overlap of construction activities, the assumptions for the maximum construction activity, and therefore the peak construction impacts, would remain the same as that evaluated in the Draft EIR because the maximum construction activity that can occur on the Project Site on any given day is limited by the Project's location in an infill site in a residential neighborhood that is impacted by traffic and on a Project Site with limited acreage, access points, and laydown areas. The activities that can occur on site on any given day are also limited by the Project's design and required construction

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<sup>3</sup> *The 36 month construction schedule excludes Preconstruction and Post-construction Activities. Examples of Preconstruction Activities may include improvements necessary for fire safety and access, interior abatement of existing buildings prior to demolition, installation of campus electrical service upgrade, and site preparation. Examples of Post-construction Activities may include interior finishing work, exterior painting, and exterior hardscape and landscape improvements.*

sequencing. Because of these limitations, the maximum on-site activities cannot be increased.

For instance, as provided in Appendix A, the activities associated with demolition of the existing North Wing and the residences on the Chaparal and Barrington Parcels, excavation and haul of the Project Site, or concrete pours under the three-year schedule would not exceed the maximum construction activity described in the Construction Activity Schedule (CAS) and the Round Trips per Vehicle Classification (RTVC) prepared by Paul W. Speer, Inc. and included in Appendix C-1 and Appendix C-2 of the Draft EIR, respectively, and the Accelerated Construction Memorandum, dated February 6, 2014, prepared by Matt Construction, included as Appendix C-3 of the Draft EIR, for similar activities. Specifically, during excavation and haul, which is when the maximum number of truck trips and the maximum use of heavy-duty construction equipment would occur on a given day, the maximum amount of excavation and haul and associated truck trips and use of equipment that could occur on a given day cannot increase beyond the maximum included in the CAS and RTVC. The six-year construction schedule already compressed the excavation and haul to the quickest time possible given the Project design and site constraints. It is not possible to increase the maximum number of truck trips or the use of heavy-equipment on-site that would occur during the peak day because of constraints such as the size of the Project Site, the time it takes to load a haul truck, the restrictions on haul hours, and traffic in the surrounding area. Therefore, the maximum numbers for construction equipment, grading, and construction truck and construction worker trips are limited and are consistent with those provided in the CAS, the RTVC, and the Accelerated Construction Memorandum. The acceleration of the construction schedule requires that additional days may utilize the maximum assumptions outlined in the CAS, RTVC, and the Accelerated Construction Memorandum. However, the maximum assumptions would not be exceeded on any given day because of the Project's limitations and constraints.

Therefore, because the maximum assumptions for construction activities would not be increased beyond those already analyzed in the Draft EIR, the Draft EIR construction analysis fully analyzed the peak impacts of the three-year construction schedule. While the number of peak days could be greater under the three-year construction schedule than under the six-year construction schedule, the intensity of the peak construction days (and thus the determination of the significance level) is unchanged from what was analyzed in the Draft EIR. The increase in the number of peak construction days would not result in new impacts under CEQA as construction-related impacts are determined based on a peak day. For example, as specified in the *L.A. CEQA Thresholds Guide*, project impacts with regard to air quality are determined based on an evaluation of the emissions from all construction-related activities, including equipment, earth moving, and worker travel, using the worst-case day. Similarly, project impacts with respect to construction traffic are determined based on the A.M. and P.M. peak traffic periods on a single day and construction

noise impacts are determined based on maximum construction activities on a single day. Therefore, as explained in detail in Errata 2, the potential impacts of the three-year construction timeframe have been addressed as part of the construction analysis in the Draft EIR and no additional analysis of the three-year construction schedule is required.

## **D. Effect of Corrections and Additions**

This Errata 6 documents additional changes to the EIR. As demonstrated by the following discussion, the modifications to the EIR do not result in new significant impacts and do not warrant recirculation of the EIR.

CEQA Guidelines Section 15088.5 requires that an EIR that has been made available for public review, but not yet certified, be recirculated only if significant new information has been added to the EIR. Pursuant to CEQA Guidelines section 15088.5(c), the entire document need not be circulated if revisions are limited to specific portions of the document. The relevant portions of CEQA Guidelines section 15088.5 read as follows:

- (a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term “information” can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation include, for example, a disclosure showing that:*
- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.*
  - (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.*
  - (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the*



*environmental impacts of the project, but the project's proponents decline to adopt it.*

*(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.*

*(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.*

The information contained in this Errata 6 merely clarifies, amplifies, or makes insignificant changes to the information that has already been presented in the EIR. In addition, the modifications to the EIR are not significant because the EIR is not changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the Project. Specifically, with the clarifications provided above regarding air quality, impacts associated with toxic air contaminants would continue to be less than significant. In addition, the clarifications provided regarding the three-year construction schedule confirm the analysis included in Errata 2. Therefore, the clarifications to the EIR would not result in any new significant impacts or a substantial increase in the severity of any impact already identified in the EIR. In addition, the clarifications to the EIR merely clarify, amplify or make insignificant refinements to the information that has already been presented in the EIR. Thus, none of the conditions in Section 15088.5 of the CEQA Guidelines are met, and recirculation is not required.

## Appendix A



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# Memorandum Regarding Three-Year Construction Schedule



August 3, 2015

Ms. Stephanie Eyestone-Jones  
President  
Eyestone Environmental  
6701 Center Drive, Suite 900  
Los Angeles, CA 90045

***RE: Archer Forward: Campus Preservation and Improvement Plan: 3-Year Construction Schedule***

Dear Ms. Eyestone-Jones:

The Draft Environmental Impact Report (“EIR”) for the Archer Forward: Campus Preservation and Improvement Plan (the “Project”) proposed construction for the Project in phases over six years (approximately 75 months) commencing with the North Wing Renovation and followed by Phase 1 and Phase 2. In addition, the Draft EIR included an analysis of an accelerated construction schedule during which Project construction activities could be concurrent and completed within a shorter time period. The six-year construction schedule analysis was based on the Construction Activity Schedule (“CAS”) and the Round Trips per Vehicle Classification (“RTVC”) prepared by Paul W. Speer, Inc. and included at Appendix C-1 and Appendix C-2 of the Draft EIR, respectively. The accelerated construction schedule was based on the Accelerated Construction Memorandum, dated February 6, 2014, prepared by Matt Construction, which was included as Appendix C-3 of the Draft EIR. In preparing the Accelerated Construction Memorandum, Matt Construction reviewed the CAS and RTVC.

In response to comments raised regarding the construction duration after release of the Final EIR, the Project was refined to be implemented within a 3-year construction timeframe, which was evaluated in Errata 2 to the EIR. Matt Construction provides clarification regarding construction assumptions for the 3-year construction schedule.

**3-Year Construction Schedule:** In response to comments raised regarding the construction duration after the release of the Final EIR, Archer requested that Matt Construction and a professional construction management firm conduct a planning exercise to determine if the Project could be constructed in 36 months.<sup>1</sup> Matt Construction has determined that the Project can be constructed in 36 months. The construction duration has been reduced by expediting the sequencing of construction activities and providing for more overlap of construction activities.

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<sup>1</sup> The 36 month construction schedule excludes Preconstruction and Post-construction Activities. Examples of Preconstruction Activities may include improvements necessary for fire safety and access, interior abatement of existing buildings prior to demolition, installation of campus electrical service upgrade, and site preparation. Examples of Post-construction Activities may include interior finishing work, exterior painting, and exterior hardscape and landscape improvements.

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It is expected that the 3-year construction schedule would commence with Preconstruction Activities followed by demolition of the existing North Wing and the residences

on the Chaparal and Barrington Parcels. During demolition activities shoring and site preparation of the Project site would also occur. Excavation and haul would then begin (which is anticipated to occur over the summer months when Archer and other schools are not in session, which is of similar duration and construction intensity as the excavation and haul under the six-year construction schedule). During the excavation and haul the Temporary Classroom Village would be installed, which would involve minimal onsite activity because the modular classrooms are prefabricated. Construction of the North Wing Renovation and Phase 1 (underground parking garage, athletic field, and Multipurpose Facility) would then occur. Once Phase 1 is completed Phase 2: Performing Arts Center and Visual Arts Center would begin. A graphic depiction of this schedule is included at Exhibit 1 to this memorandum.

**Construction Assumptions:** The 3-year construction schedule tiers off of the accelerated construction schedule and assumes no increase in maximum numbers of construction equipment, grading, construction truck and construction worker trips, or construction hours of operation that were assumed for the maximum construction activity under the CAS, the RTVC, and in Matt Construction's Accelerated Construction memorandum. While the construction duration has been reduced by expediting the sequencing of construction activities and providing for more overlap of construction activities, the assumptions for the maximum construction activity remain consistent because the maximum construction activity that can occur on the Project site on any given day is limited by the Project's location in an infill site in a residential neighborhood that is impacted by traffic and on a Project site with limited acreage, access points, and laydown areas. The activities that can occur on site on any given day are also limited by the Project's design and required construction sequencing. Because of these limitations, the maximum on-site activities cannot be increased.

For example, the activities associated with demolition of the existing North Wing and the residences on the Chaparal and Barrington Parcels, excavation and haul of the Project site, or concrete pours under the 3-year schedule would not exceed the maximum construction activity described in the CAS, the RTVC, and in Matt Construction's Accelerated Construction memorandum for similar activities. For instance, during excavation and haul, which is when the maximum number of truck trips and the maximum use of heavy-duty construction equipment would occur on a given day, the maximum amount of excavation and haul and associated truck trips and use of equipment that could occur on a given day cannot increase beyond the maximum included in the CAS and RTVC. The six-year construction schedule already compressed the excavation and haul to the quickest time possible given the Project design and site constraints. It is not possible to increase the maximum number of truck trips or the use of heavy-equipment on-site that would

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occur during the peak day because of constraints such as the size of the Project site, the time it takes to load a haul truck, the restrictions on haul hours, and traffic in the surrounding area.

Therefore, the maximum numbers for construction equipment, grading, and construction truck and construction worker trips are limited and are consistent with those provided in the CAS, the RTVC, and Matt Construction's Accelerated Construction memorandum. The acceleration of the construction schedule requires that additional days may utilize the maximum assumptions outlined in the CAS, RTVC, and the Accelerated Construction memorandum; however, the maximum assumptions would not be exceeded on any given day because of the Project's limitations and constraints.

Sincerely,

A handwritten signature in blue ink that reads "Marvin D. Wheat".

Marvin D. Wheat

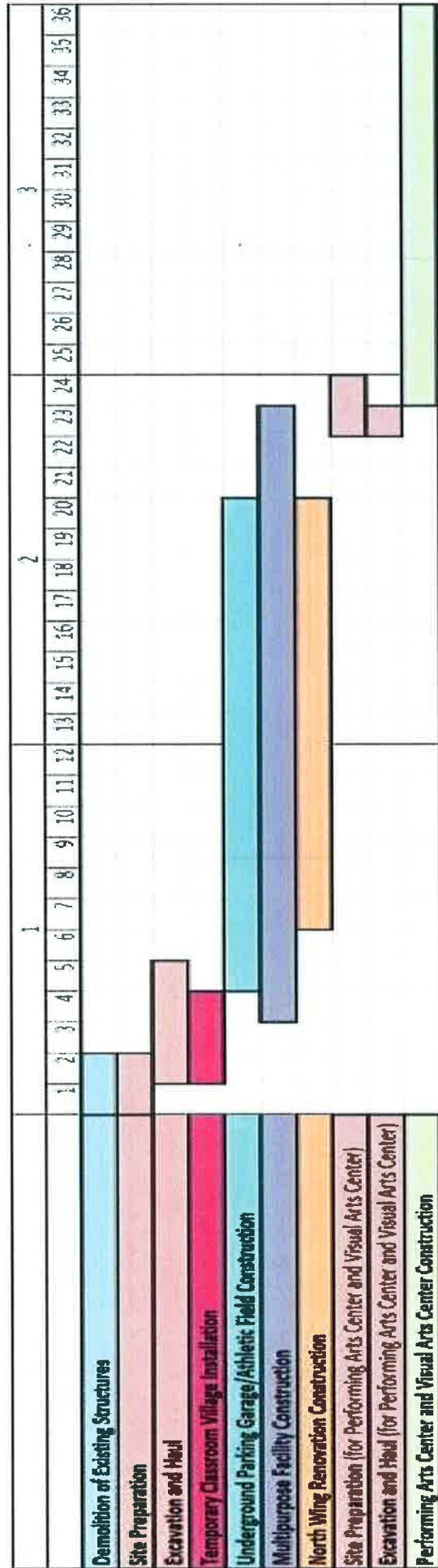
President

Handwritten initials in black ink that appear to be "DJR".

cc: Rick Benfield, The Archer School for Girls



## Exhibit 1 36-Month Construction Schedule



Revised Appendix F-2 Worksheets

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Revised Carcinogenic and  
Non Carcinogenic Risk Calculations



Archer School for Girls  
DPM Risk Calculations Offsite Exposure (Construction)

**Archer School for Girls (Off-site Sensitive Receptor)**  
**Adult Risk (Unmitigated)**

Source  (a)	Mass GLC				Weight Fraction  (d)	Contaminant  (e)	Carcinogenic Hazard			Noncarcinogenic Hazard / Toxicological Endpoints*		
	(µg/m3) (1 g/s)	DPM Emissions (g/s)	Adjusted Concentration (µg/m3) (mg/m3)				URF (µg/m3) <sup>-1</sup> (f)	CPF (mg/kg/day) <sup>-1</sup> (g)	RISK  (h)	REL (µg/m3) (i)	RfD (mg/kg/day) (j)	RESP  (k)
<b>Construction DPM (Construction Duration)</b>	38.04000	0.01356	0.51573	5.2E-04	1.00E+00	Diesel Exhaust Particulate	3.0E-04	1.1E+00	1.01E-05	5.0E+00	1.4E-03	1.2E-02
Total									<b>1.01E-05</b>	3.6E+04	1.0E+01	1.18E-02

DPM Total

**10.1** 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)	4.8
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		

**Archer School for Girls (Off-site Sensitive Receptor)**  
**Adult Risk (Mitigated)**

Source  (a)	Mass GLC				Weight Fraction  (d)	Contaminant  (e)	Carcinogenic Hazard			Noncarcinogenic Hazard / Toxicological Endpoints*		
	(µg/m3) (1 g/s)	DPM Emissions (g/s)	Adjusted Concentration (µg/m3) (mg/m3)				URF (µg/m3) <sup>-1</sup> (f)	CPF (mg/kg/day) <sup>-1</sup> (g)	RISK  (h)	REL (µg/m3) (i)	RfD (mg/kg/day) (j)	RESP  (k)
<b>Construction DPM (Construction Duration)</b>	38.04000	0.00764	0.29050	2.9E-04	1.00E+00	Diesel Exhaust Particulate	3.0E-04	1.1E+00	5.71E-06	5.0E+00	1.4E-03	6.7E-03
Total									<b>5.71E-06</b>	3.6E+04	1.0E+01	6.66E-03

DPM Total

**5.7** 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)	4.8
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)	diesel particulate control efficiency	0%
EYES	Eye irritation and/or other effects		



Archer School for Girls  
DPM Risk Calculations Onsite Student Exposure (Construction)

**Archer School for Girls (On-site Sensitive Receptor)**  
**Student Risk (Unmitigated)**

Source  (a)	Mass GLC				Weight Fraction	Contaminant	Carcinogenic Hazard			Noncarcinogenic Hazard / Toxicological Endpoints*		
	(µg/m3) (1 g/s)	DPM Emissions (g/s)	Adjusted Concentration (µg/m3) (mg/m3)				URF (µg/m3) <sup>-1</sup>	CPF (mg/kg/day) <sup>-1</sup>	RISK	REL (µg/m3) (i)	RfD (mg/kg/day)	RESP
<b>Construction DPM (Construction Duration)</b>	37.600	0.014	0.50976	5.1E-04	1.00E+00	Diesel Exhaust Particulate	3.0E-04	1.1E+00	1.67E-05	5.0E+00	1.4E-03	1.9E-02
Total									<b>1.67E-05</b>	3.6E+04	1.0E+01	1.95E-02

DPM Total **16.7** 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)	4.8
CV/BL	Cardiovascular/Blood System	inhalation rate (m3/day)	0.5
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		

**Archer School for Girls (On-site Sensitive Receptor)**  
**Student Risk (Mitigated)**

Source  (a)	Mass GLC				Weight Fraction	Contaminant	Carcinogenic Hazard			Noncarcinogenic Hazard / Toxicological Endpoints*		
	(µg/m3) (1 g/s)	DPM Emissions (g/s)	Adjusted Concentration (µg/m3) (mg/m3)				URF (µg/m3) <sup>-1</sup>	CPF (mg/kg/day) <sup>-1</sup>	RISK	REL (µg/m3)	RfD (mg/kg/day)	RESP
<b>Construction DPM (Construction Duration)</b>	37.406	0.008	0.28566	2.9E-04	1.00E+00	Diesel Exhaust Particulate	3.0E-04	1.1E+00	9.36E-06	5.0E+00	1.4E-03	1.1E-02
Total									<b>9.36E-06</b>	3.6E+04	1.0E+01	1.09E-02

DPM Total **9.4** 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)	4.8
CV/BL	Cardiovascular/Blood System	inhalation rate (m3/day)	0.5
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)	diesel particulate control efficiency	0%
EYES	Eye irritation and/or other effects		

Archer School for Girls  
DPM Risk Calculations Onsite Staff Exposure (Construction)

**Archer School for Girls (On-site Sensitive Receptor)**  
**Adult Risk (Unmitigated)**

Source  (a)	Mass GLC				Weight Fraction  (d)	Contaminant  (e)	Carcinogenic Hazard			Noncarcinogenic Hazard / Toxicological Endpoints*		
	( $\mu\text{g}/\text{m}^3$ ) (1 g/s)	DPM Emissions (g/s)	Adjusted Concentration ( $\mu\text{g}/\text{m}^3$ ) (mg/m3)				URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup> (f)	CPF (mg/kg/day) <sup>-1</sup> (g)	RISK (h)	REL ( $\mu\text{g}/\text{m}^3$ ) (i)	RfD (mg/kg/day) (j)	RESP (k)
<b>Construction DPM (Construction Duration)</b>	37.60	0.01356	0.50976	5.1E-04	1.00E+00	Diesel Exhaust Particulate	3.0E-04	1.1E+00	1.00E-05	5.0E+00	1.4E-03	1.2E-02
Total									<b>1.00E-05</b>	3.6E+04	1.0E+01	1.17E-02

DPM Total

**10.0**  
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)	4.8
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		

**Archer School for Girls (On-site Sensitive Receptor)**  
**Adult Risk (Mitigated)**

Source  (a)	Mass GLC				Weight Fraction  (d)	Contaminant  (e)	Carcinogenic Hazard			Noncarcinogenic Hazard / Toxicological Endpoints*		
	( $\mu\text{g}/\text{m}^3$ ) (1 g/s)	DPM Emissions (g/s)	Adjusted Concentration ( $\mu\text{g}/\text{m}^3$ ) (mg/m3)				URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup> (f)	CPF (mg/kg/day) <sup>-1</sup> (g)	RISK (h)	REL ( $\mu\text{g}/\text{m}^3$ ) (i)	RfD (mg/kg/day) (j)	RESP (k)
<b>Construction DPM (Construction Duration)</b>	37.60	0.00764	0.28714	2.9E-04	1.00E+00	Diesel Exhaust Particulate	3.0E-04	1.1E+00	5.64E-06	5.0E+00	1.4E-03	6.6E-03
Total									<b>5.64E-06</b>	3.6E+04	1.0E+01	6.58E-03

DPM Total

**5.6**  
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)	4.8
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)	diesel particulate control efficiency	0%
EYES	Eye irritation and/or other effects		

Revised Appendix F-2 Worksheets

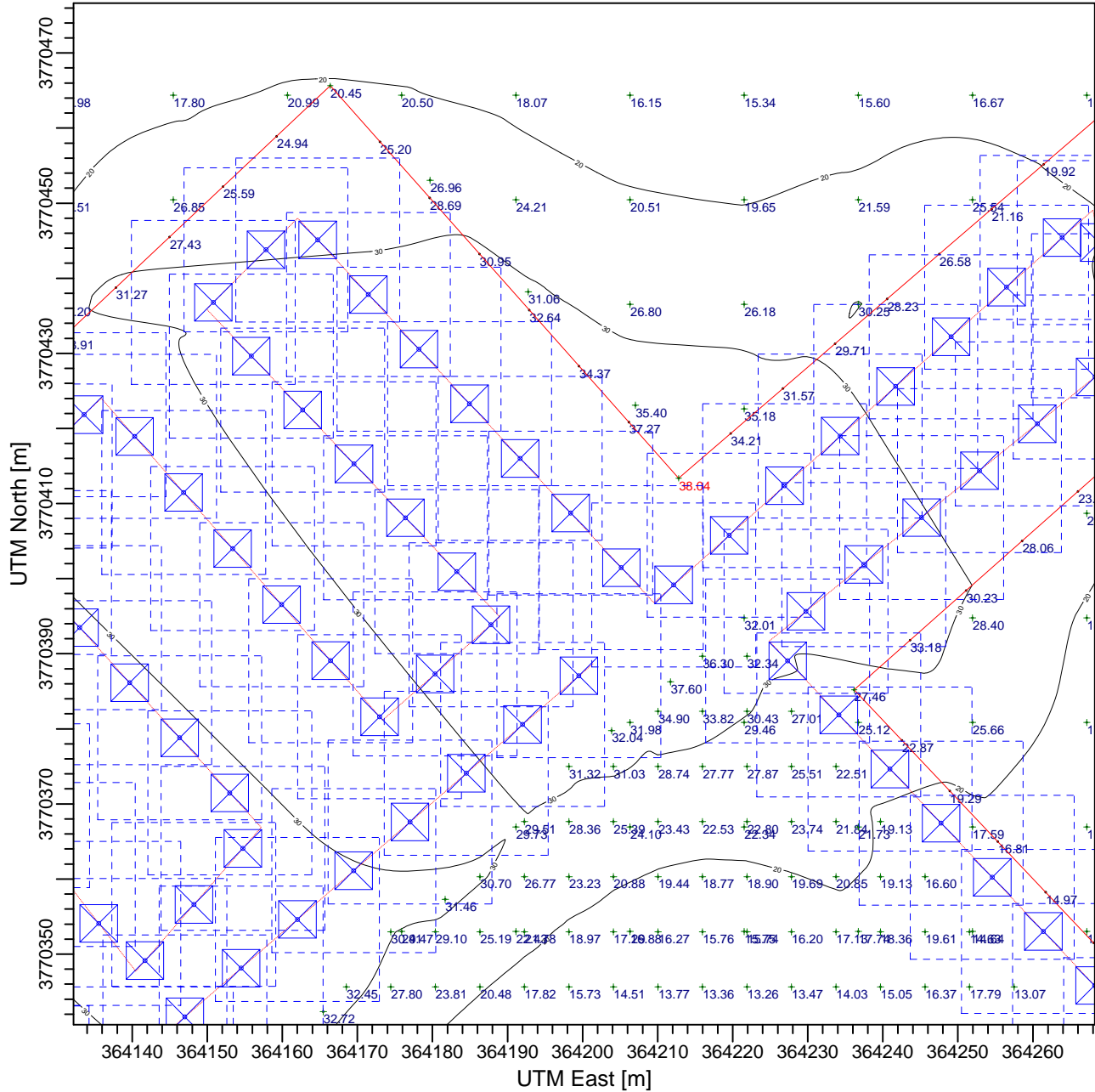
---

Revised DPM Construction HRA AERMOD  
Annual Scalar Concentration Isopleth



PROJECT TITLE:

**Archer School for Girls  
Diesel Particulate Matter (DPM) Construction HRA Annual Scalar**



COMMENTS:

Annual Scalar is based on an emission rate of 1 gram per second.

SOURCES:

**1**

COMPANY NAME:

RECEPTORS:

**655**

MODELER:

OUTPUT TYPE:

**Concentration**

SCALE:

1:855

0  0.03 km

MAX:

**38.0 ug/m<sup>3</sup>**

DATE:

**7/31/2015**

PROJECT NO.:

# Revised Appendix F-2 Worksheets

---

Revised DPM Construction  
HRA AERMOD Output File



# DPM HRA AERMOD OUTPUT FILE

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.7.0
** Lakes Environmental Software Inc.
** Date: 7/31/2015
** File: C:\Users\HESI\Dropbox\Archer\Air Quality\Construction\Construction HRA\AERMOD\DPM5\DPM5.ADI
**
*****
```

```
** AERMOD Control Pathway
*****
```

```
CO STARTING
TITLEONE C:\Active\My Dropbox\Dropbox\Archer\Air Quality\Construction\AERMOD\
MODELOPT DFAULT CONC
AVERTIME PERIOD
URBANOPT 9862049 Los_Angeles_County
POLLUTID PM
RUNORNOT RUN
ERRORFIL DPM5.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
** DESCRSRC Diesel Exhaust
** PREFIX
** Length of Side = 5.00
** Configuration = Separated
** Emission Rate = 1.0
** Elevated
** Vertical Dimension = 5.00
** SZINIT = 1.16
** Nodes = 23
** 364290.357, 3770322.388, 149.94, 5.00, 4.61
** 364224.849, 3770391.670, 152.22, 5.00, 4.61
** 364271.756, 3770429.681, 152.98, 5.00, 4.61
** 364267.982, 3770449.090, 152.56, 5.00, 4.61
** 364209.483, 3770396.792, 152.15, 5.00, 4.61
** 364162.037, 3770448.012, 153.06, 5.00, 4.61
** 364149.906, 3770435.881, 153.83, 5.00, 4.61
** 364188.995, 3770394.905, 152.23, 5.00, 4.61
** 364173.359, 3770381.156, 152.80, 5.00, 4.61
** 364135.887, 3770424.019, 153.43, 5.00, 4.61
** 364119.443, 3770408.384, 153.08, 5.00, 4.61
** 364157.184, 3770366.868, 152.49, 5.00, 4.61
** 364140.470, 3770347.728, 149.97, 5.00, 4.61
** 364103.538, 3770395.444, 152.27, 5.00, 4.61
** 364084.667, 3770377.652, 151.20, 5.00, 4.61
** 364124.026, 3770332.901, 147.98, 5.00, 4.61
** 364107.042, 3770315.918, 149.32, 5.00, 4.61
** 364066.336, 3770360.668, 152.73, 5.00, 4.61
** 364048.274, 3770342.067, 152.83, 5.00, 4.61
** 364101.920, 3770281.681, 150.43, 5.00, 4.61
** 364150.175, 3770322.927, 150.97, 5.00, 4.61
** 364141.279, 3770336.675, 150.00, 5.00, 4.61
** 364201.396, 3770388.704, 152.43, 5.00, 4.61
**
```

```
*****
LOCATION L0000001 VOLUME 364288.640 3770324.204 149.57
LOCATION L0000002 VOLUME 364281.827 3770331.410 149.68
LOCATION L0000003 VOLUME 364275.014 3770338.615 150.00
LOCATION L0000004 VOLUME 364268.201 3770345.821 150.70
LOCATION L0000005 VOLUME 364261.388 3770353.026 151.36
LOCATION L0000006 VOLUME 364254.575 3770360.232 151.86
```

## DPM HRA AERMOD OUTPUT FILE

LOCATION L0000007	VOLUME	364247.762	3770367.437	152.32
LOCATION L0000008	VOLUME	364240.949	3770374.643	152.54
LOCATION L0000009	VOLUME	364234.136	3770381.848	152.52
LOCATION L0000010	VOLUME	364227.323	3770389.054	152.40
LOCATION L0000011	VOLUME	364229.756	3770395.646	152.15
LOCATION L0000012	VOLUME	364237.461	3770401.890	152.02
LOCATION L0000013	VOLUME	364245.165	3770408.133	152.14
LOCATION L0000014	VOLUME	364252.870	3770414.376	152.37
LOCATION L0000015	VOLUME	364260.574	3770420.619	152.67
LOCATION L0000016	VOLUME	364268.279	3770426.863	152.65
LOCATION L0000017	VOLUME	364270.718	3770435.021	152.48
LOCATION L0000018	VOLUME	364268.825	3770444.755	152.21
LOCATION L0000019	VOLUME	364263.882	3770445.425	152.36
LOCATION L0000020	VOLUME	364256.489	3770438.815	152.66
LOCATION L0000021	VOLUME	364249.096	3770432.206	152.62
LOCATION L0000022	VOLUME	364241.703	3770425.597	152.33
LOCATION L0000023	VOLUME	364234.310	3770418.988	152.09
LOCATION L0000024	VOLUME	364226.917	3770412.378	152.00
LOCATION L0000025	VOLUME	364219.525	3770405.769	152.00
LOCATION L0000026	VOLUME	364212.132	3770399.160	152.04
LOCATION L0000027	VOLUME	364205.159	3770401.460	152.00
LOCATION L0000028	VOLUME	364198.420	3770408.735	152.02
LOCATION L0000029	VOLUME	364191.681	3770416.010	152.15
LOCATION L0000030	VOLUME	364184.942	3770423.285	152.39
LOCATION L0000031	VOLUME	364178.203	3770430.560	152.75
LOCATION L0000032	VOLUME	364171.464	3770437.835	153.21
LOCATION L0000033	VOLUME	364164.725	3770445.110	153.68
LOCATION L0000034	VOLUME	364157.822	3770443.798	153.87
LOCATION L0000035	VOLUME	364150.810	3770436.786	153.87
LOCATION L0000036	VOLUME	364155.867	3770429.632	153.45
LOCATION L0000037	VOLUME	364162.712	3770422.456	152.93
LOCATION L0000038	VOLUME	364169.557	3770415.281	152.52
LOCATION L0000039	VOLUME	364176.402	3770408.106	152.21
LOCATION L0000040	VOLUME	364183.247	3770400.930	152.02
LOCATION L0000041	VOLUME	364187.802	3770393.856	152.33
LOCATION L0000042	VOLUME	364180.355	3770387.307	152.57
LOCATION L0000043	VOLUME	364172.963	3770381.609	152.67
LOCATION L0000044	VOLUME	364166.437	3770389.075	152.28
LOCATION L0000045	VOLUME	364159.910	3770396.540	152.04
LOCATION L0000046	VOLUME	364153.383	3770404.006	152.21
LOCATION L0000047	VOLUME	364146.857	3770411.472	152.68
LOCATION L0000048	VOLUME	364140.330	3770418.938	153.26
LOCATION L0000049	VOLUME	364133.592	3770421.837	153.67
LOCATION L0000050	VOLUME	364126.406	3770415.004	153.45
LOCATION L0000051	VOLUME	364119.650	3770408.156	153.22
LOCATION L0000052	VOLUME	364126.321	3770400.818	152.51
LOCATION L0000053	VOLUME	364132.992	3770393.480	151.91
LOCATION L0000054	VOLUME	364139.662	3770386.143	151.54
LOCATION L0000055	VOLUME	364146.333	3770378.805	151.59
LOCATION L0000056	VOLUME	364153.003	3770371.468	151.87
LOCATION L0000057	VOLUME	364154.750	3770364.081	151.88
LOCATION L0000058	VOLUME	364148.227	3770356.611	151.22
LOCATION L0000059	VOLUME	364141.705	3770349.142	150.46
LOCATION L0000060	VOLUME	364135.549	3770354.086	150.16
LOCATION L0000061	VOLUME	364129.480	3770361.928	150.19
LOCATION L0000062	VOLUME	364123.410	3770369.770	150.43
LOCATION L0000063	VOLUME	364117.340	3770377.611	150.88
LOCATION L0000064	VOLUME	364111.271	3770385.453	151.54
LOCATION L0000065	VOLUME	364105.201	3770393.295	152.49
LOCATION L0000066	VOLUME	364098.300	3770390.505	152.44
LOCATION L0000067	VOLUME	364091.084	3770383.702	152.00
LOCATION L0000068	VOLUME	364085.391	3770376.828	151.50
LOCATION L0000069	VOLUME	364091.940	3770369.382	150.55
LOCATION L0000070	VOLUME	364098.489	3770361.936	149.68
LOCATION L0000071	VOLUME	364105.038	3770354.490	148.70
LOCATION L0000072	VOLUME	364111.587	3770347.043	147.84
LOCATION L0000073	VOLUME	364118.137	3770339.597	147.83
LOCATION L0000074	VOLUME	364123.319	3770332.195	148.62
LOCATION L0000075	VOLUME	364116.307	3770325.183	148.41
LOCATION L0000076	VOLUME	364109.295	3770318.171	148.49
LOCATION L0000077	VOLUME	364102.514	3770320.896	148.61
LOCATION L0000078	VOLUME	364095.841	3770328.232	148.54
LOCATION L0000079	VOLUME	364089.168	3770335.567	148.58
LOCATION L0000080	VOLUME	364082.495	3770342.903	149.04
LOCATION L0000081	VOLUME	364075.823	3770350.238	150.10
LOCATION L0000082	VOLUME	364069.150	3770357.574	151.26
LOCATION L0000083	VOLUME	364062.341	3770356.554	151.87

# DPM HRA AERMOD OUTPUT FILE

LOCATION L0000084	VOLUME	364055.433	3770349.440	152.09
LOCATION L0000085	VOLUME	364048.525	3770342.326	152.20
LOCATION L0000086	VOLUME	364054.620	3770334.923	151.71
LOCATION L0000087	VOLUME	364061.206	3770327.509	151.30
LOCATION L0000088	VOLUME	364067.793	3770320.096	150.88
LOCATION L0000089	VOLUME	364074.379	3770312.682	150.47
LOCATION L0000090	VOLUME	364080.965	3770305.269	150.13
LOCATION L0000091	VOLUME	364087.551	3770297.855	150.15
LOCATION L0000092	VOLUME	364094.137	3770290.442	150.18
LOCATION L0000093	VOLUME	364100.723	3770283.029	150.21
LOCATION L0000094	VOLUME	364108.088	3770286.953	149.83
LOCATION L0000095	VOLUME	364115.626	3770293.396	149.74
LOCATION L0000096	VOLUME	364123.164	3770299.839	149.78
LOCATION L0000097	VOLUME	364130.702	3770306.282	149.81
LOCATION L0000098	VOLUME	364138.240	3770312.725	149.93
LOCATION L0000099	VOLUME	364145.778	3770319.169	150.44
LOCATION L0000100	VOLUME	364147.930	3770326.396	150.67
LOCATION L0000101	VOLUME	364142.543	3770334.722	150.24
LOCATION L0000102	VOLUME	364147.018	3770341.642	150.74
LOCATION L0000103	VOLUME	364154.516	3770348.131	151.59
LOCATION L0000104	VOLUME	364162.014	3770354.621	152.33
LOCATION L0000105	VOLUME	364169.512	3770361.110	152.96
LOCATION L0000106	VOLUME	364177.011	3770367.600	153.23
LOCATION L0000107	VOLUME	364184.509	3770374.089	153.28
LOCATION L0000108	VOLUME	364192.007	3770380.579	153.12
LOCATION L0000109	VOLUME	364199.505	3770387.068	152.86

\*\* End of LINE VOLUME Source ID = DPM

\*\* Source Parameters \*\*

\*\* LINE VOLUME Source ID = DPM

SRCPARAM L0000001	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000002	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000003	0.0091743119	5.00	4.61	1.16
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SRCPARAM L0000005	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000006	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000007	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000008	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000009	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000010	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000011	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000012	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000013	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000014	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000015	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000016	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000017	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000018	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000019	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000020	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000021	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000022	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000023	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000024	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000025	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000026	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000027	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000028	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000029	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000030	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000031	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000032	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000033	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000034	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000035	0.0091743119	5.00	4.61	1.16
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SRCPARAM L0000037	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000038	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000039	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000040	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000041	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000042	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000043	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000044	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000045	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000046	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000047	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000048	0.0091743119	5.00	4.61	1.16



DPM HRA AERMOD OUTPUT FILE

SRCPARAM L0000049	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000050	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000051	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000052	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000053	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000054	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000055	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000056	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000057	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000058	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000059	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000060	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000061	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000062	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000063	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000064	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000065	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000066	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000067	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000068	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000069	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000070	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000071	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000072	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000073	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000074	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000075	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000076	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000077	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000078	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000079	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000080	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000081	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000082	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000083	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000084	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000085	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000086	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000087	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000088	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000089	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000090	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000091	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000092	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000093	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000094	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000095	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000096	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000097	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000098	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000099	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000100	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000101	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000102	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000103	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000104	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000105	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000106	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000107	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000108	0.0091743119	5.00	4.61	1.16
SRCPARAM L0000109	0.0091743119	5.00	4.61	1.16

\*\*-----  
 URBANSRC ALL

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "Scenario 2"

EMISFACT L0000001	HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000001	HROFDY 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT L0000001	HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000001	HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000002	HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000002	HROFDY 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT L0000002	HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000002	HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000003	HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000003	HROFDY 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT L0000003	HROFDY 1.0 1.0 1.0 1.0 0.0 0.0











DPM HRA AERMOD OUTPUT FILE

EMISFACT L0000100 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000100 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000100 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000100 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000101 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000101 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000101 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000101 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000102 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000102 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000102 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000102 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000103 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000103 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000103 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000103 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000104 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000104 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000104 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000104 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000105 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000105 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000105 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000105 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000106 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000106 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000106 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000106 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000107 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000107 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000107 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000107 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000108 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000108 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000108 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000108 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000109 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000109 HROFDY 0.0 0.0 1.0 1.0 1.0 1.0  
EMISFACT L0000109 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0  
EMISFACT L0000109 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0  
SRCGROUP DPM L0000001 L0000002 L0000003 L0000004 L0000005 L0000006  
SRCGROUP DPM L0000007 L0000008 L0000009 L0000010 L0000011 L0000012  
SRCGROUP DPM L0000013 L0000014 L0000015 L0000016 L0000017 L0000018  
SRCGROUP DPM L0000019 L0000020 L0000021 L0000022 L0000023 L0000024  
SRCGROUP DPM L0000025 L0000026 L0000027 L0000028 L0000029 L0000030  
SRCGROUP DPM L0000031 L0000032 L0000033 L0000034 L0000035 L0000036  
SRCGROUP DPM L0000037 L0000038 L0000039 L0000040 L0000041 L0000042  
SRCGROUP DPM L0000043 L0000044 L0000045 L0000046 L0000047 L0000048  
SRCGROUP DPM L0000049 L0000050 L0000051 L0000052 L0000053 L0000054  
SRCGROUP DPM L0000055 L0000056 L0000057 L0000058 L0000059 L0000060  
SRCGROUP DPM L0000061 L0000062 L0000063 L0000064 L0000065 L0000066  
SRCGROUP DPM L0000067 L0000068 L0000069 L0000070 L0000071 L0000072  
SRCGROUP DPM L0000073 L0000074 L0000075 L0000076 L0000077 L0000078  
SRCGROUP DPM L0000079 L0000080 L0000081 L0000082 L0000083 L0000084  
SRCGROUP DPM L0000085 L0000086 L0000087 L0000088 L0000089 L0000090  
SRCGROUP DPM L0000091 L0000092 L0000093 L0000094 L0000095 L0000096  
SRCGROUP DPM L0000097 L0000098 L0000099 L0000100 L0000101 L0000102  
SRCGROUP DPM L0000103 L0000104 L0000105 L0000106 L0000107 L0000108  
SRCGROUP DPM L0000109

SO FINISHED

\*\*

\*\* AERMOD Receptor Pathway

\*\*

RE STARTING  
INCLUDED DPM5.rou  
RE FINISHED

\*\* AERMOD Meteorology Pathway

\*\*

ME STARTING  
SURFFILE Metwsla7.sfc

# DPM HRA AERMOD OUTPUT FILE

PROFFILE Met\wsla7.pfl  
SURFDATA 0 2005  
UAIRDATA 3190 2005  
SITEDATA 99999 2005  
PROFBASE 97.0 METERS  
ME FINISHED

\*\*  
\*\*\*\*\*  
\*\* AERMOD Output Pathway  
\*\*\*\*\*

\*\*  
\*\*  
OU STARTING  
\*\* Auto-Generated Plotfiles  
PLOTFILE PERIOD DPM DPM5.AD\PE00G001.PLT 31  
SUMMFILE DPM5.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 776 MEOpen: Met data from outdated version of AERMET, version: 12345

\*\*\*\*\*  
\*\*\* SETUP Finishes Successfully \*\*\*  
\*\*\*\*\*

\*\* \*\*\* AERMOD - VERSION 14134 \*\*\* \*\* C:\Active\My Dropbox\Dropbox\Archer\Air Quality\Construction\AERMOD\ \*\*\* 07/31/15  
\*\*\* AERMET - VERSION 12345 \*\*\* \*\* \*\*\* 22:14:29

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\*\*MODELOPTs: RegDEFAULT CONC ELEV

\*\*\* MODEL SETUP OPTIONS SUMMARY \*\*\*

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

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

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 109 Source(s),  
for Total of 1 Urban Area(s):  
Urban Population = 9862049.0 ; Urban Roughness Length = 1.000 m

\*\*Model Uses Regulatory DEFAULT Options:  
1. Stack-tip Downwash.  
2. Model Accounts for ELEVated Terrain Effects.  
3. Use Calms Processing Routine.  
4. Use Missing Data Processing Routine.  
5. No Exponential Decay for URBAN/Non-SO2.  
6. Urban Roughness Length of 1.0 Meter Assumed.

\*\*Model Assumes No FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM

\*\*Model Calculates PERIOD Averages Only

\*\*This Run Includes: 109 Source(s); 1 Source Group(s); and 655 Receptor(s)

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



DPM HRA AERMOD OUTPUT FILE

\*\*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  
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07  
 Output Units = MICROGRAMS/M\*\*3

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

\*\*Detailed Error/Message File: DPM5.err

\*\*File for Summary of Results: DPM5.sum

\*\*\* AERMOD - VERSION 14134 \*\*\* C:\Active\My Dropbox\Dropbox\Archer\Air Quality\Construction\AERMOD\ 07/31/15

\*\*\* AERMET - VERSION 12345 \*\*\* 22:14:29

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

\*\* CONC OF PM IN MICROGRAMS/M\*\*3 \*\*

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

DPM	1ST HIGHEST VALUE IS 38.03862	AT ( 364212.79, 3770413.37, 152.00, 152.00, 0.00)	DC
	2ND HIGHEST VALUE IS 37.60448	AT ( 364211.70, 3770386.27, 152.74, 152.74, 0.00)	DC
	3RD HIGHEST VALUE IS 37.27411	AT ( 364206.16, 3770420.84, 152.00, 152.00, 0.00)	DC
	4TH HIGHEST VALUE IS 36.30172	AT ( 364215.97, 3770389.67, 152.51, 152.51, 0.00)	DC
	5TH HIGHEST VALUE IS 35.39585	AT ( 364207.03, 3770423.09, 152.00, 152.00, 0.00)	DC
	6TH HIGHEST VALUE IS 35.17993	AT ( 364221.53, 3770422.62, 152.00, 152.00, 0.00)	DC
	7TH HIGHEST VALUE IS 34.89892	AT ( 364210.04, 3770382.33, 152.98, 152.98, 0.00)	DC
	8TH HIGHEST VALUE IS 34.73433	AT ( 364160.69, 3770339.10, 152.05, 153.00, 0.00)	DC
	9TH HIGHEST VALUE IS 34.37075	AT ( 364199.53, 3770428.30, 152.01, 152.01, 0.00)	DC
	10TH HIGHEST VALUE IS 34.21099	AT ( 364219.74, 3770419.34, 152.00, 152.00, 0.00)	DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

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\*\*MODELOPTs: RegDFault CONC ELEV

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

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

A Total of 0 Fatal Error Message(s)  
 A Total of 5 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)

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

\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

ME W396 776 MEOPEN: Met data from outdated version of AERMET, 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

DPM HRA AERMOD OUTPUT FILE

MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 1 year gap

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