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Via Overnight Mail and Electronic Mail

December 3, 2008

Mr. James A. Capp
Stationary Source Permitting Program
Air Protection Branch, Environmental Protection Division
Georgia Department of Natural Resources
4244 International Parkway, Suite 120
Atlanta, GA 30354

Subject: Response to October 29, 2008 EPD Letter for more information
Letter No.: LEA-EPD-0022

Dear Mr. Capp:

On October 29, 2008 you sent Longleaf Energy Associates, LLC (LEA) a request for additional information regarding its case-by-case MACT analysis. Below please find the responses to your questions and requests for additional information. All cited documents and attachments are included on a CD enclosed unless they were previously provided to EPD as part of theOctober 6, 2008 case-by-case MACT submittal.

General Issues

1. The application repeatedly refers to the two proposed electrical generating units (EGUs) as "nominal 600 MW pulverized coal-fired boilers." We request that you provide clarification of the term "nominal" to ensure that there is no confusion as to the capacity of these EGUs.

Consistent with the definition of the word "nominal," LEA intended the term "nominal 600 MW pulverized coal-fired boilers" to mean a theoretical amount of net electrical generating capacity that each EGU was capable of producing and that the actual design capability could vary from that level. LEA chose to refer to the net electrical generating capacity in this way because there is not an exact relationship between heat input into the boiler and net electrical generating capacity transmitted to the electricity grid. And, given that the permit places a maximum permit limitation on heat input, the net electrical generating capacity would necessarily need to be variable.

Longleaf's PSD application defined the maximum heat input into each PC boiler as 6,139 MMBtu/hr for PRB coal and 5,856 MMBtu/hr for CAPP coal (and LEA intends for same heat input limitations to apply to this approval). The amount of net electrical generating capacity that can be generated by that amount of heat input depends on the following main variables: i) boiler efficiency (i.e. subcritical vs. supercritical), ii) thermal cycle design efficiency (i.e. steam turbine efficiency), iii) plant auxiliary load, and iv) plant degradation. All of these factors play a part in determining the amount of net electrical generating capacity that LEA's EGUs may be capable of generating for a defined heat input. Because the facility has not yet been designed, the exact value of these parameters is not known, which is why LEA chose to define the net generating capacity as a "nominal 600 MW."

As LEA referenced in its response to comments on the draft permit, if a supercritical boiler is chosen, LEA would use the additional thermal efficiency to increase the efficiency of steam use during power generation and thus increase the net electrical generating capacity that can be produced. If a supercritical boiler is used, LEA estimates that each EGU could produce in the 660 to 670 MW range of net electricity. Again, this is also only an estimate, because the final design parameters have not been completed. LEA's position on the boiler type is addressed below in Question 4.

LEA would like to note that all of the project's air quality impacts analyses were based on the emissions estimates contained in the application and supplemental information. These emission estimates were based on the maximum heat input of 6,139 MMBtu PRB/hr or 5,856 MMBtu CAPP/hr (per boiler) and they were modeled and evaluated by EPD to ensure that the air quality of the region will be fully protected. With respect to mercury, LEA's estimated annual emission rate of 0.043 tons/year (per boiler) was calculated based on 660 MW of gross electrical generating capacity. LEA is committing to not exceed 0.043 tons/year of mercury (per boiler), regardless of the electrical generating capacity of the EGUs.

2. We request that you provide clarification that the mass emissions (tpy) information in Tables 1 and 15 are on a "per EGU" basis instead of on a facility-wide basis.

Yes, the mass emissions information provided in Tables 1 and 15 are on a "per EGU" basis.

3. We request clarification that the reference to Table 14 paragraph (ix) on page 9 is a typographical error and should instead refer to Table 15.

Yes, the reference to the Table in paragraph (ix) on page 9 should refer to Table 15.

4. Consistent with the State Energy Strategy for Georgia submitted to Governor Sonny Perdue on December 15, 2006 by the Governor's Energy Policy Council (see page 27), we *request that you strongly consider committing to the use of supercritical EGUs as opposed to subcritical EGUs.*

Although no clear regulatory authority currently exists that would require LEA to utilize a certain efficiency of boiler, LEA does recognize there are environmental and energy efficiency benefits of utilizing a supercritical boiler. Thus, in light of these benefits, LEA is willing to commit to utilizing supercritical boilers for the Longleaf EGUs.

5. We request that you also include an analysis for MACT for the auxiliary boiler in this application.

Please see Attachment 1 to this response.

<u>*COALQUAL Database and Emission Calculations*</u>

6. We request more detailed information on how the COALQUAL database was used to gather data on the content of mercury, chlorine, and fluorine in the coal. Specifically, we request more information as to what coal types were included in (and excluded from) the collected data. One way to satisfy this request would be to submit a spreadsheet that includes the mercury, chlorine, and fluorine content of each sample.

A copy of the COALQUAL database (downloaded and put into spreadsheet form) used to generate the numbers presented in the original submittal is included on the attached CD.

7. Building upon the request in item #6 above, we request that you show the average value and the standard deviation for the mercury, chlorine, and fluorine samples.

Table 1 below contains the averages and standard deviations for the mercury, chlorine and fluorine samples. This information is also calculated at the bottom of the original COALQUAL data in the spreadsheet provided on the attached CD.

Table 1 – Summary of COALQUAL Data

HAP	Subbituminous		Bituminous	
	Average (ppm)	Standard Deviation (ppm)	Average (ppm)	Standard Deviation (ppm)
Mercury	0.10	0.10	0.15	0.16
Chlorine	102	114	994	858
Fluorine	58	46	85	104

8. Finally, regarding calculation, we request that you provide detailed calculations showing how you converted the contaminant content (ppm) of mercury, chlorine, and fluorine to *uncontrolled emissions (tpy) (refer to Table 1 for mercury and Table 9 for HF and HCl) and finally to the proposed allowable emission rate in Table 15.*

While LEA utilized the COALQUAL data in order to provide an estimate of uncontrolled emissions as identified by 40 C.F.R. § 63.43(e)(2) (vi) , LEA did not utilize uncontrolled emissions and control efficiencies to determine the proposed MACT standards and controlled estimated emissions for HCl, HF, or Hg presented in Table 15. Instead, the controlled emissions were calculated based on LEA's proposed MACT emission rates which were determined from other MACT and PSD permits as identified in the text of each of the MACT sections.

Sample calculations for the uncontrolled emissions are provided below for each of the HAPs for each fuel type and are also included below the COALQUAL data in the spreadsheet provided on the attached CD.

As identified in the PSD permit, there are two methods for setting permit limits. The first approach utilizes uncontrolled emissions, a control efficiency and an adequate margin of safety. The second approach utilizes applicable permit limits that have been set by other permitting authorities. For HF and HCl, there is very little test data available. Further, it is difficult to determine what the control efficiencies for HF and HCl were reflected in the available test data because the uncontrolled fluorine and chlorine were not measured as part of the tests. For Hg, the test methods and control technology are still developing. Thus for HF, HCl, and Hg, LEA believes that other achieved permit limits provide the best foundation upon which to base a MACT determination, as opposed to relying on assumptions for uncontrolled emission limits, control efficiencies and a sufficient margin of compliance.

Bituminous Sample Calculations

Uncontrolled Hg
0.31 ppm * lb/11,500 Btu * 5,856 MMBtu/hr * 8,760 hr/yr * ton/2,000 lb = 0.70 tpy

Controlled Hg
6x10-6 lb/MW-hr * 8,760 hr/yr * 660 MW (gross) * ton/2,000 lb = 0.017 tpy

Uncontrolled HCl
1852 ppm * lb/11,500 Btu * 5,856 MMBtu/hr * 36 Mol Wt HCl/35 Mol Wt Cl *8,760 hr/yr * ton/2,000 lb = 4,258 tpy

Controlled HCl
6x10-4 lb/MMBtu * 5,856 MMBtu/hr * 8,760 hr/yr * ton/2,000 lb = 62 tpy

Uncontrolled HF
189 ppm * lb/11,500 Btu * 5,856 MMBtu/hr * 20 Mol Wt HF/19 Mol Wt F *8,760 hr/yr * ton/2,000 lb = 436 tpy

Controlled HF
2x10-4 lb/MMBtu * 5,856 MMBtu/hr * 8,760 hr/yr * ton/2,000 lb = 5.1 tpy

Subbituminous Sample Calculations

Uncontrolled Hg
0.2 ppm * lb/8,200 Btu * 6,139 MMBtu/hr * 8,760 hr/yr * ton/2,000 lb = 0.66 tpy

Controlled Hg
15x10-6 lb/MW-hr * 8,760 hr/yr * 660 MW (gross) * ton/2,000 lb = 0.043 tpy

Uncontrolled HCl
216 ppm * lb/8,200 Btu * 6,139 MMBtu/hr * 36 Mol Wt HCl/35 Mol Wt Cl *8,760 hr/yr * ton/2,000 lb = 726 tpy

Controlled HCl
6x10-4 lb/MMBtu * 6,139 MMBtu/hr * 8,760 hr/yr * ton/2,000 lb = 16 tpy

Uncontrolled HF
104 ppm * lb/8,200 Btu * 6,139 MMBtu/hr * 20 Mol Wt HF/19 Mol Wt F *8,760 hr/yr * ton/2,000 lb = 360 tpy

Controlled HF
2x10-4 lb/MMBtu * 6,139 MMBtu/hr * 8,760 hr/yr * ton/2,000 lb = 5.4 tpy

Mercury
9. The proposed mercury limit for the combustion of subbituminous (PRB) coal is much higher than the proposed mercury limit for the combustion of bituminous (CAPP) coal. We request that you provide more explanation and documentation regarding the reason for the difference between the proposed mercury emission rate from subbituminous and bituminous coal.

In its 2004 proposed MACT, EPA explained why bituminous coal-fired units and subbituminous coal-fired units achieve different levels of mercury removal. In brief, EPA explained that differing chlorine content in coal types affects the speciation of mercury, and that the speciated form of mercury in the coal in turn affects the level of mercury removal that control devices can achieve.[1] Additionally, differences in mercury content and heat content of the coal were also found to affect mercury emissions. As LEA explained in its original submission, bituminous and subbituminous coals have differing chlorine content, mercury content and heat content which explain the different mercury limits for these coal types.

[1] 69 Fed. Reg. at 4671-72, (Jan. 30, 2004).

LEA reviewed data from other similar facilities to determine whether the best mercury control technologies were capable of removing a sufficient amount of mercury so as to negate the effects of the differing chlorine, mercury and heat contents of subbituminous and bituminous coals. As explained below, LEA's research indicates that available mercury control technologies — in particular, activated carbon injection (ACI)[2] — are not currently capable of achieving a sufficient level of mercury removal to justify identical mercury emission limitations for subbituminous and bituminous coals.

The available test data from similar facilities utilizing the most effective mercury add-on control, ACI, demonstrate that the limit proposed for bituminous coals cannot be met by subbituminous coals. None of the test results from subbituminous coal-fired facilities utilizing ACI have been able to meet the proposed limit for bituminous coal. As shown by Cross in Table 2 below, only an additional 5% of removal is necessary for it to meet LEA's proposed bituminous limit. In contrast, Springerville Unit 3[3] requires 45% removal to meet LEA's proposed subbituminous limit and 72% removal to meet the proposed bituminous limit. Of the three DOE test results on subbituminous coal-fired facilities, only one was able to meet greater than 72% additional removal.[4] Since uncontrolled mercury was not identified in most of those results, it isn't possible to evaluate the percent removal being obtained in those tests, but the results of the testing show that none of the facilities have been able to meet the proposed bituminous coal-fired limit.

Table 2 – Summary of Mercury Stack Test Results on New Units

Plant	Test Date	Test Result	Approx. Lb/MWhr equivalent
Bituminous – co-controls			
Cross	Feb. 9, 2007	6.31 x 10-3 lb/hr	6.3x10-6
Subbituminous – co-controls			
Tucson Electric Springerville Unit 3	Aug. 24-25, 2006	2.27×10^{-6} lb/MMBtu	21.7×10^{-6}
Subbituminous - ACI			
MidAmerican Walter Scott, Jr	Dec. 20, 2007 (Optimization Test)	1.11 ug/m3	10×10^{-6}
MidAmerican Walter Scott, Jr	Aug. 14-18, 2007	1.2×10^{-6} lb/MMBtu	10.5×10^{-6} (1)

[2] ACI is used generically and is intended to include halogenated ACI.

[3] In the prior submittal it was not made clear by LEA that ACI is not used at Springerville Unit 3 – LEA apologizes for any confusion.

[4] ACI provides approximately 68%, 82%, and 37% additional removal at the subbituminous coal-fired facilities of Pleasant Prairie, Holcomb, and Meramec. (http://www.netl.doe.gov/technologies/coalpower/ewr/mercury/control-tech/pubs/41005/41005_Final_Report.pdf, http://www.netl.doe.gov/technologies/coalpower/ewr/mercury/control-tech/pubs/Topical_Report_for_Holcomb_Station.pdf, http://www.netl.doe.gov/technologies/coalpower/ewr/mercury/control-tech/pubs/Topical%20Report%20for%20Meramec%20Station.pdf)

Plant	Test Date	Test Result	Approx. Lb/MWhr equivalent
Weston 4	July 7-11, 2008	1.4 lb/TBtu	~8.79 x 10^{-6} (2)
Newmont Nevada TS Power Plant	June 23-24, 2008	<0.0076 lb/GWhr	<7.6 x 10^{-6}
MidAmerican Walter Scott, Jr	May 8-12, 2007	0.72 x 10^{-6} lb/MMBtu	6.48 x 10^{-6} (1)
~~Newmont Nevada TS Power Plant~~ (3)	~~April 6-14, 2008~~	~~39 x 10^{-6} lb/MWhr~~	~~39 x 10^{-6}~~

(1) The test reports identified that when values fell below the Practical Quantification Level (PQL), the PQL was reported. As a result, these values represent the maximum possible emissions.[5]
(2) LEA wasn't able to find specific MMBtu/hr nor MW data to make the conversion so generic values of 3,675 MMBtu/hr (back calculated from PM data) and 585 MW (provided in overview of report) were used.
(3) As part of the June report, Fluor identified that the April results were shown to have mercury contamination of the testing equipment and were subsequently withdrawn. These results were previously presented as accurate data but are now lined out so as to make it clear to EPD, these Newmont results are no longer valid.

To further address EPD's question for a basis for the difference between the proposed bituminous and subbituminous limits, additional support for setting MACT limits is provided by EPA as part of the Hazardous Waste Combustors(HWC) MACT. Section 7.0 of the Technical Support Document for the HWC MACT Standards provides detailed calculations for the determination of the MACT Floor for air pollution control devices approach. EPA used this methodology for setting the PM MACT floor, a limit governed by the use of control devices, typically baghouses. For HWC, metals and chlorides were not set with this methodology as the feedrate was determined to be the critical issue. For coal-fired boilers, however, the use of activated carbon, i.e. the pollution control device, will determine emissions. If EPA's Air Pollution Control Technology Approach and Universal Variability Factor (UVF) are utilized to calculate a MACT floor for subbituminous coal, a limit of 16.1 x 10^{-6} lb/MWhr (gross) can be calculated.[6] This is based on taking into account the test-to-test and run-to-run variability inherent in the operation of mechanical equipment and relies on the test results available from the Newmont TS Power Plant, MidAmerican Walter Scott, and Weston 4 generating stations.[7] The Hazardous Waste Combustor MACT did not utilize the UVF for new sources, but rather relied upon the upper 99th percentile prediction limit for the best performing new source MACT pool.[8] The 99th percentile of the available test runs is equivalent to the average of the data plus 2.8 standard deviations and is equal to 13.1 x 10^{-6} lb/MWhr (gross).

10. The relevance of the last three sentences in the first paragraph of page 17 is not entirely clear. It appears as though you are saying that the calculated mercury removal for the

[5] The average mercury concentrations of the Walter Scott tests were 0.902 and 1.3 µg/dscm for May and August, respectively. The average mercury concentration of the Newmont test was 0.943 µg/dscm. All of these levels fall below the level at which the Ontario Hydro method experiences poor precision, 3 µg/dscm.
[6] For calculation details, please see MACT spreadsheet, Hg tab included on the attached CD.
[7] Mercury test data wasn't found for Wygen II nor Hardin and the data from Tucson Electric Springerville is not based on the use of ACI.
[8] Revised Technical Support Document for HWC MACT Standards Volume III: Selection of MACT Standards, EPA-HQ-OAR-2004-0022-0634 October 2008, page 9-1.

Holcomb Unit 1 is higher because the mercury rate at the outlet of the boiler was higher. We request that you provide more explanation regarding these statements and their relevance to your proposed mercury limit.

The Holcomb and Clay Boswell facilities reported the following information as part of the DOE and ICR studies.

Table 3 – Summary of Critical Hg Information

	Reported Boiler Outlet (lb/TBtu)	Reported % Removal	Calculated Uncontrolled (lb/TBtu)
Clay Boswell	0.686	86%	4.9
Holcomb	0.83	93%	11.9

The only point that LEA was attempting to make in the last three sentences is that both the percent removal and the uncontrolled emissions should be considered in evaluating what limit should be set. The Clay Boswell Unit had significantly less mercury in its uncontrolled emissions and thus only achieved 86% removal, but had it started with the uncontrolled mercury emission level of the Holcomb unit and still achieved the same outlet level, the Clay Boswell Unit would have achieved 94% removal.

11. There is an apparent discrepancy in the required mercury reduction for subbituminous coal between page 13 (93.5% reduction) and page 17 (92.7% reduction). We request that you resolve this apparent discrepancy.

LEA apologizes for the error. The correct percent reduction should be 93.5%. The calculation method is shown below.

(1 - 0.043 TPY controlled Hg / 0.66 TPY uncontrolled Hg) * 100% = 93.5% reduction

12. Footnote 54 references Connecticut's use of Indonesian subbituminous coal as part of their State Clean Air Mercury Rule. EPD is unable to locate the Indonesian subbituminous coal data in the ICR data downloaded from the cited website. We request that you provide a copy of the ICR data used as part of LS Power's review so that EPD can verify all information submitted.

The attached CD has a spreadsheet where LEA has downloaded the 4 individual ICR data spreadsheets, combined them, and sorted the data to combine all of the Indonesian subbituminous data together. LEA has hidden the additional data to make it easier for EPD to find that data among the 40,527 lines of data.

Non-Mercury Metallic Hazardous Air Pollutants

13. We request that you provide additional documentation to demonstrate that you will be using the best baghouse filters available for capturing non-mercury metallic HAPs.

LEA is not aware of any studies or test data that document the HAP removal efficiencies for different baghouse bag materials. LEA's additional research into non-mercury metal HAP removal is consistent with the findings in the AWMA article provided as part of LEA's MACT submittal: the removal of $PM_{filterable}$ indiscriminately achieves non-mercury metal HAP removal. Therefore, any baghouse bag material capable of meeting a $PM_{filterable}$ MACT level will also effectively capture non-mercury metal HAPs.

Baghouse filter bags are available from a wide variety of manufacturers. These manufacturers provide technical assistance to aid the proper selection of fabric filter material and design. This selection is based on the baghouse type, operating temperature, pressure, and other unique operating conditions such as acid dew point or corrosiveness of the collected materials. The selection of the appropriate baghouse fabric filter would be supported by the manufacturer's engineering group to ensure that all environmental requirements would be fulfilled.

A paper was presented at the 2008 101st Air and Waste Management Association annual conference that addressed improvements in baghouse bags.[9] The ETV program for baghouses is based on the performance of $PM_{2.5}$ and does not address HAP removal. As shown in the paper, the performance of baghouse bags has been steadily increasing for the last several years. Given that baghouse technology will likely continue improving in the future, coupled with the fact that LEA has an extremely stringent PM limit, LEA believes that it is important not to commit to a particular baghouse bag/filter at this time.

14. On page 23, use of term "idealized operation" within quotations along with the footnote to the court decision makes it appear that this term was used in the court decision, however, that does not appear to be the case. We request your clarification regarding the use of this term (or similar) in any of the referenced court decisions. In addition, your application states that "baghouse cleaning" does not occur during stack tests. We request additional explanation as to when, and how often, baghouse cleaning occurs. We also request that you provide more explanation of the "other operational changes" that do not occur during stack tests that may affect emissions.

LEA apologies for inference that "idealized operation" was from the footnoted court case. The intent of the footnote was only to indicate that the concept of "achieved under worst foreseeable circumstances" comes from that court case. The general concept LEA was attempting to address in those sentences has also been addressed by EPA in the preamble to proposed MACT rulemaking.

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[9] http://www.epa.gov/nrmrl/std/etv/pubs/600etv08023.pdf

> "Since an emission limitation must be complied with at all times, for it to be achievable it must be set at a level that will not force sources to violate it when operating conditions are not ideal and higher emissions levels might be observed."[10]

There is not a set schedule for cleaning of a baghouse. The cleaning process for a baghouse is performed based on the need to reduce the pressure drop that results from a build-up of filter cake on the bags. As shown in the presentation on the attached CD, for the plant being demonstrated, baghouse cleaning does not occur on a set time schedule. The buildup of filter cake (and associated pressure drop) will be dependent on the variable quantities of ash, lime injected to control SO_2 (which will vary based on the inlet SO_2), and activated carbon injected (which will likely vary based on the mercury content of the fuel).

In addition, the age of the bags will likely also affect the frequency of baghouse cleaning. Older bags have a greater degree of permanent buildup that cause the pressure drop to reach the cleaning set point sooner.

LEA's historical information showed baghouse cleaning could increase particulate emissions, however after further research, LEA has found that more modern baghouses do not seem to suffer from this problem. EPA's analysis for the HWC MACT identifies no significant variation in emission rates from baghouse cleaning and operational loads[11] but does identify the need for a break-in period before setting normal operation emission rates.[12] Data taken from a brand new fabric filter during its first year of operation is not representative of the performance of a baghouse as PM emissions are substantially higher during normal operation than during the initial break-in period of the fabric filter.[13]

LEA still believes that the proposed limit of 0.010 lb/MMBtu $PM_{filterable}$ represents MACT. As part of HWC PM MACT analysis, EPA showed that test-to-test variability is not statistically insignificant, precluding the use of a low, single-test snapshot test result to establish a MACT permit limit.[14] If EPA's Air Pollution Control Technology Approach and UVF are utilized to calculate the PM MACT Floor, the resulting limit is 0.0254 lb/MMBtu.[15] This is based on taking into account the test-to-test and run-to-run variability inherent in the operation of mechanical equipment and relies on the test results available from the Hardin, Cross 3, Newmont TS Power Plant, Weston 4, and Wygen II generating stations. The HWC MACT did not utilize the UVF for new sources, but rather relied upon the upper 99th percentile prediction limit for the best performing new source MACT pool.[16] The 99th

[10] 72 Fed. Reg. 5524 (February 6, 2007).
[11] EPA-HQ-OAR-2004-0022-0459, Technical Support Document for HWC MACT Standards Volume III: Selection of MACT Standards, Section 16.2 – Selection of MACT Back-End Control Devices, page 16-5
[12] Draft Technical Support Document for HWC MACT Standards, EPA-HQ-OAR-2007-0877-0037, March 2006, page 3 through 4.
[13] EPA-HQ-OAR-2004-0022-0459, Technical Support Document for HWC MACT Standards Volume III: Selection of MACT Standards, Section 16.2 – Selection of MACT Back-End Control Devices, page 16-2
[14] *Ibid*, page 16-5
[15] For calculation details, please see MACT spreadsheet, PM tab included on the attached CD.
[16] Revised Technical Support Document for HWC MACT Standards Volume III: Selection of MACT Standards, EPA-HQ-OAR-2004-0022-0634 October 2008, page 9-1.

percentile of the available test runs is equivalent to the average of the data plus 2.8 standard deviations and is equal to 0.0153 lb/MMBtu.

LEA has proposed a limit of 0.010 lb/MMBtu. This value is just below the calculated limits shown above, and thus represents MACT. Given this stringent particualte standard which LEA is proposing, LEA will have to select the best bag available to meet all of its permit limits.

15. LS Power cited several permits and Notice of MACT Approvals for facilities using PM filterable as a surrogate for non-mercury metal HAPs. We are unable to verify the use of PM filterable as a surrogate for non-mercury metal HAPs in the Colorado Dept. of Natural Resources, PSD Permit for Xcel Energy's Comanche Unit 3 (June 29, 2005). EPD does have the referenced PSD Permit as part of the additional documents but the permit does not reference PM filterable as a surrogate for non-mercury metal HAPs. We request that you provide a copy of the relevant documents that support this surrogate approach for the Comanche facility.

The Xcel Energy Comanche permit was issued without a notice of MACT approval as a result of CAMR so PM filterable was not used explicitly as a surrogate for non-mercury metal HAPs as part of the permit. However, as part of the Preliminary Analysis (provided as document ComanchePAfinal.pdf), the Colorado Dept. of Natural Resources identified on page 7, in footnote 1 to the table identifying the potential to emit that "Metallic HAPs are controlled by the baghouse and emissions are estimated based on the filterable PM_{10} BACT limit." Thus, EPD is correct in that it was not permitted as a surrogate as part of a MACT analysis, but $PM_{filterable}$ was used to meet the regulatory requirement for determination of the quantity of each of the metallic HAPs being emitted.

Should you have any questions concerning the above responses or the attached documents, please do not hesitate to contact me.

Sincerely,

Kathy French

Kathy French
Director, Environmental Permitting

Cc: Patricia Barmeyer, Esq.