BART EXEMPTION MODELING REPORT

ASH GROVE CEMENT COMPANY ▪ MIDLOTHIAN, TEXAS

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April 30, 2007

Project 051701.0140

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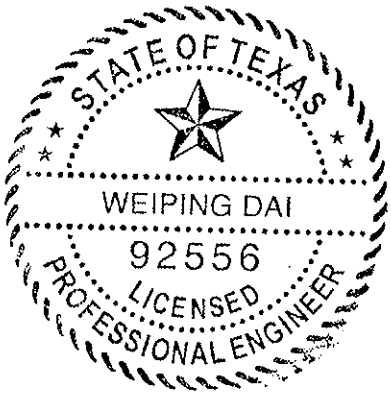
PROFESSIONAL ENGINEER SEAL

To the best of my knowledge, the representations made in this modeling demonstration document are true and accurate. The emission source data used in the analysis was provided by the client or determined from the client-provided data. By affixing my seal below, I submit that the engineering work and calculations performed in this modeling demonstration document were either performed by myself or under my direct supervision, as defined in Section 131.81 of the Texas Engineering Practice Act.

Place P.E. Seal below this line



Weiping Dai
Signature

04/27/2007
Date

Weiping Dai, Managing Consultant, Trinity Consultants
Printed Name, Title, and Affiliation

2. INTRODUCTION

Trinity Consultants (Trinity) has been working with the Ash Grove Texas, L.P. (Ash Grove) Portland cement plant located in Midlothian, Texas to assess the applicability of the Best Available Retrofit Technology (BART) regulations of the Regional Haze Rule. Trinity is submitting the results of the Best Available Retrofit Technology (BART) exemption modeling analysis performed to determine whether the BART-eligible sources at Ash Grove's Midlothian, Texas plant are exempt from BART. The BART-eligible sources were modeled in accordance with the modeling protocol (Version 0) submitted to the Texas Commission on Environmental Quality (TCEQ) in March of 2007. In addition, the modeling reflects comments provided to Ash Grove by the TCEQ on March 21, 2007. A summary of differences between the final modeling and the modeling methods documented in the modeling protocol is provided in the "Overview of Modeling" section of this report.

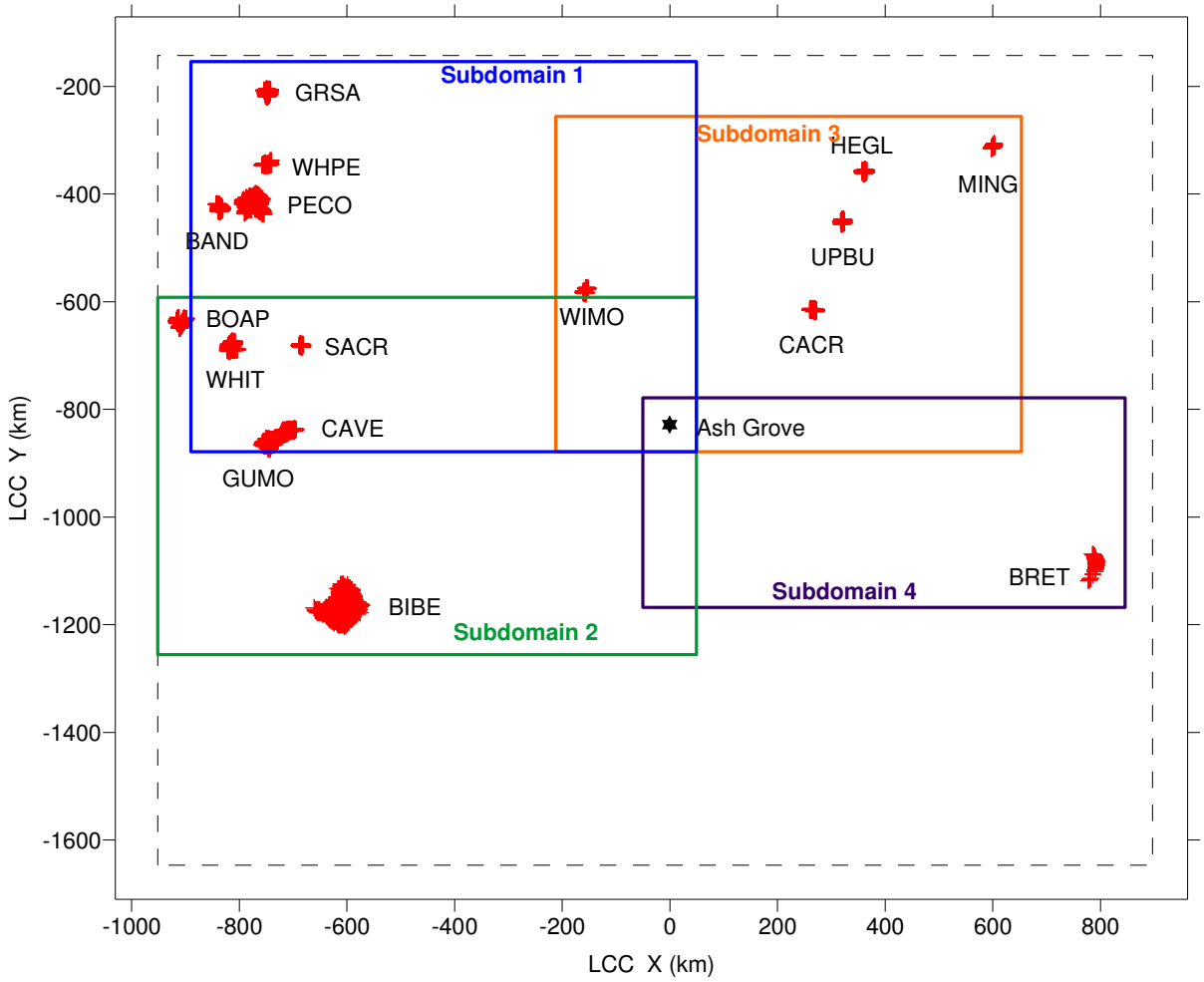
3. OVERVIEW OF MODELING

The modeling analysis examined visibility impacts in 16 Class I areas. The Class I areas include the following:

- Bandelier Wilderness Area (BAND)
- Big Bend National Park (BIBE)
- Bosque del Apache Wilderness Area (BOAP)
- Breton Wilderness Area (BRET)
- Caney Creek Wilderness Area (CACR)
- Carlsbad Caverns National Park (CAVE)
- Great Sand Dunes Wilderness Area (GRSA)
- Guadalupe Mountains National Park (GUMO)
- Hercules-Glades Wilderness Area (HEGL)
- Mingo Wilderness Area (MING)
- Pecos Wilderness Area (PECO)
- Salt Creek Wildlife Refuges (SACR)
- Upper Buffalo Wilderness Area (UPBU)
- Wheeler Peak Wilderness Area (WHPE)
- White Mountain Wilderness Area (WHIT)
- Wichita Mountains Wildlife Refuges (WIMO)

The modeling was completed using a single domain of meteorological data and four separate computational subdomains. The computational subdomains were established such that the 16 Class I areas were divided into 4 computational modeling groups based on their relative locations to one another. Figure 1 shows the computational subdomains that were modeled.

FIGURE 1. CALPUFF COMPUTATIONAL DOMAINS



In response to comments provided to Trinity/Ash Grove by TCEQ regarding the modeling protocol, two changes were made to the modeling methods and procedures documented in the protocol. Since neither changed warranted a new version of the protocol, documentation of the two changes is provided in this report. The changes that were made to the modeling methods and procedures are as follows:

- The CALPUFF control files were revised such that the model would read in hourly ozone concentrations from three ozone.dat files (2001, 2002, and 2003) provided by TCEQ, rather than using a default monthly background ozone value of 40 ppb.
- The fugitive modeling adjustment factor of 0.6 was removed from the area sources, since the adjustment factor is only intended for use with the ISC and SCREEN3 models. The revised emission rates for the area sources resulting from the elimination of the 0.6 fugitive modeling adjustment factor that were used for the refined CALPUFF modeling are provided in Appendix A.

In addition to the two changes described above, there was a change made to the modeled SO_2 emission rates for the three BART-eligible kilns. This change is not based on comments provided by

TCEQ, rather it resulted from Trinity/Ash Grove's closer examination of the SO_2 emission rates included in the original modeling protocol as compared to the combined Kiln 1, Kiln 2, and Kiln 3 SO_2 limit of 2,100 lbs/hr specified in Condition 2 under "Emission Limitations" on Page 1 of Ash Grove's Permit No. 1. More specifically, Condition 2 states that "all three kilns in aggregate shall operate under a total combined SO_2 emission rate of 2,100 lb/hr."

Table 1 lists the 24-hour hourly equivalent emission rates that were included in the modeling protocol. The emission rates correspond to the highest 24-hour emission rate for each kiln that occurred during the baseline period of 2001 to 2005 and were derived from continuous emissions monitoring system (CEMS) data.

TABLE 1. SO_2 MAXIMUM ACTUAL EMISSION RATE DURING BASELINE PERIOD

	Kiln 1 (lb/hr)	Kiln 2 (lb/hr)	Kiln 3 (lb/hr)
Maximum Rolling 24-Hour Emission Rate (as Hourly Equivalent) During 5 Year Baseline Period	960.6	898.6	867.4
Ending Hour for Maximum Rolling 24-Hour Emission Rate (as Hourly Equivalent) During 5 Year Baseline Period	10/01/2005 Hour 21	07/22/04 Hour 11	01/21/03 Hour 18

Note that none of the emission rates listed in Table 1 occurred during the same 24-hour period, but that the sum of the emission rates exceeds the permit limit of 2100 lbs/hr. The U.S. EPA's BART Implementation Rule (70 Federal Register No. 128, July 6, 2005) indicates the maximum actual emission rates that should be used in modeling "are intended to reflect steady-state operating conditions during periods of high capacity utilization. We do not generally recommend that emissions reflecting periods of start-up, shutdown, and malfunction be used, as such emission rates could produce higher than normal effects than would be typical of most facilities."

In order that daily emission rates included in the model reflect the permitted SO_2 emission limit of 2,100 lbs/hr, the permitted emissions of 2,100 lbs/hr were modeled rather than the emission rates listed in Table 1. The permitted emissions were allocated between the three kilns using a weighted distribution, where the weighting was determined based on the ratio of the emission rates listed in Table 1. Table 2 provides the revised SO_2 emission rates that sum to the permit limit of 2,100 lbs/hr.

TABLE 2. KILN 1- 3 PERMITTED SO_2 EMISSION RATE ALLOCATED TO EACH KILN

Source Description	Weighted SO_2 Emission Rates Based on Kiln 1-3 Permit Limit (lb/hr)
Kiln 1	735
Kiln 2	693
Kiln 3	672
Total	2,100

A summary of the modeling files that were utilized in the analysis are included on the DVD submitted with this report.

4.1 U.S. EPA GUIDANCE FOR BART

The U.S. EPA's "Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations; Final Rule" (70 *Federal Register* No. 128, July 6, 2005) establishes the form and level of the BART applicability threshold. The 24-hour average contribution threshold of 0.5 deciview (dv) was selected on the basis of "perceptibility" of regional haze at a level of 1.0 dv attributable to a single sources that causes visibility impairment, and that "typically, there are multiple sources that affect visibility in Class I areas, so a source causing a 0.5 dv change can be expected to be contributing to noticeable visibility impairment." The preamble noted that U.S. EPA originally proposed to interpret CALPUFF model output such that "if the maximum daily visibility value at any receptor over the five years modeled is greater than the 'cause or contribute' threshold, then the State should conclude that the source is subject to BART." U.S. EPA subsequently evaluated comments suggesting the form of the standard should be as low as the 90th percentile, but ultimately concluded that the form of the contribution threshold should be the 98th percentile.

> *We note that the 98th percentile value would only be used to determine whether a particular BART-eligible source would be subject to further review by the State. In determining what, if any, emission controls should be required, the State will have the opportunity to consider the frequency, duration, and intensity of a source's predicted effect on visibility … there are other features of our recommended modeling approach that are likely to overstate the actual visibility effects of an individual source… Because of … the uncertainties associated with the model, we believe it is appropriate to use the 98th percentile—a more robust approach that does not give undue weight to the extreme tail of the distribution. The use of the 98th percentile of modeled visibility values would appear to exclude roughly 7 days per year from consideration.*

4.2 U.S. EPA GUIDANCE FOR STATISTICALLY BASED STANDARDS

The choice of a statistically based 0.5 dv contribution threshold at the 98th percentile is a reasonable choice for the reasons stated explicitly by U.S. EPA and for consistency with the analogous 24-hour average NAAQS for $PM_{2.5}$, which is a principal component of regional haze. It is therefore logical that the BART assessment threshold would be interpreted in the same manner as the $PM_{2.5}$ 24-hour average NAAQS, for which guidance is provided in U.S. EPA's *Guidance on Data Handling Conventions for the PM NAAQS* (EPA-454/R-99-008, April 1999), and is codified at 40 CFR Part 50 Appendix N, *Interpretation of the National Ambient Air Quality Standards for $PM_{2.5}$*, including recently promulgated revisions to the $PM_{2.5}$ NAAQS and Appendix N (September 21, 2006). Appendix N defines the "24-hour standard design value" as **the <u>3-year average of annual 98th percentile 24-hour average values recorded at each monitoring site</u>**. This interpretation is consistent with U.S. EPA's original 1999 guidance for data handling conventions.

The 1999 data handling guidance uses a series of example computations to demonstrate the approach for determining the 98th percentile values and computing the design value relative to the standard.

Examples 6 and 7 are relevant to the computation of the 98th percentile 24-hour average and design value. Specifically, Table 7-1 indicates that for 365 daily average values (as would be obtained from CALPUFF modeling for each year of data analysis) the 8th-high value represents the 98th percentile, which is subsequently arithmetically averaged over three years to determine the design value to assess compliance.

It is noteworthy that Appendix N (as revised) makes no provision for spatial averaging for 24-hour average concentrations, and allows spatial averaging for annual averages only under certain conditions. "Except for calculation of spatially averaged annual means and spatially averaged annual standard design values, all other calculations shown in this appendix shall be implemented on a site-level basis" (Section 3.0(d)). Previous versions of the PM_{10} standards acknowledged that although guidance for data handling "focuses on monitored data, the same principles apply to modeling data, subject to EPA modeling guidelines" (40 CFR Part 50, Appendix K, Section 1.0(c)).

4.3 INTERPRETING THE 98TH PERCENTILE FOR BART

The original BART exemption modeling protocol for Ash Grove's Midlothian plant proposed to evaluate the BART exemption by comparing the 98th percentile of the 2001 through 2003 daily dv values output by CALPOST (22nd highest daily value) to a contribution threshold of 0.5 dv. It was proposed that if the 98th percentile of the daily dv values output by CALPOST was less than 0.5 dv, it would be concluded that the source is exempt from BART.

TCEQ did not submit comments to either Trinity or Ash Grove that would preclude the proposed method from being used to make a determination. However, TCEQ requested that, in addition to the 98th percentile of the 2001 through 2003 daily dv values, the final BART modeling report summarize the 98th percentile daily dv values for each individual year. Trinity wishes to point out that any interpretation of a 98th percentile as the 8th-highest annual 24-hour average impact at a Class I area is an extremely conservative interpretation. It is conservative since it ignores the spatial variability of impacts among receptors (i.e. ignores that compliance is assessed at each monitoring site (i.e. modeled receptor)). Further, this interpretation is inconsistent with the form of the 24-hour average $PM_{2.5}$ standard since it does not compute a 3-year average of the 98th percentile value of each year. Also, the 8th-highest annual 24-hour average impact, in actuality, does not represent the 98th percentile, but instead is a far more stringent standard. For an area such as the Wichita Mountains, with 59 receptors, the 8th highest annual 24-hour average actually represents the 99.963th percentile.

$$1-\frac{8}{365}=97.808\% \qquad 1-\frac{8}{365\times 59}=99.963\%$$

Depending on the yearly distribution of the results, the most conservative 98th percentile impact may come from the maximum 8th highest value for each of the three years or the 22nd highest value for all years combined (if three years of data and 365 values for each year are calculated).

For BART, a conservative interpretation of the 98th percentile as the 8th highest value for any one year may be utilized by some simply due to the computational ease of using the default output from the CALPOST visibility postprocessor (CALPOST default output when processing visibility includes

the high value for each day, regardless of the receptor). However, other forms of the 98th percentile can be easily calculated in a less conservative manner using more refined CALPOST setting (i.e. generating a DELVIS.dat file) and auxiliary output files from the CALPOST.

4.4 IMPROVE VISIBILITY ALGORITHM

Apart from considerations of the 98th percentile impact, another alternative interpretation of the visibility impact calculations presented in the initial modeling protocol prepared by Trinity for Ash Grove is now possible by use of the updated light extinction calculation algorithms developed by the Interagency Monitoring of Protected Visual Environments (IMPROVE) workgroup. The details of the revised algorithms are beyond the scope of this letter, but are described in detail in a report entitled "Revised IMPROVE Algorithm for Estimating Light Extinction from Particle Speciation Data."[1] The updated algorithm, which has been approved by the IMPROVE Steering Committee and is currently undergoing peer review, provides a more refined calculation by including visibility impairment due to the following processes:

- Visibility impairment due to different sizes of sulfates, nitrates, and organic carbon
- Visibility impairment due to sea salt particles
- Distinct water growth curves (i.e., *f*(RH)) for small sulfates and nitrates, large sulfates and nitrates, and sea salt
- Elevation-dependent (hence Class I area dependent) Rayleigh scattering coefficient
- Visibility impairment due to NO_2

The revised IMPROVE light extinction algorithm takes the following form:

$$b_{ext} \approx \begin{aligned} & 2.2 f_S(RH)[\mathrm{NH_4(SO_4)_2}]_{\mathrm{Small}} + 4.8 f_L(RH)[\mathrm{NH_4(SO_4)_2}]_{\mathrm{Large}} + \\ & 2.4 f_S(RH)[\mathrm{NH_4NO_3}]_{\mathrm{Small}} + 5.1 f_L(RH)[\mathrm{NH_4NO_3}]_{\mathrm{Large}} + \\ & 2.8[\mathrm{OC}]_{\mathrm{Small}} + 6.1[\mathrm{OC}]_{\mathrm{Large}} + 10[\mathrm{EC}] + 1[\mathrm{PMF}] + 0.6[\mathrm{PMC}] + \\ & 1.4 f_{SS}(RH)[\mathrm{Sea\ Salt}] + b_{\mathrm{Site-specific\ Rayleigh\ Scattering}} + 0.33[\mathrm{NO_2}] \end{aligned}$$

Where,
f_S(RH) - relative humidity adjustment for small particles (either sulfates $[NH_4(SO_4)_2]_{small}$ or nitrates $[NH_4NO_3]_{small}$
F_L(RH) - relative humidity adjustment for large particles (either sulfates $[NH_4(SO_4)_2]_{large}$ or nitrates $[NH_4NO_3]_{large}$
$[NH_4(SO_4)_2]_{small}$ - Concentration of small sulfates (ug/m^3)
$[NH_4(SO_4)_2]_{large}$ - Concentration of large sulfates (ug/m^3)
$[NH_4NO_3]_{small}$ - Concentration of small nitrates (ug/m^3)

[1] http://vista.cira.colostate.edu/IMPROVE/Publications/GrayLit/gray_literature.htm.

$[NH_4NO_3]_{large}$ - Concentration of large nitrates (ug/m^3)
$[OC]_{small}$ - Concentration of small organic carbons (ug/m^3)
$[OC]_{large}$ - Concentration of large organic carbons (ug/m^3)
[EC] - Concentration of elemental carbon (ug/m^3)
[PMF] - Concentration of fine particulate matter (ug/m^3)
[PMC] - Concentration of coarse particulate matter (ug/m^3)
[Sea Salt] - Concentration of sea salt (ug/m^3)
$[NO_2]$ - Concentration of nitrogen dioxide (ug/m^3)

The haze index (HI) in units of deciviews is simply calculated from the reconstructed light extinction as shown in the following equation.

$$HI = 10 \ln\left(\frac{b_{ext}}{10}\right)$$

For the purposes of calculating current, future, and natural background visibility at Class I areas as part of its reasonable progress analyses, CENRAP is presenting regional air quality modeling results using both the default and the newly revised IMPROVE light extinction formula. To facilitate the use of the revised IMPROVE algorithm for assessing BART applicability, the VISTAS Technical Advisor developed and distributed a spreadsheet tool to implement the revised IMPROVE light extinction algorithm, designated as the CALPOST-IMPROVE Processor Version 2 (September 29, 2006). This processor calculates the reconstructed light extinction using the revised IMPROVE algorithm and output from the CALPOST postprocessor. To implement the CALPOST-IMPROVE tool for Class I areas in CENRAP, three additional data points are required and three adjustments to the data incorporated into the spreadsheet are required.

The additional data includes the following: background concentration of gaseous NO_2, Rayleigh scattering parameter corrected for site-specific elevation, and an estimate of the average background sea salt aerosol concentration. This data is further described in the section of this letter summarizing the model results.

The adjusted data points include the background concentrations of large and small sulfates and organic carbon. These values must be adjusted for any Class I area that is located in the west rather than the east (i.e states to the west of states that the Mississippi runs through), since the VISTAS tool was originally developed to address parks within VISTAS, which are all in the west. The specific adjustments are described in the section of the letter summarizing the model results.

Refined modeling techniques were used to quantify the "98th percentile" of the visibility impacts using four separate approaches. The approaches are listed below in order from most to least conservative:

- Approach No. 1: 98th percentile is interpreted as the maximum 8th-high impact for any one year of data based on the old IMPROVE algorithm
- Approach No. 2: 98th percentile is interpreted as the maximum 22nd-high impact among three years of data based on the old IMPROVE algorithm
- Approach No. 3: 98th percentile is interpreted as the maximum 8th-high impact for any one year of data based on the new IMPROVE algorithm
- Approach No. 4: 98th percentile uses a "traditional" interpretation of the 98th percentile as the maximum of the 3-year average of the 8th-high value at each receptor for each of three years of modeled data based on the old IMPROVE algorithm

Approach Nos. 1 and 2

Trinity calculated the maximum 8th-high impact for each year for 2001 to 2003 based on the old IMPROVE algorithm. This is Approach No. 1 as it is listed above. Trinity also calculated the 98th percentile for 2001 through 2003 (22nd-high impact) based on the old IMPROVE algorithm. This is Approach No. 2 as it is listed above. As documented in the original modeling protocol, Approach No. 2 provides the basis for the BART exemption determination for Ash Grove's Midlothian plant. The data for all of the approaches are included with the modeling files posted to the TCEQ ftp site.

Table 3 provides a summary of the visibility impacts attributable to Ash Grove's Midlothian plant based on Approaches Nos. 1 and 2.

TABLE 3. SUMMARY OF 8TH HIGH VISIBILITY IMPACTS PER YEAR AND 98TH PERCENTILE OF IMPACTS FROM 2001 TO 2003 USING "OLD" IMPROVE EQUATION

Class I Area	2001		2002		2003		**2001-2003**	
	8th High Δdv	Days => 0.5 Δdv	8th High Δdv	Days => 0.5 Δdv	8th High Δdv	Days => 0.5 Δdv	**98% Δdv**	**Days => 0.5 Δdv**
BAND	0.005	0	0.017	0	0.017	0	**0.012**	**0**
BIBE	0.077	0	0.074	0	0.108	1	**0.082**	**1**
BOAP	0.011	0	0.022	0	0.014	0	**0.014**	**0**
BRET	0.025	0	0.005	0	0.021	0	**0.014**	**0**
CACR	0.231	2	0.197	0	0.323	2	**0.233**	**4**
GRSA	0.004	0	0.012	0	0.011	0	**0.01**	**0**
GUMO	0.066	1	0.119	0	0.054	0	**0.076**	**1**
HEGL	0.112	0	0.119	0	0.106	0	**0.119**	**0**
MING	0.038	0	0.109	0	0.055	0	**0.057**	**0**

Class I Area	2001		2002		2003		**2001-2003**	
	8th High Δdv	Days => 0.5 Δdv	8th High Δdv	Days => 0.5 Δdv	8th High Δdv	Days => 0.5 Δdv	**98% Δdv**	**Days => 0.5 Δdv**
SACR	0.048	0	0.077	0	0.04	1	**0.057**	**1**
UPBU	0.155	1	0.115	1	0.161	0	**0.148**	**2**
WHPE	0.006	0	0.028	0	0.017	0	**0.014**	**0**
WHIT	0.042	0	0.065	0	0.025	0	**0.042**	**0**
WIMO	0.469	7	0.353	2	0.562	8	**0.421**	**17**
CAVE	0.094	2	0.145	0	0.041	1	**0.097**	**3**
PECO	0.009	0	0.036	0	0.025	0	**0.021**	**0**

As shown in the last column of Table 3, all of the 98th percentile impacts for 2001 to 2003 are less than the BART exemption threshold of 0.5 dv. Since all of the impacts are less than the BART exemption threshold, Ash Grove's Midlothian plant is not subject to BART.

Approach No. 3

While Approach No. 2 demonstrates that the Ash Grove Midlothian plant is not subject to BART (since the three-year 98th percentile of impacts in all Class I areas are less than the BART exemption threshold), Trinity has conducted additional analysis on the impacts in WIMO (the only Class I area with an 8th high annual impact above 0.5 dv (i.e. 2003 = 0.562)). It should be mentioned that for the 16 Class I areas included in the modeling analysis, there is only one day in one year (2003) in one Class I area (WIMO) where the model predicted an 8th high impact for the Midlothian plant that was greater than 0.5 dv based on the old IMPROVE equation.

Trinity calculated visibility impacts in WIMO based on the new IMPROVE algorithm using the VISTAS IMPROVE spreadsheet tool. This is Approach No.3 as it is listed above. The following specific inputs to the tool were used:

- Elevation-dependent Rayleigh scattering coefficient of 11 Mm^{-1} (WIMO only) from Table A2 of the IMPROVE's "Revised IMPROVE Algorithm for Estimating Light Extinction from Particle Speciation Data" memo.
- Sea Salt background concentration of 0.02 $\mu g/m^3$ or based on 2000-2004 data from the VIEWS web site (http://vista.cira.colostate.edu/views/Web/Data/DataWizard.aspx).
- Maximum 24-hour average daily NO_2 concentration from 2001 to 2003 attributable to BART-eligible sources at the Ash Grove Midlothian plant as calculated by an additional CALPOST analysis

Although other anthropogenic (stationary and mobile) sources contribute to background levels of NO_2 at Class I areas, for the purposes of this analysis, the background NO_2 concentration was assumed to be attributable only to BART-eligible sources at Ash Grove's Midlothian plant. The 24-hour average NO_2 concentration for each day was calculated by separate CALPOST processing analyses, and converted from units of $\mu g/m^3$ (default model output) to parts per billion as required by the tool. The maximum value was conservatively applied to each day of the visibility processing in the new

IMPROVE algorithm. The NO_2/NO_X ratio was conservatively entered as 1.0 in the CALPOST-IMPROVE tool.

Table 4 provides a summary of the visibility impacts attributable to Ash Grove's Midlothian plant based on Approach No. 3.

TABLE 4. SUMMARY OF 8TH HIGH VISIBILITY IMPACTS PER YEAR AND 98TH PERCENTILE OF IMPACTS FROM 2001 TO 2003 USING "NEW" IMPROVE EQUATION

Class I Area	2001		2002		2003		**2001-2003**	
	8th High Δdv	Days => 0.5 Δdv	8th High Δdv	Days => 0.5 Δdv	8th High Δdv	Days => 0.5 Δdv	**98% Δdv**	**Days => 0.5 Δdv**
WIMO	0.432	3	0.273	1	0.432	6	**0.325**	**10**

As shown in Table 4, both the 8th high impact in WIMO for any one year and the 98th percentile impact for 2001 to 2003 in WIMO are less than the BART exemption threshold of 0.5 dv.

Approach No. 4

Trinity also calculated the maximum of the 3-year averages (2001-2003) of the high, 8th high visibility impacts in WIMO (the maximum 3-year average of the highest of the 8th high impacts at each receptor) using the old IMPROVE algorithm. This methodology is consistent with the statistical methods that are used to evaluate compliance with the $PM_{2.5}$ NAAQS, as further explained elsewhere in this report. This is Approach No.4 described above.

Table 5 provides a summary of the visibility impacts attributable to Ash Grove's Midlothian plant based on Approach No. 4.

TABLE 5. SUMMARY OF 8TH HIGH VISIBILITY IMPACTS PER YEAR AND 98TH PERCENTILE OF IMPACTS FROM 2001 TO 2003 USING "NEW" IMPROVE EQUATION

Class I Area	2001 High, 8th High Δdv	2002 High, 8th High Δdv	2003 High, 8th High Δdv	**3-Year Average of High 8th High Δdv**
WIMO	0.425	0.318	0.549	0.431

As shown in Table 4, the maximum 3-year average (2001-2003) of the high, 8th high visibility impacts in WIMO is less than the BART exemption threshold of 0.5 dv.

6. CONCLUSION

Trinity has completed the BART exemption modeling for Ash Grove Midlothian's plant and has determined that the plant is not subject to BART. The plant is exempt from BART based on the fact that the 98th percentile of the 2001 to 2003 visibility impacts in all Class I areas is less than the EPA's BART exemption threshold of 0.5 dv.

APPENDIX A

AREA SOURCE EMISSION RATES

Table 1-1. Revised Area Source PMC and PMF Emission Rates

Portland Cement Manufacturing Particle Size Distibution:

Particle Size (microns)	Coarse or Fine Particulate	Cumulative Mass Percent Equal < Stated Size (AP-42 Appendix B.2-14)	Cumulative Mass Percent ≤ Stated Size on a PM10 Basis	Mass Percentage
PM	Coarse	100	--	N/A
PM10	Coarse	85	100	32%
PM5	Coarse	58	68	33%
PM2.5	Fine	30	35	35%

Category	FIN	EPN	Source Description	PM10 Emission Rate	Calculated Emission Pc (lb/hr)	Calculated Emission Pf (lb/hr)	Area (m^2)	Modeled Emission Pc (lb/hr*m2)	Modeled Emission Pf (lb/hr*m2)
AREA SOURCES									
Grouped									
		RAWMATR							
	1-4B	1_4B	Sand Stockpile Fugitives	1.31E-01	8.515E-02	4.585E-02	2023.44	**4.208E-05**	**2.266E-05**
	1-5B	1_5B	Mill Scale Stockpile	2.90E-02	1.885E-02	1.015E-02	1011.72	**1.863E-05**	**1.003E-05**
	1-8B	1_8B	Gypsum Stockpiles	1.45E-01	9.429E-02	5.077E-02	3035.15	**3.107E-05**	**1.673E-05**
		Grouped Parameters			1.983E-01	1.068E-01	6070.31	**3.267E-05**	**1.759E-05**
Ungrouped									
	2-7	2_7C	Fug. From CKD Stockpile	9.82E-01	6.386E-01	3.438E-01	16187.49	**3.945E-05**	**2.124E-05**
	3-10	3_10	Fug. From Clinker Outside Stora	4.00E-03	2.600E-03	1.400E-03	4046.87	**6.425E-07**	**3.459E-07**
	6-4B	6_4B	Fug. From Solids Fuel Stockpiles	2.10E-01	1.365E-01	7.350E-02	12140.62	**1.124E-05**	**6.054E-06**

APPENDIX B

LIST OF ELECTRONIC MODELING FILES

DVD	Folder (Year)	Subfolder (Subdomain)	CALPUFF File Name	File Type	Run Length Date Range	Run Length Hours	Date Range Appended to Create Final Annual Concentration File	Hours Included in Final Appended Annual Concentration File	Append File Name	CALPOST File Name
#2	2001	Subdomain 3	CPUFF01_CACR,HEGL,MING,UPBU,WIMO_1.inp CPUFF01_CACR,HEGL,MING,UPBU,WIMO_1.dat CPUFF01_CACR,HEGL,MING,UPBU,WIMO_1.list	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	January 1 - June 30	4344	January 1 - June 30	4344	CONC01_CACR,HEGL,MING,UPBU,WIMO_1.inp CONC01_CACR,HEGL,MING,UPBU,WIMO.dat	CPOST01_CACR.inp CPOST01_CACR.lst CPOST01_HEGL.inp CPOST01_HEGL.lst CPOST01_MING.inp CPOST01_MING.lst CPOST01_UPBU.inp CPOST01_UPBU.lst CPOST01_WIMO.inp CPOST01_WIMO.lst
#2	2001	Subdomain 3	CPUFF01_CACR,HEGL,MING,UPBU,WIMO_2.inp CPUFF01_CACR,HEGL,MING,UPBU,WIMO_2.dat CPUFF01_CACR,HEGL,MING,UPBU,WIMO_2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - December 31	4649	July 1 - December 31	4409		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1a.inp CPUFF01_BAND,GRSA,PECO,WHPE_1a.dat CPUFF01_BAND,GRSA,PECO,WHPE_1a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 1 - Feb 14	1080	Jan 1 - Feb 14	1080	Append1.inp Append1.dat	CPOST01_BAND.inp CPOST01_BAND.lst CPOST01_GRSA.inp CPOST01_GRSA.lst CPOST01_PECO.inp CPOST01_PECO.lst CPOST01_WHPE.inp CPOST01_WHPE.lst
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1b1.inp CPUFF01_BAND,GRSA,PECO,WHPE_1b1.dat CPUFF01_BAND,GRSA,PECO,WHPE_1b1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Feb 5 - March 9	792	Feb 15 - March 9	552		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1b2-1.inp CPUFF01_BAND,GRSA,PECO,WHPE_1b2-1.dat CPUFF01_BAND,GRSA,PECO,WHPE_1b2-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 5 - March 20	384	March 10 - March 20	264		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1b2-2.inp CPUFF01_BAND,GRSA,PECO,WHPE_1b2-2.dat CPUFF01_BAND,GRSA,PECO,WHPE_1b2-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 16 - March 31	384	March 21 - March 28	192		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1c1.inp CPUFF01_BAND,GRSA,PECO,WHPE_1c1.dat CPUFF01_BAND,GRSA,PECO,WHPE_1c1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 21 - April 22	792	Mar 29 - April 4	168		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1c1-1.inp CPUFF01_BAND,GRSA,PECO,WHPE_1c1-1.dat CPUFF01_BAND,GRSA,PECO,WHPE_1c1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	April 1- April 22	528	April 5- April 22	432		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1c2.inp CPUFF01_BAND,GRSA,PECO,WHPE_1c2.dat CPUFF01_BAND,GRSA,PECO,WHPE_1c2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	April 13 - May 15	792	April 23 - May 15	552		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_1d.inp CPUFF01_BAND,GRSA,PECO,WHPE_1d.dat CPUFF01_BAND,GRSA,PECO,WHPE_1d.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	May 6 - June 30	1344	May 16 - June 30	1104		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_2a.inp CPUFF01_BAND,GRSA,PECO,WHPE_2a.dat CPUFF01_BAND,GRSA,PECO,WHPE_2a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - August 13	1296	July 1 - July 9	216		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_2aa.inp CPUFF01_BAND,GRSA,PECO,WHPE_2aa.dat CPUFF01_BAND,GRSA,PECO,WHPE_2aa.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 5 - August 13		July 10 - August 10	744		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_2a1.inp CPUFF01_BAND,GRSA,PECO,WHPE_2a1.dat CPUFF01_BAND,GRSA,PECO,WHPE_2a1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 2 - August 15	336	August 11 - August 15	144		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_2b1.inp CPUFF01_BAND,GRSA,PECO,WHPE_2b1.dat CPUFF01_BAND,GRSA,PECO,WHPE_2b1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 6 - Sept 7	792	August 16 - Sept 7	552		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_2b2.inp CPUFF01_BAND,GRSA,PECO,WHPE_2b2.dat CPUFF01_BAND,GRSA,PECO,WHPE_2b2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 29 - Sept 30	792	Sept 8 - Sept 30	552	Append2.inp Append2.dat	
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_3a.inp CPUFF01_BAND,GRSA,PECO,WHPE_3a.dat CPUFF01_BAND,GRSA,PECO,WHPE_3a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 21 - Oct 31	984	Oct 1 - Oct 31	744		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_3b.inp CPUFF01_BAND,GRSA,PECO,WHPE_3b.dat CPUFF01_BAND,GRSA,PECO,WHPE_3b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 21 - Nov 30	984	Nov 1 - Nov 30	720		
#1	2001	Subdomain 1	CPUFF01_BAND,GRSA,PECO,WHPE_3c.inp CPUFF01_BAND,GRSA,PECO,WHPE_3c.dat CPUFF01_BAND,GRSA,PECO,WHPE_3c.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 21 - Dec 31	977	Dec 1 - Dec 31	737		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 1 - Feb 14	1080	Jan 1 - Feb 14	1080		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b1.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b1.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Feb 5 - March 9	792	Feb 15 - March 9	552		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Feb 28 - March 31	768	Feb 28 - March 23	336		

DVD	Folder (Year)	Subfolder (Subdomain)	CALPUFF File Name	File Type	Run Length Date Range	Run Length Hours	Date Range Appended to Create Final Annual Concentration File	Hours Included in Final Appended Annual Concentration File	Append File Name	CALPOST File Name
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2-1.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2-1.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 19 - March 31	312	March 24 - March 29	144	Append1.inp Append1.dat	CPOST01_BIBE.inp CPOST01_BIBE.lst CPOST01_BOAP.inp CPOST01_BOAP.lst CPOST01_CAVE.inp CPOST01_CAVE.lst CPOST01_GUMO.inp CPOST01_GUMO.lst CPOST01_SACR.inp CPOST01_SACR.lst CPOST01_WHIT.inp CPOST01_WHIT.lst
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c1-2a.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c1-2a.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c1-2a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 27 - April 10	360	March 30 - April 10	288		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c1-2.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c1-2.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	April 6 - April 22	408	April 11 - April 22	288		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c2.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c2.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1c2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	April 13 - May 15	792	April 23 - May 15	552		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1d.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1d.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1d.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	May 6 - June 30	1344	May1 6 - June 30	1104		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - July 26	864	July 1 - July 26	624		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 22.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 22.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 22.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 17 - August 21	864	July 17 - August 20	600		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-1.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-1.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 15 - Sept 11	672	August 16 - Sept 4	360		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2a2.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2a2.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 2 - Oct 3	768	Sept 5 - Oct 3	696		
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 24 - Nov 16	1296	Oct 4 - Nov 16	1056	Append2.inp Append2.dat	
#1	2001	Subdomain 2	CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2c.inp CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2c.dat CPUFF01_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_ 2c.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 7 - Dec 31	1320	Nov 17 - Dec 31	1073		
#2	2001	Subdomain 4	CPUFF01_BRET.inp CPUFF01_BRET.dat CPUFF01_BRET.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	January 1 - December 31	8760	January 1 - December 31	8753	N/A	CPOST01_BRET.inp CPOST01_BRET.lst
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_1.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_1.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 1 - June 30	4344	Jan 1 - June 30	4344	Append.inp Append.lst	CPOST02_CACR.inp CPOST02_CACR.lst CPOST02_HEGL.inp CPOST02_HEGL.lst CPOST02_MING.inp CPOST02_MING.lst CPOST02_UPBU.inp CPOST02_UPBU.lst CPOST02_WIMO.inp CPOST02_WIMO.lst
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_CACR 2a1-1.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_CACR 2a1-1.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_CACR 2a1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - July 12	528	July 1 - July 12	288		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2a11.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2a11.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2a11.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 8 - July 14	168	July 13 - July 14	48		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2a12.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2a12.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2a12.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 10 - July 15	144	July 15	24		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_ 2a1-2a2.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_ 2a1-2a2.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_ 2a1-2a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 11 - July 18	192	July 16 - July 18	72		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2b.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2b.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a1-2b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 13 - July 23	240	July 19 - July 23	120		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a2.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a2.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 14 - August 15	792	July 24 - August 15	552		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2b1.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2b1.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_2b1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 6 - Sept 7	792	August 16 - Sept 7	552		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_ 2b2.inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_ 2b2.dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_ 2b2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 29 - Sept 30	792	Sept 8 - Sept 30	552		
#3	2002	Subdomain 3	CPUFF02_CACR,HEGL,MING,UPBU,WIMO_3 .inp CPUFF02_CACR,HEGL,MING,UPBU,WIMO_3 .dat CPUFF02_CACR,HEGL,MING,UPBU,WIMO_3 .lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 21 - Dec 31	2441	Oct 1 - Dec 31	2201		

DVD	Folder (Year)	Subfolder (Subdomain)	CALPUFF File Name	File Type	Run Length Date Range	Run Length Hours	Date Range Appended to Create Final Annual Concentration File	Hours Included in Final Appended Annual Concentration File	Append File Name	CALPOST File Name
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_1.inp CPUFF02_BAND,GRSA,PECO,WHPE_1.dat CPUFF02_BAND,GRSA,PECO,WHPE_1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jaunary 1 - June 30	4344	Jaunary 1 - June 30	4344	Append1.inp Append1.dat	CPOST02_BAND.inp CPOST02_BAND.lst CPOST02_GRSA.inp CPOST02_GRSA.lst CPOST02_PECO.inp CPOST02_PECO.lst CPOST02_WHPE.inp CPOST02_WHPE.lst
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2a.inp CPUFF02_BAND,GRSA,PECO,WHPE_2a.dat CPUFF02_BAND,GRSA,PECO,WHPE_2a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - July 10	480	June 21 - July 10	240		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1.inp CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1.dat CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 29 - July 29	744	July 11 - July 18	192		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1a.inp CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1a.dat CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 14 - July 24	264	July 19 - July 24	144		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1b.inp CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1b.dat CPUFF02_BAND,GRSA,PECO,WHPE_2a1-1b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 20 - July 29	240	July 25 - July 29	120		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_ 2a1-2.inp CPUFF02_BAND,GRSA,PECO,WHPE_ 2a1-2.dat CPUFF02_BAND,GRSA,PECO,WHPE_ 2a1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 20 - August 19	744	July 30 - August 19	504		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2a2.inp CPUFF02_BAND,GRSA,PECO,WHPE_2a2.dat CPUFF02_BAND,GRSA,PECO,WHPE_2a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 10 - Sept 30	1248	August 20 - Sept 30	1008		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2b.inp CPUFF02_BAND,GRSA,PECO,WHPE_2b.dat CPUFF02_BAND,GRSA,PECO,WHPE_2b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 21 - Oct 28	912	Oct 1 - Oct 28	672		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1.inp CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1.dat CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 17 - Nov 12	648	29-Oct	24		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1.inp CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1.dat CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 25 - Nov 5	288	Oct 30 - Nov 5	168		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1b.inp CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1b.dat CPUFF02_BAND,GRSA,PECO,WHPE_2b1-1b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 1 - Nov 12	288	Nov 6 - Nov 12	168		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2b1-2.inp CPUFF02_BAND,GRSA,PECO,WHPE_2b1-2.dat CPUFF02_BAND,GRSA,PECO,WHPE_2b1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 3 - Nov 28	624	Nov 13 - Nov 28	384		
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2b2-1.inp CPUFF02_BAND,GRSA,PECO,WHPE_2b2-1.dat CPUFF02_BAND,GRSA,PECO,WHPE_2b2-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 19 - Dec 18	720	Nov 29 - Dec 18	480	Append2.inp Append2.dat	
#2	2002	Subdomain 1	CPUFF02_BAND,GRSA,PECO,WHPE_2b2-2.inp CPUFF02_BAND,GRSA,PECO,WHPE_2b2-2.dat CPUFF02_BAND,GRSA,PECO,WHPE_2b2-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Dec 14 - Dec 31	408	Dec 19 - Dec 31	288		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 1 - June 30	4344	Jan 1 - June 30	4344	Append1.inp Append1.dat	CPOST02_BIBE.inp CPOST02_BIBE.lst CPOST02_BOAP.inp CPOST02_BOAP.lst CPOST02_CAVE.inp CPOST02_CAVE.lst CPOST02_GUMO.inp CPOST02_GUMO.lst
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-1.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-1.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 23 - July 25	792	June 23 - July 4	96		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-11.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-11.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-11.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 30 - July 14	360	July 5 - July 14	240		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-12.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-12.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-12.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 10 - July 25	384	July 15 - July 25	264		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-2.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-2.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 16 - August 16	768	July 26 - August 16	528		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2-1.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2-1.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 7 - Sept 8	792	August 17 - Sept 8	552		

DVD	Folder (Year)	Subfolder (Subdomain)	CALPUFF File Name	File Type	Run Length Date Range	Run Length Hours	Date Range Appended to Create Final Annual Concentration File	Hours Included in Final Appended Annual Concentration File	Append File Name	CALPOST File Name
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2-2.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2-2.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 30 - Sept 30	768	Sept 9 - Sept 30	528		CPOST02_GUMO.lst CPOST02_SACR.inp CPOST02_SACR.lst CPOST02_WHIT.inp CPOST02_WHIT.lst
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 21 - Oct 31	984	Oct 1 - Oct 11	264		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1-1.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1-1.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 7 - Oct 21	360	Oct 12 - Oct 21	240		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1-2.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1-2.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 17 - Oct 31	360	Oct 22 - Oct 29	192		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-1a.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-1a.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-1a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 25 - Nov 7	336	Oct 30 - Nov 7	216		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-1b.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-1b.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-1b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 3 - Nov 15	312	Nov 8 - Nov 15	192		
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-2.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-2.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b2-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 6 - Nov 30	600	Nov 16 - Nov 30	360	Append2.inp Append2.dat	
#3	2002	Subdomain 2	CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b3.inp CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b3.dat CPUFF02_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b3.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 21 - Dec 31	977	Dec 1 - Dec 31	737		
#3	2002	Subdomain 4	CPUFF02_BRET.inp CPUFF02_BRET.dat CPUFF02_BRET.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	January 1 - December 31	8760	January 1 - December 31	8753	N/A	CPOST02_BRET.inp CPOST02_BRET.lst
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_CACR 1.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_CACR 1.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_CACR 1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 1 - June 30	4344	Jan 1 - June 30	4344	Append.inp Append.dat	CPOST03_CACR.inp CPOST03_CACR.lst CPOST03_HEGL.inp CPOST03_HEGL.lst CPOST03_MING.inp CPOST03_MING.lst CPOST03_UPBU.inp CPOST03_UPBU.lst CPOST03_WIMO.inp CPOST03_WIMO.lst
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2a.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2a.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - August 15	1344	July 1 - August 15	1104		
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1a1.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1a1.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1a1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 11 - August 18	192	August 16 - August 18	72		
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_ 2b1-1a2.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_ 2b1-1a2.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_ 2b1-1a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 14 - August 21	192	August 19 - August 21	72		
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1b1.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1b1.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1b1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 17 - August 24	192	August 22 - August 24	72		
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1b2.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1b2.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-1b2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 20 - August 27	192	August 25 - August 27	72		
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-2.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-2.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 23 - Sept 7	384	August 28 - Sept 7	264		
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b2.inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b2.dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_2b2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 3 - Sept 30	672	Sept 8 - Sept 30	552		
#5	2003	Subdomain 3	CPUFF03_CACR,HEGL,MING,UPBU,WIMO_3 .inp CPUFF03_CACR,HEGL,MING,UPBU,WIMO_3 .dat CPUFF03_CACR,HEGL,MING,UPBU,WIMO_3 .lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 21 - Dec 31	2441	Oct 1 - Dec 31	2190		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1a1.inp CPUFF03_BAND,GRSA,PECO,WHPE_1a1.dat CPUFF03_BAND,GRSA,PECO,WHPE_1a1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 1 - Feb 14	1080	Jan 1 - Feb 14	1080		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1a2.inp CPUFF03_BAND,GRSA,PECO,WHPE_1a2.dat CPUFF03_BAND,GRSA,PECO,WHPE_1a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Feb 5 - March 31	1320	Feb 15 - March 4	432		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1a2-1.inp CPUFF03_BAND,GRSA,PECO,WHPE_1a2-1.dat CPUFF03_BAND,GRSA,PECO,WHPE_1a2-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Feb 28 - March 20	504	Mar 5 - March 20	384		

DVD	Folder (Year)	Subfolder (Subdomain)	CALPUFF File Name	File Type	Run Length Date Range	Run Length Hours	Date Range Appended to Create Final Annual Concentration File	Hours Included in Final Appended Annual Concentration File	Append File Name	CALPOST File Name
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1a2-2.inp CPUFF03_BAND,GRSA,PECO,WHPE_1a2-2.dat CPUFF03_BAND,GRSA,PECO,WHPE_1a2-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 11 - March 31	504	March 21 - March 31	264	Append1.inp Append1.dat	CPOST03_BAND.inp CPOST03_BAND.lst CPOST03_GRSA.inp CPOST03_GRSA.lst CPOST03_PECO.inp CPOST03_PECO.lst CPOST03_WHPE.inp CPOST03_WHPE.lst
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1b.inp CPUFF03_BAND,GRSA,PECO,WHPE_1b.dat CPUFF03_BAND,GRSA,PECO,WHPE_1b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 21 - May 1	1008	April 1 - May 1	744		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1bb.inp CPUFF03_BAND,GRSA,PECO,WHPE_1bb.dat CPUFF03_BAND,GRSA,PECO,WHPE_1bblst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	April 22 - June 2	1008	May 2 - June 1	744		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1b1-1a.inp CPUFF03_BAND,GRSA,PECO,WHPE_1b1-1a.dat CPUFF03_BAND,GRSA,PECO,WHPE_1b1-1a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	May 27 - June 3	192	June 2 - June 3	48		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1b1-1b.inp CPUFF03_BAND,GRSA,PECO,WHPE_1b1-1b.dat CPUFF03_BAND,GRSA,PECO,WHPE_1b1-1b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	May 30 - June 5	168	June 4 - June 5	48		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1b1-2.inp CPUFF03_BAND,GRSA,PECO,WHPE_1b1-2.dat CPUFF03_BAND,GRSA,PECO,WHPE_1b1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 1 - June 10	240	June 6 - June 10	120		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1b1-3.inp CPUFF03_BAND,GRSA,PECO,WHPE_1b1-3.dat CPUFF03_BAND,GRSA,PECO,WHPE_1b1-3.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 6 - June 15	240	June 11 - June 15	120		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_1b2.inp CPUFF03_BAND,GRSA,PECO,WHPE_1b2.dat CPUFF03_BAND,GRSA,PECO,WHPE_1b2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 6 - June 30	600	June 16 - June 30	360		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_2.inp CPUFF03_BAND,GRSA,PECO,WHPE_2.dat CPUFF03_BAND,GRSA,PECO,WHPE_2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - July 22	768	July 1 - July 22	528		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_22.inp CPUFF03_BAND,GRSA,PECO,WHPE_22.dat CPUFF03_BAND,GRSA,PECO,WHPE_22.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	July 13 - August 13	768	July 23 - August 13	528	Append2.inp Append2.dat	
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_2a1.inp CPUFF03_BAND,GRSA,PECO,WHPE_2a1.dat CPUFF03_BAND,GRSA,PECO,WHPE_2a1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 2 - August 24	552	14-Aug	24		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_2a1-1.inp CPUFF03_BAND,GRSA,PECO,WHPE_2a1-1.dat CPUFF03_BAND,GRSA,PECO,WHPE_2a1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 10 - August 19	240	August 15 - August 19	120		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_2a1-2.inp CPUFF03_BAND,GRSA,PECO,WHPE_2a1-2.dat CPUFF03_BAND,GRSA,PECO,WHPE_2a1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 15 - August 24	240	August 20 - August 24	120		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_2a2.inp CPUFF03_BAND,GRSA,PECO,WHPE_2a2.dat CPUFF03_BAND,GRSA,PECO,WHPE_2a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 15 - Sept 5	528	August 25 - Sept 5	288		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_2b.inp CPUFF03_BAND,GRSA,PECO,WHPE_2b.dat CPUFF03_BAND,GRSA,PECO,WHPE_2b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 27 - Sept 30	840	Sept 6 - Sept 30	600		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_3a1.inp CPUFF03_BAND,GRSA,PECO,WHPE_3a1.dat CPUFF03_BAND,GRSA,PECO,WHPE_3a1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Sept 21 - Oct 16	624	Oct 1 - Oct 5	120		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_3a1-1.inp CPUFF03_BAND,GRSA,PECO,WHPE_3a1-1.dat CPUFF03_BAND,GRSA,PECO,WHPE_3a1-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 1 - Oct 11	264	Oct 6 - Oct 9	96		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_3a1-2.inp CPUFF03_BAND,GRSA,PECO,WHPE_3a1-2.dat CPUFF03_BAND,GRSA,PECO,WHPE_3a1-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 7 - Oct 16	240	Oct 10 - Oct 16	168		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_3a2.inp CPUFF03_BAND,GRSA,PECO,WHPE_3a2.dat CPUFF03_BAND,GRSA,PECO,WHPE_3a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 7 - Oct 31	600	Oct 17 - Oct 31	360		
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_3b.inp CPUFF03_BAND,GRSA,PECO,WHPE_3b.dat CPUFF03_BAND,GRSA,PECO,WHPE_3b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 21 - Nov 30	984	Nov 1 - Nov 30	720	Append3.inp Append3.dat	
#4	2003	Subdomain 1	CPUFF03_BAND,GRSA,PECO,WHPE_3c.inp CPUFF03_BAND,GRSA,PECO,WHPE_3c.dat CPUFF03_BAND,GRSA,PECO,WHPE_3c.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Nov 21 - Dec 31	966	Dec 1 - Dec 31	726		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a1.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a1.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 1 - Jan 31	744	Jan 1 - Jan 31	744		

DVD	Folder (Year)	Subfolder (Subdomain)	CALPUFF File Name	File Type	Run Length Date Range	Run Length Hours	Date Range Appended to Create Final Annual Concentration File	Hours Included in Final Appended Annual Concentration File	Append File Name	CALPOST File Name
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a2.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a2.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Jan 21 - Feb 28	936	Feb 1 - Feb 28	672	Append1.inp Append1.dat	CPOST03_BIBE.inp CPOST03_BIBE.lst CPOST03_BOAP.inp CPOST03_BOAP.lst CPOST03_CAVE.inp CPOST03_CAVE.lst CPOST03_GUMO.inp CPOST03_GUMO.lst CPOST03_SACR.inp CPOST03_SACR.lst CPOST03_WHIT.inp CPOST03_WHIT.lst
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a3.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a3.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1a3.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Feb 21 - March 31	936	March 1 - March 31	744		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b1.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b1.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	March 21 - April 30	984	April 1 - April 30	720		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	April 21 - May 31	984	May 1 - May 31	744		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	May 21 - June 15	624	1-Jun	24		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1a.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1a.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	May 28 - June 8	288	June 2 - June 8	168		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1b.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1b.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-1b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 4 - June 15	288	June 9 - June 15	168		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-2.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-2.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_1b3-2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 6 - June 30	600	June 16 - June 30	360		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	June 21 - August 31	1728	July 1 - August 11	1008		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a1.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 5 - August 20	384	August 12 - August 20	216		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2a2.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 16 - August 31	384	August 21 - August 31	264		
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2b.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	August 21 - Oct 31	1728	Sept 1 - Oct 31	1464	Append2.inp Append2.dat	
#4	2003	Subdomain 2	CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2c.inp CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2c.dat CPUFF03_BIBE,BOAP,CAVE,GUMO,SACR,WHIT_2c.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	Oct 21 - Dec 31	1710	Nov 1 - Dec 31	1446		
#5	2003	Subdomain 4	CPUFF03_BRET.inp CPUFF03_BRET.dat CPUFF03_BRET.lst	CALPUFF Input File CALPUFF Output Data File CALPUFF Output List File	January 1 - December 31	8760	January 1 - December 31	8742	N/A	CPOST03_BRET.inp CPOST03_BRET.lst

DVD #5

Folder	Subfolder	File Name	File Description
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thPerc_CPOST01_WIMO.inp	CALPOST Input File for 98th Percentile Analysis
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thPerc_CPOST02_WIMO.inp	CALPOST Input File for 98th Percentile Analysis
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thPerc_CPOST03_WIMO.inp	CALPOST Input File for 98th Percentile Analysis
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thPerc_CPOST01_WIMO.lst	CALPOST List File for 98th Percentile Analysis
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thPerc_CPOST02_WIMO.lst	CALPOST List File for 98th Percentile Analysis
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thPerc_CPOST03_WIMO.lst	CALPOST List File for 98th Percentile Analysis
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thperc_wimo2001.del	CALPOST 98th Percentile Data File
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thperc_wimo2002.del	CALPOST 98th Percentile Data File
WIMO2001-2003RefinedCPOST	CALPOST_98th	98thperc_wimo2003.del	CALPOST 98th Percentile Data File
WIMO2001-2003RefinedCPOST	NO2forNewImproveEqn	NO2_CPOST01_WIMO.inp	CALPOST Input File for NO2 Concentrations
WIMO2001-2003RefinedCPOST	NO2forNewImproveEqn	NO2_CPOST02_WIMO.inp	CALPOST Input File for NO2 Concentrations
WIMO2001-2003RefinedCPOST	NO2forNewImproveEqn	NO2_CPOST03_WIMO.inp	CALPOST Input File for NO2 Concentrations
WIMO2001-2003RefinedCPOST	NO2forNewImproveEqn	no2_cpost01_wimo.lst	CALPOST List File for NO2 Concentrations
WIMO2001-2003RefinedCPOST	NO2forNewImproveEqn	no2_cpost02_wimo.lst	CALPOST List File for NO2 Concentrations
WIMO2001-2003RefinedCPOST	NO2forNewImproveEqn	no2_cpost02_wimo.lst	CALPOST List File for NO2 Concentrations
WIMO2001-2003RefinedCPOST	NO2forNewImproveEqn	NO2 Values.xls	Sorted daily NO2 concentrations
WIMO2001-2003RefinedCPOST	New ImproveEqn	IMPROVE_WIMO_2001.xls	Visibility Data Using New IMPROVE Eqn
WIMO2001-2003RefinedCPOST	New ImproveEqn	IMPROVE_WIMO_2002.xls	Visibility Data Using New IMPROVE Eqn
WIMO2001-2003RefinedCPOST	New ImproveEqn	IMPROVE_WIMO_2003.xls	Visibility Data Using New IMPROVE Eqn
WIMO2001-2003RefinedCPOST	New ImproveEqn	IMPROVE_WIMO_2001to2003Total.xls	Visibility Data Using New IMPROVE Eqn