

**112(g) Case-By-Case Maximum Achievable Control Technology Determination  
Longleaf Energy Associates, LLC  
Construction/Operation of a Coal Fired Power Plant  
Located in Hilton, Georgia (Early County)**

**FINAL DETERMINATION**

SIP Permit Application No. 18499  
March 2010

**Reviewing Authority**

**State of Georgia  
Department of Natural Resources  
Environmental Protection Division  
Air Protection Branch  
Stationary Source Permitting Program (SSPP)**

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## **Executive Summary**

Longleaf submitted Application No. 18499 dated October 7, 2008. The application contains a Notice of MACT Approval request for the coal-fired boilers and the auxiliary boiler and a request for extension of dates concerning the commencement and completion of construction for the facility.

On June 16, 2009, EPD issued a Notice of MACT Approval stating that the permit amendment that includes a case-by-case MACT determination and an extension for the construction deadlines for the pulverized coal-fired electric power generation facility should be approved. The Narrative contained a draft Air Quality Permit and the Notice of MACT Approval for the pulverized coal-fired electric power generation facility.

The Division requested that Longleaf Energy Associates, LLC place a public notice in a newspaper of general circulation in the area of the proposed facility notifying the public of the proposed construction and providing the opportunity for written public comment and public hearing. Such public notice was placed in *Early County News* (legal organ for Early County) on June 17, 2009. Georgia EPD held a Question & Answer session and a public hearing on July 28, 2009. The public comment period expired August 4, 2009.

During the comment period, comments were received from Longleaf Energy Associates, LLC, GreenLaw, Franklin County, Planning & Building Department, and hundreds of emails and letters from citizens of Georgia, Alabama and Florida. This discussion will not elaborate on typographical or grammatical revisions made to the final permit. The comments are listed below along with the Division's responses and a discussion of any changes made to the final Permit. A copy of the synthetic minor analysis is provided in Appendix A. A copy of the final permit is provided in Appendix B. A copy of comments received during the public comment period is provided in Appendix C. A copy of additional correspondence received is provided in Appendix D.

## Comments from Longleaf Energy Associates, LLC

### Comment 1: Mercury Emissions

In its October 2008 application for establishing case-by-case emission limits for HAPs, Longleaf submitted information to the APB to establish a MACT emission limit for mercury emissions when firing sub-bituminous coal equal to  $15 \times 10^{-6}$  lb/MW-hr (gross). Condition 2.15.m. of the Amendment proposes to limit mercury emissions to “ $13 \times 10^{-6}$  lb/MW-hr on a 12-month rolling average while firing PRB coal.” The proposed mercury emission limit in Condition 2.15.m. is more than 13% lower than the value for sub-bituminous coal that Longleaf proposed in the case-by-case MACT of  $15 \times 10^{-6}$  lb/MW-hr (gross). Following receipt of the draft Amendment, Longleaf reviewed the literature and available test results and is willing to use its best efforts to meet this more stringent emission limit when firing sub-bituminous coal.

The APB’s proposed mercury reporting requirements for both PRB and CAPP coals in Condition 8.25.b.x and 8.25.b.xi are stated as being on an annual average basis while the emission limits in 2.15.m. are on a 12-month rolling average basis. LEA requests that the reporting requirements be aligned with the emission limit requirements to a 12-month rolling average basis.

Finally, in the interests of clarity, Longleaf reminds the APB that the data that it used to derive the limits were obtained for sub-bituminous coal and bituminous coal generally. Longleaf did not limit its analysis to mercury emissions associated with the combustion and control of coal from the Powder River Basin for the proposed sub-bituminous mercury emission limit or from Central Appalachia for the bituminous mercury emission limit.

**Response:** EPD agrees that the averaging period was intended to a 12-month rolling average period as indicated in Condition 2.15.m. The annual average listed in Condition 8.25 was inadvertently unchanged and is in error. Condition 8.25 has been modified.

### Comment 2: Acid Gas Emissions

Longleaf requests modification of Condition 8.25.c.i to reflect that the PM limit used as a surrogate is  $PM_{\text{filterable}}$  and only an exceedance of the  $PM_{\text{filterable}}$  emission limit in Condition 2.15 will be an excursion for HF and HCl. This interpretation is consistent with Longleaf’s proposed use of a PM CEMS (which only measures filterable) as a compliance mechanism as well as the APB’s MACT Narrative at page 3 which identifies  $PM_{\text{filterable}}$  as a surrogate monitoring method. As presently worded, Longleaf believes that a potential exceedance of a  $PM_{\text{total}}$  stack test (Condition 2.15.d.) could also be implied to be an excursion for HF and HCl.

Additionally, Table XX on page 44 of 50 of the draft Notice of MACT Approval indicates that the PM or  $SO_2$  CEMS will be used to determine compliance with HF and HCl emission limits. Longleaf requests clarification that as per the permit Condition 8.25.c.i, both the PM and  $SO_2$  CEMS will be used for compliance.

**Response:** EPD agrees and the above change has been made to the permit.

### **Comment 3: Non-Mercury Metal Emissions**

The APB's proposed reporting for PM<sub>filterable</sub> in Condition 8.25.b.v is based on a 3-hour block average. However, on page 46 of 50, #17, the Notice of MACT Approval identifies the standard as a 3-hour rolling average. Longleaf requests clarification that the PM<sub>filterable</sub> limit is a 3-hour block average as identified in the permit.

**Response:** EPD agrees that the PM<sub>filterable</sub> limit is a 3-hour block average as indicated in Condition No. 8.25 and the reference in the Notice of MACT Approval is in error.

### **Comment 4: Commence Construction**

In a letter addressed to Mr. Jac Capp dated October 8, 2008, Longleaf requested that date for commencing construction of the Facility be extended for a period of 18 months. When the Director of EPD issued the PSD permit to Longleaf in May of 2007, she specified that, consistent with Georgia's PSD regulations, Longleaf must commence construction of the Facility within 18 months. Thirty days after the issuance of the PSD permit, third parties petitioned for judicial review of the permit, and today, more than two years later, this permit appeal continues. As you know, the ongoing permit appeal currently prevents Longleaf from commencing construction and until it is finally resolved, Longleaf may continue to be prevented from commencing construction. Longleaf appreciates the APB's willingness to extend the commence construction date in a manner consistent with Georgia's PSD regulations.

In response to the request for extension, the APB proposed to alter the date by which Longleaf must commence construction of the Facility. The APB's modification appears in Condition 2.1 of the Amendment and provides in relevant part that "[a]pproval to construct shall become invalid if construction if not commenced by January 21, 2011." Longleaf appreciates the APB's proposal to grant the extension request and simply asks that the permit extension language be clarified to address any delays that would result should a petition for judicial review of this Amendment be filed with the Office of State Administrative Hearings. As such, we respectfully request that Condition 2.1 be modified as follows: "Approval to construct shall become invalid if construction if not commenced by January 21, 2011, or as that date may be modified by operation of law as provided in O.C.G.A. § 12-2-2(c)(2)(B)."

**Response:** EPD believes that the ongoing litigation, which prevents construction from commencing, is an adequate basis for granting an extension. Longleaf has submitted additional proposed language since the close of the comment period that would base the extension timing on the timing of OSAH's decision. EPD prefers to stick with a fixed date for the deadline. Therefore, EPD will modify Condition No. 2.1 to have a deadline for commencement of construction of October 1, 2011 which is 18 months after the anticipated permit issuance date. This is expected to be enough time for the facility to commence construction on this project.

In conclusion, Longleaf appreciates the APB's review of its case-by-case MACT application and its request to extend the date for commencing construction of the Facility. Longleaf believes that the changes that it has suggested in this letter do not constitute significant modifications to the APB's proposed permit actions. Rather, these suggestions should help make the draft Amendment more consistent with the data and analyses Longleaf presented in its MACT application and the legal standards that will govern any subsequent legal challenges. For these reasons, Longleaf urges the APB to incorporate its suggested modifications prior to issuing the Amendment.

**Response:** Comment so noted.

## Comments from GreenLaw

### Comment 1:

The amendment proposed by EPD contains two parts: 1) an extension of the construction schedule for the PSD permit that was issued for the Longleaf Energy Station (“Longleaf” or “Longleaf Plant”) in May 2007, and 2) a case-by-case Maximum Achievable Control Technology (“MACT”) Determination. For the reasons stated below, both amendments should be denied.

#### I. EPD Should Not Grant an Extension to the Longleaf Construction Schedule.

EPD issued a PSD permit for the construction and operation of the Longleaf Energy Station on May 14, 2007. Pursuant to the federal PSD regulations, no “new major stationary source” can “begin actual construction” without a permit meeting the requirements of the PSD program. 40 CFR 52.21 (a)(2)(iii). The federal regulations also provide that PSD permit approval to construct a major emitting source shall become invalid if:

Construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time.

40 CFR 52.21(r)(2). This time period may be extended “upon a satisfactory showing that an extension is justified.” *Id.*

Longleaf Energy Associates, LLC, (“Longleaf”) submitted a request for an extension of the dates for the commencement and completion of construction for the Longleaf Plant. Specifically, Longleaf requested that the construction deadline be extended so that the 18-month time period begins tolling on July 21, 2009 and that construction be completed by December 31, 2015, respectively. This request should be denied for the following reasons:

#### A. The Public Notice is Deficient

Before a construction schedule for a PSD permit may be extended, it must be subjected to the public notice and comment. *See* 42 USC 7470(5); 40 CFR 70(h); DNR Rule 391-3-1-.03(10)(e)(8). In this case, the public notice is deficient. In providing notice to the public, EPD must inform the public “of the activity or activities involved in the permit action[.]” 40 CFR 70(h)(2). However, the notice is devoid of any mention of the extension for the PSD permit’s construction schedule. *See* Notice of Public Hearing and Notice of the Opportunity for Public Comment.<sup>1</sup> The public notice describes that the public will have the opportunity to comment on the case-by-case MACT determination, but does not mention that an amendment to the PSD permit’s construction schedule is being considered. Indeed, the public notice is misleading in that it states that “[t]he facility already has a permit for the construction and operation of a coal-fired power plant facility.”<sup>2</sup> *Id.* This statement implies that there will be no changes to the PSD permit that was issued to Longleaf in 2007. Instead, the notice states that “[t]his amendment’s purpose it to add new requirements to the permit based on the case-by-case MACT determination, also know at that Notice of MACT approval.” As such, no notice of the construction schedule change has been given.

In addition, in providing notice to the public EPD must “provide a statement that sets forth the legal and factual basis of the draft permit conditions...” 40 CFR 70.7(a)(5). The legal and factual basis provided by EPD

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<sup>1</sup> <http://www.georgiaepd.org/air/airpermit/.downloads/permits/psd /dockets/longleaf/112docs/0990030not.pdf>

<sup>2</sup> It is significant that the website which contains the pertinent materials for public review is unclear. The information contained on EPD’s website regarding the construction extension is housed solely under the “112(g) Documents.”

is deficient. EPD's position is set forth in the "Narrative" dated June 6, 2009. That document purports to describe EPD's rationale for extending the construction commencement date of the Longleaf Plant until July 21, 2009. However, the permit amendment states that the extension shall be until July 21, 2011. No explanation has been provided for EPD's rationale to extend the commencement of construction for an additional two years. In addition, EPD's only stated reason (made by adopting Longleaf's stated position without further explanation) is limited solely to the existence of litigation. As described in greater detail below, *see* I.B, such a rationale is legally insufficient to justify an extension.

**Response:** The facility is subject to 40 CFR 52.21(r) which does not contain any requirements on providing a public notice for an extension of the construction schedule. EPD consolidated this permitting action in conjunction with the case-by-case MACT analysis which requires the permitting authority to provide opportunity for public comment, lasting for a 30-day period and be noticed by a prominent advertisement in the area affected by the facility. The public notice, which was published by the facility in the *Early County News* (legal organ for Early County) on June 17, 2009, satisfies the requirements of 40 CFR 70.7(h) and Georgia Rule 391-3-1-.03(10)(e)(8). In satisfying 40 CFR 70.7(h), in which the facility is not subject to at this time, all of the requirements of 40 CFR 63.43(h) are clearly included and thus satisfies the legal standard. The public notice states that any citizen can comment on the "draft Air Quality Permit Amendment" which includes any condition being modified in the permit. The draft permit clearly states that this permit is being amended to add case-by-case MACT limits and to amend the commencement of construction deadline date and completion of construction deadline date.

#### B. A Satisfactory Showing Has Not Been Made to Justify a Construction Schedule Extension

To the extent that a rationale has been provided by EPD, it is limited only to the existence of ongoing litigation of the original PSD permit. The mere existence of litigation does not justify the extension of a PSD permit. The administrative and judicial appeal of a PSD permit is a right conferred on the public by the Clean Air Act, and exercise of that right cannot excuse a permit applicant from its obligation to comply with the otherwise applicable requirements of the Act and its implementing regulations. A conclusion to the contrary would amount to the adoption of an automatic and unlimited permit extension anytime a member of the public appeals a permit – clearly an untenable outcome that would fundamentally jeopardize the integrity of the PSD Program.

Instead, the limitation of the ongoing validity of a PSD permit is directly related to *a fundamental purpose of the PSD program* – to require that all new or modified major sources in attainment areas employ *state of the art measures for emissions controls*. By sufficiently up-to-date to reflect the latest technological advancements.

In seeking the extension, Longleaf claims that Kentucky has granted an extension based on the existence of litigation. Subsequent to Longleaf's application, however, Kentucky clarified its position with respect to the granting of extensions. Rather than considering litigation, Kentucky considers extensions in the context of "the two primary purposes of the construction requirements of the PSD program." *Kentucky Mountain Power, LLC v Energy & Env. Cabinet*, Final Order, DAQ-29109-039, at 9 (Nov. 24, 2008). Those purposes are:

- (i) assure major sources of air pollution are constructed using current BACT when actually constructed, as opposed to being constructed using older technology, which is generally no as efficient or effective as newer technology in removing pollutants; and
- (ii) assure that proposed sources actually get timely constructed and do not otherwise impede other potential sources of economic activity from being constructed given proposed sources use up available air pollution increments in the air quality program, as long as those sources remain permitted for construction event assuming they are not longer viable projects.

*Id.* at 9-10. This position has been echoed elsewhere as well. See EPA Region IX Policy on PSD Permit Extensions (requiring a new BACT analysis be performed as a condition for all permit extensions);<sup>3</sup> *In the Matter of New York Power Authority*, EAD 825, PSD Appeal No. 82-4 (Dec. 6, 1983) (finding that the time limits are there to ensure that the facility is “constructed in accordance with reasonably current pollution control standards”). In addition, it is also important to consider whether the air quality in the area has changed. See *In the Matter of New York Power Authority*, EAD 825, PSD Appeal No. 82-4 (Dec. 6, 1983) (considering “current information regarding the level of air pollution the locality where the facility is located”). In fact, there are numerous factors that should be considered, yet the reason for proposing this extension has focused solely on the Longleaf litigation.

While Longleaf may be concerned about the impact of the litigation on its interests, EPD must look beyond the interests of Longleaf and consider the impact of the extension on the public who breathe the air, and on businesses who may provide an economic benefit to local residents if they are able to use air pollution increments that are otherwise reserved for Longleaf. For example, since the issuance of the Longleaf permit, there have been proposed and final BACT limits that are lower than those proposed by the Longleaf permit. See Ex. 60 (spreadsheet compiled by the National Park Service that summarizes proposed and final permit limits as of January 2009). The need to revisit the BACT analysis is further supported by the fact that EPD performed the BACT analysis prior to the MACT analysis. See *supra* Section III. If the BACT analysis is revised, the benefit to the community would be cleaner air. In addition, EPD should consider *current* information regarding the level of air pollution (including neighboring Alabama counties) where the facility is located, but there is no indication that this has occurred.

EPD should also consider economic interests and whether the extension would harm the ability of the local community to attract other businesses. For example, the federal stimulus package and federal energy legislation are providing opportunities for the development of green energy projects at a level that is unprecedented in Georgia. It is expected that as many as 59,000 new jobs could come to Georgia as a result. However, if the Longleaf permit is extended, the available air increments will be reserved for Longleaf, depriving local citizens of potential economic opportunities.

When the factors that impact the **public** are considered, the extension is not “substantially justified” as required by law. See 40 CFR 52.21(r)(2). Therefore, the extension should be denied.

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<sup>3</sup> <http://www.epa.gov/region7/programs/artd/air/nsr/nsrmemos/extnsion.pdf>

**Response:** The final PSD permit was issued on May 14, 2007. On June 13, 2007, Friends of the Chattahoochee and Sierra Club filed a petition to appeal this Permit in the Office of State Administrative Hearing. Since then ongoing litigation has prevented the facility from commencing construction on this project.

Georgia has adopted a regulatory program for PSD permits, which EPA has approved as part of Georgia's State Implementation Plan (SIP). Therefore, in Georgia, the Director of EPD issues PSD permits to qualifying sources pursuant to Georgia Rule 391-3-1-.02(7). According to 40 CFR 52.21(r)(2) and Georgia Rule 391-3-1-.02(7), EPD has the authority to grant an extension for commencement of construction past the 18 months deadline upon a satisfactory showing that an extension is justified.

Also mentioned in Greenlaw's comments, are several other permitting agencies or rulings in which additional factors were used in deciding whether to grant an extension of the construction schedule for a PSD facility. These factors are not federal requirements nor have been adopted in the Georgia Rules for Air quality and thus are not applicable and not binding on the decisions of EPD. The Director of EPD may extend the 18-month time limit provided for in Condition 2.1 of the Permit "upon a satisfactory showing that an extension is justified." Ga. Comp. R. & Regs. r. 391-3-1-.02(7)(b)(15) (incorporating by reference 40 C.F.R. § 52.21(r)(2)).

EPD believes that the ongoing litigation, which prevents construction from commencing, is an adequate basis for granting an extension for commencement of construction deadline under Georgia Rule 391-3-1-.02(7).

**Comment 2:**

**NOTE: Longleaf has now submitted an amendment to their case-by-case MACT permit application requesting synthetic minor status for all hazardous air pollutants. Comments in the following section have been reduced to only include the headings to note that we have received said comments but they are no longer applicable to this permit amendment. Those comments that are still applicable will receive responses from EPD as noted below.**

- II. EPD's Proposed HAP Limits Fail to Reflect MACT for the Longleaf Plant.
  - A. MACT Limits for New Sources of Hazardous Air Pollution.
  - B. The Draft Permit Fails to Set Adequate Limits for All Hazardous Air Pollutants Emitted by the Plant.
    - 1. Filterable Particulate Matter Is Not an Adequate Surrogate for All Non-Hg Metal HAPs.
      - a. HAP Metals Are Not Invariably Present In Filterable Particulate Matter
      - b. The Particulate Control Device Does Not Indiscriminately Capture All HAP Metal Emissions
      - c. Facilities Achieve Reductions in HAP Metal Emissions By Means Other Than Particulate Matter Control
      - d. BACT Does Not Equal MACT
      - e. Conclusion
    - 2. Carbon Monoxide is Not an Adequate Surrogate for All Organic HAPs.
      - a. Organic HAPs Are Not Invariably Present in Carbon Monoxide.
      - b. CO Control Does Not Indiscriminately Capture Organic HAPs, and Facilities Achieve Reductions in Organic HAP Emissions By Means Other Than CO Control.
      - c. Conclusion
  - C. EPD's MACT Limits Are Not Based on the Emissions Achieved in Practice by the Best Controlled Similar Source.
  - D. The Proposed Limits for Longleaf Do Not Represent Maximum Achievable Control Technology.
    - 1. Assuming It Is Appropriate to Establish a Particulate Matter Limit as a Surrogate For Non-Mercury Metallic HAPs MACT, EPD's Proposed Filterable Particulate Matter Limit Fails to Reflect MACT.
    - 2. Assuming It Is Appropriate to Establish A CO Limit As A Surrogate For Organic HAPs MACT, the CO Limit Fails to Reflect MACT.
    - 3. MACT For Individual HAPs.

- a. Hydrogen chloride
  - (i) *The MACT Approval Fails to Identify Important Design Criteria for Longleaf*
  - (ii) *The MACT Limits Are Less Stringent Than Several Other HCL Emission Limits for Coal-Fired Electric Utility Boilers*
  - (iii) *The MACT Limits Are Less Stringent Than The HCL Limits Achieved in Practice by the Best Controlled Similar Source*
    - (a) *MACT Floor Did Not Consider Best Controlled Similar Source.*
    - (b) *Improperly Relied On Permit Limits*
    - (c) *Ignored Stack Test Data*
  - (iv) *EPD Must Conduct a Revised and Proper MACT Floor Determination*
  - (v) *PA Failed to Fully Evaluate Beyond-the-Floor HCl Control Technologies for Longleaf.*
  
- b. **MACT For Hydrogen Fluoride**
  - i. *The MACT Approval Fails to Identify Important Design Criteria for Longleaf*
  - ii. *The MACT Limits Are Less Stringent than Other HF Emission Limits for Coal-Fired Electric Utility Boilers.*
  - iii. *The MACT Limit Are Less Stringent than the HF Limits Achieved in Practice by the Best Controlled Similar Source.*
  - iv. *EPD Must Conduct a Revised MACT Floor Determination.*
  - v. *EPA Failed to Fully Evaluate Beyond-the-Floor HF Control Technologies for Longleaf.*
  
- c. **Mercury MACT**
  - i. *There is No Valid Justification for Subcategorizing Similar Sources for Determining the MACT Floor Based on Type of Coal.*
    - (a) *EPD Cannot Rely on EPA's Proposed MACT Rulemaking to Provide Justification for Subcategorizing the Mercury MACT Determination for Longleaf Based on Coal Rank.*
    - (b) *With Currently Available Control Options and Technology, Coal-Fired Electric Utility Steam Generating Units Can Meet the Same Level of Mercury Emissions Regardless of Coal Rank*
  - ii. *Based on Longleaf's Analysis, the MACT Floor Should No Higher than  $6 \times 10^{-6}$  lb/MW-hr Regardless of Coal Rank Burned.*

- iii. *Longleaf's Analysis of Whether Units Burning Subbituminous Coal Can Meet Its Proposed MACT Floor for Bituminous Coal is Flawed.*
  - (a) *To Properly Compare Emission Rates Achieved to Its Proposed MACT Floor, EPD Should Have First Converted its Proposed MACT Floor Limit to Units of Pounds per Million British Thermal Unit Heat Input.*
  - (b) *There Are Subbituminous Coal-Fired Units Meeting Mercury Emission Rates As Low as Longleaf's Proposed MACT Floor (EPD's Proposed CAPP Coal Limit).*
  - (c) *Longleaf's Analysis of Whether Subbituminous Coal-Fired Units Can Meet Longleaf's Bituminous Coal MACT Floor Level Failed to Consider that Control Techniques Other than those Tested Can Result in Lower Mercury Emissions at Subbituminous Coal-Fired Units.*
  - (d) *Longleaf's Analysis of the Control Efficiency that Would Have to Be Achieved to Meet Its Bituminous Coal MACT Floor Level Was Not Based on Design Coal Data for Longleaf and Was Instead Based on a Gross Overestimate of Worst Case Mercury Emissions from Subbituminous Coal.*
  - (e) *Longleaf Could Readily Achieve its Proposed CAPP Coal MACT Floor Limit with PRB Coal and Available Mercury Control Technologies that are Achieving High Removal Efficiencies at Plants Burning Subbituminous Coal*
- iv. *Longleaf/EPD Have Improperly Relied on EPA's Proposed MACT Standard as Setting the MACT Floor Without Adequate Review and Independent Analysis.*
  - (a) *EPA Failed to Adequately Justify Its Methods For Determining Emissions of the Best Controlled Similar Source Under the Worst Reasonably Foreseeable Circumstances, and EPD Cannot Rely on EPA's Unjustified Methods. Without Conducting Its Own Review and Independent Analysis.*
  - (b) *EPA Assumed Too Low of a Thermal Efficiency in Converting the Mercury Emissions Levels of the Best Controlled Similar Source to lb/MW-hr Units, and EPD Must Use a More Realistic Thermal Efficiency to Convert to lb/MW-hr Units Reflective of the Design of the Longleaf Boilers.*
  - (c) *Correcting EPA's Determination of MACT Floor for Mercury for the Deficiencies Discussed above, MACT Floor Based on the 1999 ICR Data Would Be Lower Than EPD's Proposed  $6 \times 10^{-6}$  lb/MW-hr Mercury Limit.*
- v. *Relevant Mercury Limits Were Not Adequately Considered by EPD.*

d. Other HAPS

e. The Proposed Longleaf MACT Provisions Do Not Include Adequate Testing or Monitoring Requirements

The proposed permit revisions fail to include adequate testing or monitoring requirements to ensure enforceability and compliance with the proposed MACT limits. Specifically, 40 C.F.R. §63.43(g)(2) provides in pertinent part as follows:

(2) The Notice of MACT Approval will specify any notification, operation and maintenance, performance testing, monitoring, reporting and record keeping requirements. The Notice of MACT Approval shall include:

(i) In addition to the MACT emission limitation or MACT work practice standard established under this subpart, additional emission limits, production limits, operational limits or other terms and conditions necessary to ensure Federal enforceability of the MACT emission limitation;

(ii) Compliance certifications, testing, monitoring, reporting and record keeping requirements that are consistent with the requirements of §70.6(c) of this chapter;

(iii) In accordance with section 114(a)(3) of the Act, monitoring shall be capable of demonstrating continuous compliance during the applicable reporting period. Such monitoring data shall be of sufficient quality to be used as a basis for enforcing all applicable requirements established under this subpart, including emission limitations....

The draft permit, as revised, fails to comply with these requirements.

First, the permit fails to include any testing or monitoring, recordkeeping or reporting requirements for mercury during the first year of operation of Longleaf. While mercury CEMs are required to demonstrate compliance with the proposed rolling 12-month averages (which we support and agree are justified to ensure continuous compliance with emission limits), the permit must include interim monitoring and reporting provisions for the first 12 month of operation (before the first 12 month rolling average is determined) to ensure that Longleaf is achieving MACT for mercury during that period.

Second, the Permit requires a single stack test for HF and for HCL (for each coal type) over the entire life of the Facility. Condition 4.2(d), (g), (h). The Permit also does not include any excess emission, exceedances, or excursions reports for HCL and HF. Condition 8.25. The notice of MACT Approval at 26 explains that Longleaf proposes to use SO<sub>2</sub> and PM CEMS to demonstrate that acid gas pollution control devices are operating effectively. However, the Permit is silent on this scheme. It does not require that SO<sub>2</sub> and PM CEMS data be used to determine compliance with the HCL and HF limits. Thus, the proposed MACT limits for HF and HCL are unenforceable as a practical matter. The advocated indirect monitoring fails to ensure compliance.

There is typically no correlation between sulfur in coal (and hence SO<sub>2</sub> in stack gases) and chlorine or fluorine in the coal (and hence HCL and HF in the stack gases). Similarly, there is no correlations between ash content and chlorine and fluorine in coal (and hence HCL and HF in the stack gases). *See* Exs. 19, 20A-C. For example, the chlorine in the coal could triple while the sulfur content remains constant. This could lead to an exceedance of the HCL limit, but no change in SO<sub>2</sub> emissions. Thus, the SO<sub>2</sub> CEMS does not assure compliance with the HCL and HF emission limits. Similarly, the PM CEMS also does not assure continuous compliance with HCL and HF.

Thus, the indirect monitoring is not linked to the underlying permit limit. Neither EPD nor Longleaf has measured or supported in any manner the relationship between the parameters being “indirectly” monitored, SO<sub>2</sub> and PM, and the plant’s HCL and HF emissions. The permit does not, as a result, connect the “indirect” parameters with the plant’s HCL and HF limits; even in the plant violates the “indirect” parameters, under the terms of the permit, the HCL and HF limits are still satisfied. Moreover, the suggested indirect monitoring fails to measure all of the variables upon which the plant’s HCL and HF emissions depend. HCL and HF emissions may vary by orders of magnitude based upon, among other things, fuel selection - yet the permit does not monitor the chlorine and fluorine content of the plant’s fuels or place any restrictions on these fuels. As a result, even if all of the indirectly monitored parameters are satisfied, i.e., the SO<sub>2</sub> and PM limits, the plant may still emit pollutants well above the HCL and HF permit limits. PM differently, unless all variables that significantly affect the plant’s HCL and HF emissions are monitored, “indirect” monitoring cannot ensure continuous compliance; the permit fails to provide such comprehensive indirect monitoring.

The permit and supporting record fail to establish any relationship between the indicators and the parameters they represent. The EPA has objected to numerous proposed Title V permits based on a permitting authority’s failure to adequately establish a correlation between the indicator and the emission limit. For example, EPA objected to the proposed Title V permit for a plant in Florida based in part upon the lack of correlation between VOC emissions and Co/O<sub>2</sub> emissions where CO/O<sub>2</sub> was being measured as a surrogate for VOCs. In the objection letter, the EPA stated:

[T]he Title V permit does not contain any detailed explanation linking CO/O<sub>2</sub> monitoring to VOC, for the purposes of compliance. To resolve this concern, the permit must require the source to conduct routing VOC monitoring, or a technical demonstration, such as a comparison of historical emission data to emission limits, must be included in the statement of basis explaining why the State has chosen to allow CO monitoring as a surrogate for VOC. A discussion of how carbon monoxide monitoring indicates good combustion, which affect VOC emissions, could be provided along with historical data to support the current monitoring strategy.

*U.S. EPA Region 4 Objection, Proposed Part 70 Operating Permit, Southdown, Inc. - Brooksville plant, Hernando County, Florida, Permit No. 0530010-002-AV*

Similarly, on December 22, 2000, the EPA granted a petition for objection to a Title V permit based in part upon the fact that the permit and accompanying Statement of Basis failed to provide a sufficient basis for assuring compliance with several permit conditions. *See In re Fort James Camas Mill*, Order Denying in Part and Granting in part Petition for Objection to Permit, December 22, 2000. According to the Order, “the rationale for the selected monitoring method must be clear and documented in the permit record.” *Id.* at 8.

The permit and supporting record must establish a specific link with proffered indicators to assure continuous compliance and enforceability. For example, in the Tampa Electric Company’s F.J. Gannon Station case, the EPA objected to the Title V permit, stating:

While the permit does include parametric monitoring of emission unit and control equipment operation in the O&M plans for these units... the parametric monitoring scheme that been specified is not adequate. The parameters to be monitored and the frequency of monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation

of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of normal operating time. The Department should set the appropriate percentage of the operating time would serve as trigger for this testing requirement.

*U.S. EPA Region 4 Objection, Proposed Part 70 Operating Permit, Tampa Electric Company, F.J. Gannon Station, Permit No. 0570040-002-AV.*<sup>4</sup>

The permit offers no link between the preferred indicators and the underlying MACT limits. Thus, if EPD is going to allow these secondary indicators at all, the agency should rewrite the permit to clearly transfer enforceability to the underlying limits HCL, HF, as well as metals (PM surrogate) and organic HAPs (CO surrogate). By way of example: if SO<sub>2</sub> is used to determine continuous compliance with HCL and HF, at the very least, the permit should clearly state that an SO<sub>2</sub> violation equals an HCL and HF limit violation.

The permit does not specify that a violation of an indicator constitutes a per se violation of the underlying permit limit. The permit also does not contain an indicator range or the procedure to acquire one. The permit also lacks any requirement to develop a correlation between the indicators and the applicable requirement, support for the chosen approach, a trigger for additional stack testing, a requirement for stack testing if operation occurs outside of the range, or a requirement to cure the exceedance. Thus, the permit does not ensure continuous compliance for HCL, HF, non-mercury metallic HAPs, and organic HAPs.

Continuous emission monitoring systems (CEMS) are available for both HCL and HF and are widely used in other industries. *See, e.g.* Ex. 113 and 114.<sup>5</sup> While they have not yet been used on coal-fired power plants in the United States to our knowledge, a case-by-case MACT limits have only recently been imposed on coal-fired power plants, HCL and HF CEMs are entirely capable of being used on such power plants.

EPA has recently recognized that CEMS are the proper means of measuring compliance with HCL limits; on April 22, 2009, EPA recommended that North Carolina require a HCL CEMS to assure that HCL emissions at Cliffside Unit 6 remain below the MACT applicability threshold. EPA wrote: “While there are monitoring alternatives to an HCL, CEMS, a HCL CEMS is expected to provide the most reliable assurance of compliance.” Ex. 115.<sup>6</sup> In addition, Florida recently issued a revised draft permit for the Seminole plant that requires the use of HCL and HF CEMS to demonstrate that emissions remain below 9.75 ton/yr for HCL plus HF combined, which works out to the lowest HCL and HF emissions in any coal plant permit. Ex. 116 and 117.

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<sup>4</sup> *See also* U.S. EPA Region 4 Objection, Proposed Part 70 Operating permit, Oxy Vinyl, LP, Louisville, Kentucky, Permit No. 212-99-TV (“For example, a parametric range that is representative of the proper operation of the control equipment could be established using source data to develop a correlation between control parameter(s) and PM emissions. The permit must specify the parametric range or procedure used to establish that range, as well as the frequency for re-evaluating the range”) (emphasis added); U.S. EPA Region 4 Objection Proposed Part 70 Operating Permit; North County Regional Resource Recovery Facility Permit No. 0990234-001-AV; U.S. EPA Region 4 Objection Proposed Part 70 Operating Permit Pinellas County Resource Recovery Facility Permit No. 1030117-002-AV. These decisions are posted on EPA’s website at: [http://www.epa.gov/Region4/air/permits/TitleVObjectionLetters/KY\\_ObjectionLetters/OxyVinyls.pdf](http://www.epa.gov/Region4/air/permits/TitleVObjectionLetters/KY_ObjectionLetters/OxyVinyls.pdf); [http://www.epa.gov/Region4/air/permits/TitleVObjectionLetters/FL\\_ObjectionLetters/NorthCoRRWestPalm.pdf](http://www.epa.gov/Region4/air/permits/TitleVObjectionLetters/FL_ObjectionLetters/NorthCoRRWestPalm.pdf); and [http://www.epa.gov/Region4/air/permits/TitleVObjectionLetters/FL\\_ObjectionLetters/PinnellasCoRRClearwater.pdf](http://www.epa.gov/Region4/air/permits/TitleVObjectionLetters/FL_ObjectionLetters/PinnellasCoRRClearwater.pdf)

<sup>5</sup> Offerings by Gasmeter and Thermo Scientific.

<sup>6</sup> Letter from A. Stanley Meiburg, Acting Regional Administrator, EPA Region 4, to Dee Freeman, Secretary, North Carolina Department of Environment and Natural Resources, April 30, 2009.

Continuous emission monitoring is EPA's preferred method of determining continuous compliance and has been required for NO<sub>x</sub> and SO<sub>2</sub> under NSPS for decades. *See, e.g.*, NSR Manual, p. I.3 ("Continuous, direct emission measurement is preferable.") CEMS should be used here to determine continuous compliance with the HCL and HF MACT limits.

**Response:** Please refer to the narrative document in Appendix A. Longleaf has agreed to synthetic minor limits for all HAPs. The entire monitoring, record keeping and reporting permit conditions will be revisited to ensure that the facilities emissions stay below the emission limitations of 10 tons per year on any single HAP and 25 tons per year on all combined HAPs. The new and revised permit conditions will ensure that the facility remains in compliance with their emission limits. The facility will no longer be using any surrogate pollutants for verifying compliance with the HAPs limits.

**Comment 3:**

**E. The Application Must Be Submitted and Reviewed By a Professional Engineer Licensed in Georgia**

In Georgia, "it shall be unlawful for any person other than a professional engineer to practice or to offer to practice professional engineering in this state." O.C.G.A. §43-1: -7. The terms "professional engineer" and "professional engineering" are defined by statute. O.C.G.A. § 43-15-2. The term "Professional engineering" means:

[T]he practice of the art and sciences, known as engineering, by which mechanical properties of matter are made useful to man in structures and machines and shall include any professional service, such as consultation, investigation, evaluation, planning, designing, or responsible supervision of construction or operation, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or projects, wherein the public welfare or the safeguarding of life, health, or property is concerned or involved, when such professional service requires the application of engineering principles and data and training in the application of mathematical and physical sciences. A person shall be construed to practice or offer to practice professional engineering, within the meaning of this chapter who by verbal claim, sign, advertisement, letterhead, card, or in any other way represents or holds himself out as a professional engineer or engineer or as able or qualified to perform engineering services or who does perform any of the services set out in this paragraph. Nothing contained in this chapter shall include the work ordinarily performed by persons who operate or maintain machinery or equipment.

O.C.G.A. § 43-15-2(11) (emphasis added). The term "professional engineer" means:

[A]n individual who is qualified, by reason of knowledge of mathematics, the physical sciences, and the principles by which mechanical properties of matter are made useful to man in structures and machines, acquired by professional education and practical experience, to engage in the practice of professional engineering and who possesses a current certificate of registration as a professional engineer issued by the board.

O.C.G.A. § 43-15-2(10) (emphasis added). The term "the board" as used in the above definition means "the State Board of Registration for Professional Engineers and Land Surveyors." O.C.G.A. § 43-15-2(1).

Thus, in order to lawfully practice professionally engineering in the State of Georgia, one must be a professional engineer as defined by Georgia law. In order to be considered a professional engineer in Georgia, one must receive certification from the Georgia Board of Registration for Professional Engineers and Land Surveyors. Absent this certification, it is unlawful to practice professional engineering. As stated in the Georgia Code, it is

“unlawful for any person other than a professional engineer to practice or to offer to practice professional engineering” in Georgia. O.C.G.A. § 43-15-7.

In order to issue a MACT Approval, both the Applicant and EPD make MACT determinations. A MACT determination is made similar to a BACT determination, as discussed above. The Georgia Board of Registration for Professional Engineers and Land Surveyors has ruled that BACT determinations constitute the practice of engineering. Minutes, Meeting of the Georgia Board of Registration for Professional Engineers and Land Surveyors, December 6, 1994; Minutes, Meeting of the Georgia Board of Registration for Professional Engineers and Land Surveyors, December 10, 1991. As such, EPD must ensure that both the MACT determinations made by the Applicant and the permitting agency are performed by properly licensed professional engineers.

**Response:** The Georgia Air Quality Act and the Georgia Rules for Air Quality Control provide the regulations, guidance and structure on the issuance of Air Quality Permits. Nowhere in those governing provisions is there a requirements that EPD professionals be registered or licensed by any particular board. The justification provided by Greenlaw includes meeting minutes from Georgia’s Professional Engineering Board which suggest that permitting actions such as BACT determination or MACT determinations by association constitute the practice of professional engineering. Longleaf has now proposed minor source designation for hazardous air pollutants. The facility is no longer subject to the requirements of 40 CFR 63 Subpart B, and thus the Notice of MACT Approval that was issued draft in July 2009 is no longer applicable. The meeting minutes, even if they were binding, are therefore not applicable to the proposed permit amendment.

**Comment 4:**

**III. EPD Must Revisit Its PSD Determinations in Light of the MACT Process**

Until a proper case-by-case MACT review has been conducted - or at the very least until EPD has performed a meaningful assessment of the likely implications of MACT-related hazardous air pollutant (“HAP”) emission limits - EPD has no way of assessing how the MACT requirements may affect the proposed plant’s ability to control PSD pollutants. The technologies prescribed to meet MACT may allow for far greater cost-effective reductions in criteria pollutants than may have been true when EPD first issued the Plant’s PSD permit. Changes in fuels require pursuant tomcat may necessitate entirely different pollution-control methods as BACT, or the MACT limits may affect the emissions calculations that were the basis of EPD’s earlier PSD analysis; most importantly, any CO-based MACT limit for organic HAP would increase the Plant’s NOx emissions, potentially exceeding the significance threshold.

Both MACT and PSD are inherently technology-based, and technology-forcing in the broadest sense of that term, potentially affecting not just add-on control technology, but process technology, raw inputs, fuel quality, fuel mix, operational parameters, work practices, etc. Thus, the impact of one regulatory program on these “technology” choices for the project necessarily will have implications for what is achievable or appropriate under the other program.

The MACT process is a more rigorous exercise than PSD’s BACT requirements, with a more stringent set of technology-forcing criteria. As a result of these fundamental differences between MACT and BACT, and the clearly more stringent nature of MACT analysis, EPD cannot conduct a reasonably complete PSD analysis without considering, to some significant degree; what will (or is likely to be) required by MACT.

By performing the MACT and PSD analyses in isolation, EPD has essentially allowed its PSD limits to determine its MACT limits. The Clean Air Act explicitly states, “In no event shall application of “best available control technology” result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 7411 or 7412 of this title” 42 U.S.C. § 7479(3); *see also* 42 U.S.C. § 7475(a)(3)(C). Moreover, EPD’s approach deprives the public of an opportunity to comment upon critical elements of the agency’s decision-making process - the potential interactions between the two programs, and the trade-offs EPD has made between them.

EPD cannot conduct a reasonably complete BACT analysis without first (or simultaneously) performing a MACT analysis, and providing an opportunity for public comment on the evaluation. The Clean Air Act requires EPD to include compliance with “any other applicable emission standard or standard of performance” - including the standards of Section 112 - in its PSD analysis. 42 U.S.C. § 7475(a)(3)(C). EPD must accordingly, revisit the Plant’s PSD permit to assess the impacts of the Plant’s MACT limits on its PSD determinations, and allow the public an opportunity to comment on the agency’s decision and its underlying technical and policy rationale.

**Response:** Under the provision of 40 CFR Subpart B, EPD completed a case-by-case MACT review. In this subpart, no BACT analysis is required regardless of the pollutants evaluated. The purpose of the case-by-case MACT analysis is to review hazardous air pollutants (HAPs) being emitted from the facility, and limit their emissions based on the guidance and protocols provided in the subpart. Therefore, BACT limits are not apart of this review and will not be revisited. Longleaf has submitted an amended application which includes synthetic minor limits for all hazardous air pollutants (HAPs) being emitted from the facility. The facility has agreed to strict limitations of 10 tons per year on any single HAP and 25 tons per year on all combined HAPs in addition to limits that are already in the current air quality permit. Please refer to the narrative document in Appendix A.

#### **IV Conclusion**

For the reasons set forth above, we ask EPD to deny the requested MACT permit and request for an extension of the PSD permit. If you have any questions about these comments, would like any of the source material referenced in these comments, or require any additional information, please do not hesitate to contact us at (404) 659-3122.

Thank you for your consideration of this important matter.

**Response:** Comment so noted.

## **Comments from Franklin County, Planning & Building Department**

### **Comment 1:**

On behalf of the Franklin County Board of County Commissioners, please accept these comments in opposition to the Georgia Environmental Protection Division's ("EPD") proposed Permit Amendment No. 4911-099-0033-P-01-1 ("Amendment" or "Permit Amendment") to the Prevention of Significant Deterioration ("PSD") permit issued for the Longleaf Energy Station, Early County, Georgia.

The Verified List of Impaired Waters produced by the Florida Department of Environmental Protection on May 12, 2009, shows fish consumption advisories for Mercury in St. George Sound, Apalachicola Bay, Indian Lagoon, Gulf of Mexico, East Bay, Apalachicola River, Sweetwater Greet, Upper Sweetwater Creek, Bird Bay, Equiloxic Creek, Lake Seminole, Chipola River, Dead Lake, Crooked River, Alligator Harbor, East Bayou, West Bayou, Blounts Bay, and New River. These impaired waters are located throughout the Florida watershed of the 107-mile Apalachicola River and the 35 miles of coastal and estuarine waters associated with Apalachicola Bay. The pervasiveness of these fish consumption advisories is solid evidence that no new sources of air-borne mercury pollution should be permitted in the Apalachicola watershed, which includes the Chattahoochee and Flint Rivers. It is highly likely that mercury pollution from the proposed Longleaf Energy Station will directly reach the Apalachicola River and Bay by the air and water.

The permit should be issued because it does not require Longleaf to use Maximum Achievable Control Technology (MACT) or to set appropriate MACT-based limits on hazardous air pollutants. The residents of Franklin County depend in large part on the health and integrity of the Apalachicola ecosystem. People make a living through fishing guide services, sales of fishing gear, boat sales, eco-tourism, crabbing, oystering, shrimping, and commercial finfishing. The Apalachicola ecosystem is famous for the quality of its seafood and its pristine nature. However, people pay attention to fish consumption advisories and steer away from locales with pollution problems. Because it will burn coal and because it will not have MACT, the Longleaf Energy Station will add more mercury to finish in the Apalachicola watershed.

Congress enacted the present version of Section 112 of the Clean Air Act to address two central concerns. First, the air pollutants addressed by Section 112 are very toxic, posing "a significant threat to public health." When Congress amended the Act to create the currently applicable requirements, studies estimated that the "cancer incidence attributable to toxic air pollution may be as high as 500,000 fatal cases for those Americans now alive." Lakes and rivers in more than 45 states and several tribes all across the United States are not posted with Fish advisories and warnings for pregnant women and children because of high mercury levels in fish attributable to mercury emissions from coal-fired power plants.

Second, Congress amended section 112 in response to agencies' persistent failure and delay in regulating these air toxics. Congress described efforts to reduce hazardous air pollution as "a record of false starts and failed opportunities," and speculated that agency foot-dragging might be motivated by the fact that reductions might be "potentially very costly for some source categories or pollutants." Those twin legislative concerns – enormously harmful pollutants, and regulatory agencies that had persistently failed to address them – resulted in a legal framework that demands strict limitations, and provides agencies with little discretion to relax or avoid those limits.

The proposed permit revisions fail to include adequate testing or monitoring requirements to ensure enforceability and compliance with the proposed MACT limits.

In this era of transition from dirty energy sources, such as coal, to sustainable, cleaner energy sources such as biomass, solar, and wind, it is imperative that regulatory agencies such as the Georgia Environmental Protection Division, not allow the proliferation of plants such as Longleaf Energy Station.

For the reasons set forth above, we as EPD to deny the requested MACT permit.

**Response:** Longleaf has agreed to synthetic minor limits for all HAPs, thus 112(g) Case By Case MACT provisions do not apply. The permit amendment requires a battery of stack testing and parameter monitoring, as well as mercury CEMS to ensure compliance with the synthetic minor HAP limits.

In addition to permitting the facility as a minor source of HAPs, in the final permit EPD is significantly lowering the allowable mercury emission rate. EPD is lowering the allowable mercury emission rate when burning PRB coal from  $13 \times 10^{-6}$  lb/MW-hr to  $7.64 \times 10^{-6}$  lb/MW-hr, which is a reduction of 41% from the draft permit. This is consistent with the permit limit in the recently issued Plant Washington permit and is believed to be the lowest ever permitted rate for burning PRB coal. This emission rate is based on a 90% reduction in mercury from the average mercury concentration of PRB coal.

## Comments from Citizens

### Comment 1:

EPD received hundreds of emails and letters containing the following comment:

Georgia does not need polluting, outdated coal technology when there are cost effective energy alternatives available right now. Solar energy is being installed across the state, including on farms in South Georgia. But Longleaf is still relying on outdated technology, technology that becomes more outdated each and every day.

In reviewing the Longleaf permit, EPD sees Longleaf as its client, but it isn't. I am your client, and so is every citizen of Georgia who drinks the water and breathes the air. Please protect our families' health and clean up the water we drink, the swamps, creeks, and rivers we fish, and the air we breathe.

Response: EPD works with the facility to ensure the most up to date information and technologies are being utilized to reduce the emissions and minimally impact the surrounding areas. A company submits an air permit application proposing the type of facility that is to be built and designates where the facility will be located. EPD's job is to enforce the rules and regulations that are applicable to the proposed facility.

EPD strives to maintain a high level of customer service with all of our customers which includes industry, other state and federal agencies, and citizens of the United States. The Georgia Rules for Air Quality Control and the Federal Rules for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) are designed to protect the environment and human health. EPD and the facility are required to complete modeling to anticipate and/or predict the ambient air quality impacts associated with the construction and operation of the proposed modification. The main purpose of the air quality analysis is to demonstrate that emissions emitted from the proposed new major stationary source, in conjunction with other applicable emissions from existing sources (including secondary emissions from growth associated with the new project), will not cause or contribute to a violation of any applicable National Ambient Air Quality Standard (NAAQS) or PSD increment in a Class II or Class I area. NAAQS exist for NO<sub>2</sub>, CO, PM<sub>10</sub>, SO<sub>2</sub>, Ozone (O<sub>3</sub>), and lead (Pb). PSD increments exist for SO<sub>2</sub>, NO<sub>2</sub>, and PM<sub>10</sub>.

There are no applicable NAAQS or specific Georgia ambient air standards for the non-criteria pollutants being emitted, such as HAPs. Impacts from each of the pollutants listed in this letter were analyzed using the EPD Guidance for Ambient Impact Assessment of Toxic Air Pollutant Emissions (referred to as the Georgia Air Toxics Guideline; Version June 21, 1998). The Georgia Air Toxics Guideline is a guide for estimating the environmental impact of sources of toxic air pollutants. A toxic air pollutant is defined as any substance, which may have an adverse effect on public health, excluding any specific substance that is covered by a State or Federal ambient air quality standard.

The Georgia Air Quality Act and the Georgia Rules in 391-3-1-.03(1)(c) state that the permit for the construction or modification of any facility shall be issued upon a determination by the Director that the facility can reasonably be expected to comply with all the provisions of the Act and the rules and regulations promulgated thereunder. Therefore, Georgia EPD must issue an air quality permit for the Longleaf facility if determined that they will meet all applicable requirements in the rules and regulations.

**Comment 2:**

EPD received over 40 letters and emails containing the following comments:

Please accept these comments regarding the Longleaf Energy Associates, LLC's application for a notice of MACT approval for the Longleaf Energy Station near Hilton in Early County, Georgia.

As a resident of the area to be affected by this proposed project, I oppose the authorization of this permit for the following reasons:

1. The plan's permit will allow for up 158 pounds of mercury to be emitted each year. Most of that will fall into the Chattahoochee and Flint Rivers, Lake Seminole and other smaller creeks and ponds that will be absorbed by the fish. I eat the fish from these waterways and am aware of the negative health effects caused by mercury. The State already advises pregnant woman to eat no more than 1 local fish meal per week. We should not be further burdened by more mercury emissions.

**Response:** Please refer to comments submitted by Franklin County for further discussion on this matter.

2. The plant's permit will allow tons of soot particles to be emitted into the region's air. These soot particles are a source for breathing and heart problems and will increase the need for affordable, accessible healthcare system – currently lacking in the area.

**Response:** The facility is equipped with a fabric filter baghouse which has a control efficiency of 99.5% for the removal of particulate matter. This control equipment will minimize the small particles that are present in the flue gas.

3. The high level of permitted soot particle pollution could cause the area to be classified in “non-attainment”; a federal designation that would make current necessary timber farming practices, know as “prescribed burns”, illegal. As well, this status would mean the area would not receive continued federal assistance money in some areas.

**Response:** Early County and the surrounding areas are not classified as “non-attainment” and indications at this time are that no attainment issues will present themselves in the near future. Georgia EPD continues to monitor the ambient air quality throughout the state and works with counties to help ensure that we do not continue to have major non-attainment issues throughout the state.

4. The plant's permit will allow tons of sulfur dioxide, nitrogen oxides and carbon dioxide to be emitted into the local air. These emissions will decrease local farmer's profits from the region's agricultural production.

**Response:** The facility is equipped with selective catalytic reduction (SCR) for the control of NOx and a dry scrubber/baghouse combination for the control of SO<sub>2</sub>. The limits for these pollutants are some of the lowest in the nation. At this time, there are no regulations governing CO<sub>2</sub> emissions from any stationary source. When and if legislation is finalized, Longleaf will have to comply with any and all applicable requirements.

5. Burning coal creates ash that contains arsenic, mercury, lead, chromium, and cadmium – elements that seep into soil. This ash will be stored on-site. The plant’s coal-ash storage pond will be located upstream of my property on the Chattahoochee River, threatening my family and my property if there is an overflow. In recent years, weather patterns have demonstrated unpredictable times of high rainfall that cause flood events in the region.

**Response:** The limestone/ash mixture that is the waste stream from the baghouse will not be stored in a pond. This waste stream is completely dry and will be disposed of in a landfill. The facility is planning on using an onsite landfill that will be equipped with state of the art prevention and monitoring devices to minimize or prevent any leaching of containments in to the surrounding water table.

6. The proposed permit does not address maximum achievable control technology. EPA is currently promulgating a revised MACT standard for coal-fired power plants, like Longleaf. Any permit decision related to the plant’s MACT approval should, at least be suspended until EPA’s new standard is finalized.

**Response:** 112(g) case-by-case MACT is no longer applicable. The facility agreed to accept even lower limits on all HAP emissions so that the facility is no longer classified as major source for HAPs. US EPA is expected to issue HAP emission standards, including mercury, for power plants in the future. At present, those standards are expected to be proposed in Spring of 2011 and finalized by the end of 2011. If the US EPA mercury standard is more stringent then this permit, then the regulation requires that the facility comply with the more stringent emission limit from US EPA.

7. Further studies of other non-mercury metallic hazardous air pollutants cumulative impact on human health and the environment from other regional and minor source permits should be conducted and studies in comparison with regional demographics, fish consumption inventory, health statistics, and agricultural output.

**Response:** Comment so noted.

8. The region’s tourism industry, including outdoor recreation – boating, swimming, fishing; arts and culture; and historic sit-seeing will negatively be impacted by the permitting of the Longleaf plant.

**Response:** Comment so noted.

I appreciate the opportunity to comment on this proposed project and encourage the EPD to decline the MACT permit for the Longleaf plant.

**Response:** Comment so noted.

**Comment 3:**

EPD received a number of emails against the coal plant and suggesting the use of a biomass plant, listed below is one example received by the Division.

I am opposed to the Longleaf Coal Burning plant on so many levels; this area could benefit so much more from a biomass plant. Please do not issue a permit for this dangerous and hazardous coal plant that will ruin our environment and will put our families in peril!

**Response:** EPD works with the facility to ensure the most up to date information and technologies are being utilized to reduce the emissions and minimally impact the surrounding areas. A company submits an air permit application proposing the type of facility that is to be built and designates where the facility will be located. EPD's job is to enforce the rules and regulations that are applicable to the proposed facility.

**Comment 4:**

EPD received a number of emails against the coal plant, listed below is one example received by the Division.

I am a Southwest Georgia resident and adamantly oppose the Longleaf Coal Plant. It is ironic that something so destructive to the environment would be named after a natural element (leaf), but as a marketing consultant I understand its use. Coal plants are the past – let's keep them there. It is time to move into the present with technology that does not further harm the earth.

**Response:** Comment so noted.

**Comment 5:**

EPD received numerous letters and emails from citizens of Georgia objecting to the proposed coal plant. All of these comments are available in the public file if any party is interested. Many of their concerns were centered on additional mercury in the air and water affecting our fish, using outdated technology to meet our electricity needs, suggesting the use of clean coal technology or clean energy sources and the general concern for Georgia's air, water and public health. One other concern is that Georgia EPD does not view it's own citizens as clients or customers and is short sighted to only look at LS Power.

**Response:** Georgia EPD views its citizens as very important partners as we pursue a sustainable environment that provides a foundation for a vibrant economy and healthy communities (reference to EPD mission statement). One of EPD's functions is as a regulatory agency. And as a regulatory agency, EPD issues permits to permit applicants if they meet all state and federal rules and regulations. By law if the permit applicant, such as LS Power, complies with all applicable rules and regulations, Georgia EPD must issue the permit. EPD appreciates the public involvement of its citizens and hopes to continue that relationship and improve it at every opportunity to further our mission.

Please refer to comments submitted by Franklin County for further discussion on the reductions in allowable mercury emissions from the draft permit.

## **Comments from Public Hearing**

### **Comment 1:**

Sierra Barnes - There is no reason to build this coal plant because all of our energy needs can be met with other energy technologies. Please see the report entitled "Energy Revolution" at the GreenPeace.org web site. Removing the coal from this plant will be the best Maximum Available Control Technology.

**Response:** EPD works with the facility to ensure the most up to date information and technologies are being utilized to reduce the emissions and minimally impact the surrounding areas. A company submits an air permit application proposing the type of facility that is to be built and designates where the facility will be located. EPD's job is to enforce the rules and regulations that are applicable to the proposed facility.

### **Comment 2:**

Lynn Henley – Her husband experienced skin irritation (burning) after running in the rain near their home next to Plant Scherer. Coal plants are not clean and it is the pollution that one cannot see that can hurt them. Southerners are not stupid, and they do not want this plant here in Georgia.

**Response:** EPD has complied with all requirements associated with this permitting action. The final permit for Longleaf Energy imposes very stringent emissions limits making this facility one of the least emitting coal-fired power plants ever permitted in the United States. It has been determined through approved modeling techniques that the estimated emissions will not cause or contribute to a violation of any ambient air standard or allowable PSD increment. It has further been determined that the proposal will not cause impairment of visibility or detrimental effects on soils or vegetation. Any air quality impacts produced by project-related growth should be inconsequential.

### **Comment 3:**

Debbie Buckner – She introduced legislation that would prohibit permitting of any new coal plants in Georgia. It has not passed the legislature. She asked utility companies if the state could help them with conservation efforts, and they said no. She is concerned with the mercury emissions and water usage of the proposed plant. The plant is unfair because West Virginia loses its mountaintops, and Georgia takes the hit in pollution for the benefit of electricity customers in Florida, and for the benefit of the New Jersey Company that is building it. The state needs jobs for Georgians, and the plant will provide very few good paying permanent jobs.

**Response:** The final permit for Longleaf Energy imposes very stringent emissions limits for mercury emissions making this facility one of the least emitting coal-fired power plants for mercury ever permitted in the United States. In addition, the EPD recently adopted rules requiring significant reductions in mercury emissions from all existing coal-fired power plants in the entire state. Overall, state-wide, mercury emissions will be decreasing significantly.

### **Comment 4:**

Ela Orenstein – She gave background information on the dangers of mercury emissions, and how it spreads through the environment. Mercury will be deposited close to the plant. EPD has not limited the type of coal that can be burned in the plant, and did not consider state-of-the-art control technologies that can also remove other pollutants. The PSD increments consumed by this plant could limit other cleaner industry from locating nearby.

**Response:** Longleaf has submitted an amended application which includes synthetic minor limits for all hazardous air pollutants (HAPs) being emitted from the facility. The facility has agreed to strict limitations of 10 tons per year on any single HAP and 25 tons per year on all combined HAPs in addition to limits that are already in the current air quality permit. In Appendix A of this document is the new analysis and write up for the new limits. Please refer to Appendix A for further discussion.

### **Comment 5:**

Neill Herring – He objects to the permit with the current mercury standard because he feels that a more stringent standard of zero can be achieved. Georgia exports power to other states and Florida, and does not need this plant.

**Response:** Please refer to comment 3 for further discussion on this matter.

**Comment 6:**

Gordon Rogers – Mr. Rogers is a Satilla River keeper. Emissions from the proposed plant will reach the headwaters of the Satilla River, as well as Florida and Alabama. One milligram of mercury per kilogram of fish is enough contamination to set the limit of how much fish one can eat to only 6 ounces per month. Flat head catfish over 30 inches long in the Satilla river are so contaminated that they are inedible. 71.81 kilograms of mercury is enough to contaminate 143,620,000 one-pound fish each year. The Georgia Constitutional right to hunt and fish in this state is being violated because one cannot safely eat the fish one catch in many rivers in the state.

**Response:** Please refer to comments submitted by Franklin County for further discussion on this matter.

**Comment 7:**

Paul DeLoach – The hearing process has illustrated what EPD does to evaluate permits. Georgia citizens need to work with their legislators to provide systems, processes, and legislation to hold EPD to a higher standard when processing the permits. Citizens and Legislators need to make EPD accountable for the fair and equitable use of our natural resources, their water, and natural animal habitats.

**Response:** Comment so noted.

**Comment 8:**

Olin Thompson – Member of the Early County Development Authority. The authority stands behind the project, at Longleaf by LS power. He is confident that EPD will do their jobs to make sure that the plant complies with state and federal laws that are on the books already, and urges EPD to issue the permit.

**Response:** Comment so noted.

**Comment 9:**

Paul Black – Building this plant in Early County will be the equivalent of adding 1.5 million cars to the area in terms of emissions. Air quality problems in the Atlanta area are caused by auto emissions, and result in significantly higher incidences of asthma for young athletes. The plant may create 100 jobs, but is that small economic benefit worth risking children’s health for years to come. EPD’s cost estimates do not account for medical costs when people suffer from asthma and other respiratory problems. Why doesn’t EPD model PM2.5?

**Response:** Under this permit amendment, EPD is addressing hazardous air pollutants (HAPs) and not making any changes to the modeling protocol completed for the original permit. At the time of the original permit application, the facility was not required to model for PM<sub>2.5</sub> and under guidance from the Environmental Protection Agency (EPA), EPD used PM<sub>10</sub> as a surrogate. The Georgia Court of Appeals in their recent decision has upheld this decision by EPD.

**Comment 10:**

Sammy Prim – Mr. Prim was a local Pediatrician, but is now retired. More global warming will occur due to the additional CO<sub>2</sub> emissions from the plant. Air pollution from the steel mills in Birmingham caused severe asthma and respiratory problems in children there. Mercury exposure is widespread and causes neurological damage. PM<sub>2.5</sub> bypasses the body's natural defenses and gets inside the lungs and arteries, causing inflammation, lung scarring, heart attacks, and fatal tumors. High pollution areas cause statistically significant reduction in IQ among children.

**Response:** Please refer to comment 9 for further discussion on this matter.

**Comment 11:**

Mark Redden - The Longleaf energy plant threatens the existence of the shoal bass in the Georgia rivers.

**Response:** Comment so noted.

**Comment 12:**

Katy Hinman – Georgia Interfaith Power & Light. She feels that continuing our reliance on non-renewable energy resources and subjecting the environment to 20 to 30 years of emissions from this plant is not good stewardship of the god given resources. One can meet the energy needs with alternative energy sources and more conservation.

**Response:** Comment so noted.

**Comment 13:**

Allen York – LS Power should use local Georgia labor to build the plant. At another LS power project in Arkansas, LS Power is using non-local labor including many illegal aliens.

**Response:** Comment so noted.

**Comment 14:**

DuBose Porter - He is opposed to a coal power plant, but not to a power plant in general. Other technologies should be examined to generate power without the environmental impacts of mercury. Biomass power technology could produce the power one need with less environmental impacts and would also supply more local jobs, and rely more on local resources of biomass fuel.

**Response:** Please refer to comment 1 for further discussion on this matter.

**Comment 15:**

Richard Ward – Early County Board of Commerce. He urges EPD to grant the permit extension. The county needs the economic benefits of the plant to be able to run the local county.

**Response:** Comment so noted.

**Comment 16:**

Rosie Morrow – Sierra Club. Environmental impacts are of great concern. Particulate and mercury emission impacts outweigh the economic benefits of the plant. ADEM says that Houston County Alabama will be PM NAA probably next year.

**Response:** Based on EPD research, currently neither EPA nor ADEM have presented new information designating the Houston County area as non-attainment for fine particulate matter. If this were to occur, EPD would investigate the impact on the surrounding counties in Georgia and determine what course of action will be needed.

**Comment 17:**

Ben Sharenko – This country is in a period of transition from older dirtier energy technologies to newer, cleaner methods. Georgia has a chance to be a leader toward new, cleaner, and more efficient energy practices. There are better ways to meet our energy needs.

**Response:** Comment so noted.

**Comment 18:**

Tom Barksdale – Four of the ten EMCs that pulled out of the Plant Washington coal power project stated that the Longleaf Energy Plant and Plant Washington are not economically viable. One can meet the electricity needs with other energy technologies, conservation, and better efficiency.

**Response:** Comment so noted.

**Comment 19:**

Oscar Jackson – Senile Dentist. Georgia Power and the Southern Company are the ones that really run the state of Georgia.

**Response:** Comment so noted.

## Additions and Changes to the Draft Permit

- 1.7 ~~The Permittee shall comply with all applicable provisions of 40 CFR 63, Subpart DDDDD “NESHAP for Industrial/Commercial/Institutional Boilers and Process Heaters” for the auxiliary boiler, S03. In the event of any discrepancy between the terms of this Permit and 40 CFR Part 63, Subpart DDDDD, the terms of 40 CFR Part 63, Subpart DDDDD shall control Deleted.~~  
[40 CFR 63.2231]
- 1.13 ~~The Permittee shall comply with all applicable provisions of the National Emission Standard for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart B “Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)”.~~  
[40 CFR 63, Subpart B] Deleted.
- 2.1 Approval to construct shall become invalid if construction is not commenced by ~~January 21, 2011~~ **October 1, 2011**, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division may extend the deadline upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date. For purposes of this Permit, the definition of “commence” is given in 40 CFR 52.21(b)(9).  
[40 CFR 52.21(r)(2)]
- 2.2 ~~The Permittee shall meet the following:~~
- a.—The construction of **the PC-Fired Boilers S01 and S02, Auxiliary Boiler S03**, Emergency Generator S42, Diesel Fire-water pump S43, Coal handling particulate sources (Emission Unit IDs S06 – S18), Ash management particulate sources (Emission Unit IDs S19 – S31), Lime management particulate sources (Emission Unit IDs S35 – S37), Cooling Towers (Emission Unit IDs S40 and S41), and Fuel Storage Tanks (Emission Unit IDs S44 – S48) shall be completed no later than December 31, 2015. Approval to construct shall become invalid if construction is not commenced by ~~January 21, 2011~~ **October 1, 2011**, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division may extend the deadline upon a satisfactory showing that an extension is justified **which shall not exceed an additional 12 months**. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.  
[40 CFR 52.21(r)(2)]
  - b.—~~The Notice of MACT Approval for the PC Fired Boilers S01 and S02 and Auxiliary Boiler S03 shall expire if construction or reconstruction has not commenced within 18 months of issuance, unless the Division has granted an extension which shall not exceed an additional 12 months.~~  
[40 CFR 63.43(g)(4)]

- 2.15 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from each PC-Fired Boiler, S01 and S02, any gases which
- a. Contain nitrogen oxides (NO<sub>x</sub>) in excess of 0.07 lb/MMBtu on a 30-day rolling average.  
[40 CFR 52.21(j); 40 CFR 60.44Da(e)(1) (subsumed)]
  - b. Contain nitrogen oxides (NO<sub>x</sub>) in excess of 0.05 lb/MMBtu on a 12-month rolling average. This condition becomes effective 6 months after initial start-up of each PC-Fired boiler, S01 and S02, absent approval by the Division for an extension of this date.  
[40 CFR 52.21(j); 40 CFR 60.44Da(e)(1) (subsumed)]
  - c. Contain carbon monoxide (CO) in excess of 0.10 lb/MMBtu on a 30-day rolling average and 0.30 lb/MMBtu on a 1-hour average.  
[~~40 CFR 63, Subpart B~~; 40 CFR 52.21(j) (subsumed)]
  - d. Contain particulate matter (PM) in excess of 0.010 lb/MMBtu for filterable particulate matter (PM) on a 3-hour average and 0.030 lb/MMBtu for total particulate matter on a 3-hour average.  
[~~40 CFR 63, Subpart B~~; 40 CFR 52.21(j) (subsumed); 391-3-1-.02(2)(d) (subsumed); 40 CFR 60.42Da(c) (subsumed)]
  - e. Contain sulfur dioxide in excess of 0.065 lb/MMBtu on a 30-day rolling average when the uncontrolled sulfur dioxide emission rate is less than or equal to 1 lb/MMBtu on a 30-day rolling average.  
[40 CFR 52.21(j); 40 CFR 60.43Da(i)(1)(i) (subsumed); 391-3-1-.02(2)(d) (subsumed)]
  - f. Contain sulfur dioxide in excess of 0.08 lb/MMBtu on a 30-day rolling average when the uncontrolled sulfur dioxide emission rate is greater than 1 lb/MMBtu but less than 1.25 lb/MMBtu on a 30-day rolling average.  
[40 CFR 52.21(j); 40 CFR 60.43Da(i)(1)(i) (subsumed); 391-3-1-.02(2)(d) (subsumed)]
  - g. Contain sulfur dioxide in excess of 0.105 lb/MMBtu on a 30-day rolling average when the uncontrolled sulfur dioxide emission rate is greater than 1.25 lb/MMBtu but less than 1.6 lb/MMBtu on a 30-day rolling average.  
[40 CFR 52.21(j); 40 CFR 60.43Da(i)(1)(i) (subsumed); 391-3-1-.02(2)(d) (subsumed)]
  - h. Contain sulfur dioxide in excess of 0.12 lb/MMBtu on a 24-hour average.  
[40 CFR 52.21(j); 40 CFR 60.43Da(i)(1)(i) (subsumed); 391-3-1-.02(2)(d) (subsumed)]
  - i. Contain volatile organic compounds (VOC) in excess of  $3.6 \times 10^{-3}$  lb/MMBtu, as methane, ~~on a 3-hour average.~~  
[40 CFR 52.21(j)]
  - j. Contain lead (Pb) in excess of  $1.8 \times 10^{-5}$  lb/MMBtu ~~on a 3-hour average.~~  
[40 CFR 52.21(j)]

- k. Contain fluorides (as HF) in excess of  $2.0 \times 10^{-4}$  lb/MMBtu ~~on a 3-hour average~~.  
[40 CFR 63, Subpart B; 40 CFR 52.21(j); Georgia Air Toxic Guideline - 391-3-1-.02(2)(a)3]
  - l. Contain sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>) in excess of 0.005 lb/MMBtu ~~on a 3-hour average~~.  
[40 CFR 52.21(j)]
  - m. Contain mercury (Hg) in excess of  $13 \times 10^{-6}$  lb/MW-hr on an 12-month rolling average while firing PRB coal or  $6 \times 10^{-6}$  lb/MW-hr on an 12-month rolling average while firing CAPP coal, or a computed weighted average based on the proportion of energy output in gross MW output contributed by each coal rank burned during the compliance period and its applicable Hg emissions limit.  
[40 CFR 63, Subpart B; 40 CFR 52.21(j) (subsumed); 40 CFR 60.45Da(a) (subsumed)]
  - n. Contain mercury from clarifier sludge incineration in both PC-Fired Boilers, S01 and S02, in excess of 3.2 kg (7.1 lb) of mercury per 24-hour period.  
[40 CFR 61.52(b)]
  - o. Contain hydrochloric acid (HCl) in excess of  $6 \times 10^{-4}$  lb/MMBtu ~~on a 3-hour average~~ while firing PRB coal or  $2.4 \times 10^{-3}$  lb/MMBtu ~~on a 3-hour average~~ while firing CAPP coal or a computed weighted average based on the proportion of energy output in MMBtu input contributed by each coal rank burned during the compliance period and its applicable HCl emissions limit.  
[40 CFR 63, Subpart B; Georgia Air Toxic Guideline - 391-3-1-.02(2)(a)3 (subsumed)]
  - p. Exhibit greater than 20 percent opacity.  
[40 CFR 52.21(j); and 391-3-1-.02(2)(d) (subsumed); 40 CFR 60.42Da(b) (subsumed)]
- 2.16 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the Auxiliary Boiler, S03 any gases which
- a. Contain nitrogen oxides (NO<sub>x</sub>) in excess of 0.1 lb/MMBtu.  
[40 CFR 52.21(j)]
  - b. Contain carbon monoxide (CO) in excess of 0.04 lb/MMBtu.  
[40 CFR 52.21(j); 40 CFR 63.7500 (subsumed)]
  - c. Contain particulate matter (PM) in excess of 0.01 lb/MMBtu for filterable particulate matter and 0.023 lb/MMBtu for total particulate matter.  
[40 CFR 63, Subpart B; 40 CFR 52.21(j) (subsumed); 391-3-1-.02(2)(d) (subsumed); 40 CFR 60.43b(h) (subsumed); 40 CFR 63.7500 (subsumed)]

- d. Contain volatile organic compounds (VOC) in excess of 0.003 lb/MMBtu, as methane.  
[~~40 CFR 63, Subpart B~~; 40 CFR 52.21(j) (subsumed)]
- e. Contain sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>) in excess of 6 x 10<sup>-5</sup> lb/MMBtu.  
[40 CFR 52.21(j)]
- f. Exhibit greater than 10 percent opacity.  
[40 CFR 52.21(j); 40 CFR 63.7500 and 391-3-1-.02(2)(d) (subsumed); 40 CFR 60.43b(f) (subsumed)]
- g. Contain hydrochloric acid (HCl) in excess of 0.0009 lb/MMBtu.  
[~~40 CFR 63, Subpart B~~; ~~40 CFR 63.7500 (subsumed)~~ **Georgia Air Toxic Guideline - 391-3-1-.02(2)(a)3**]

**2.25 The Permittee shall not discharge or cause the discharge into the atmosphere from the facility any single hazardous air pollutant (HAP) which is listed in Section 112 of the Clean Air Act, in an amount equal to or exceeding 10 tons during any twelve consecutive months, or any combination of such listed pollutants in an amount equal to or exceeding 25 tons during any twelve consecutive months. [40 CFR 63 Avoidance and 391-3-1-.03(2)(c)]**

4.1 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants**. The methods for the determination of compliance with emission limits listed under Section 2.0 which pertain to the emission units listed in Note B are as follows:

- a. Method 1 shall be used for the determination of sample point locations,
- b. Method 2 shall be used for the determination of stack gas flow rate,
- c. Method 3 or 3A shall be used for the determination of stack gas molecular weight,
- d. Method 3B shall be used for the determination of the emissions rate correction factor or excess air, Method 3A may be used as an alternative;
- e. Method 4 shall be used for the determination of stack gas moisture,
- f. Method 5 or Method 17, as applicable, for the determination of filterable Particulate Matter concentration, the sampling time for each run shall be two hours,
- g. Method 7 or 7E for the determination of Nitrogen Oxide concentration from the auxiliary boiler, SO<sub>3</sub>, the sampling time for each run shall be **a minimum of** one hour,
- h. Method 8 shall be used for the determination of sulfur acid mist emissions, the sampling time for each run shall be **a minimum of** one hour,
- i. Method 9 and the procedures contained in Section 1.3 of the above reference document shall be used for the determination of opacity,
- j. Method 10 shall be used for the determination of carbon monoxide concentration, the sampling time for each run shall be **a minimum of** one hour,

- k. Method 19 shall be used for the determination of particulate matter (PM), carbon monoxide, and nitrogen oxides, and sulfur dioxide emission rates,
- l. Method 25A shall be used to determine total Hydrocarbons and to calculate Volatile Organic Compound emissions, the sampling time for each run shall be **a minimum of** one hour,
- m. Method 26A shall be used for the determination of **fluorine and chlorine at the inlet of the control device, hydrogen fluoride, Fluorine** and hydrochloric acid emission rates from the PC-Fired Boilers, S01 and S02; the sampling time for each run shall be **a minimum of** one hour. **The percent removal of hydrogen chloride and hydrogen fluoride shall also be calculated at the time of the test. The Division may require the Permittee to determine the percent removal of hydrogen chloride and hydrogen fluoride when firing PRB or CAPP coal based on the results of the test.**
- n. Method 29 shall be used for the determination of **emission rates of lead and other non-mercury metals that are included in Section 112 of the Clean Air Act**~~lead emission rates~~, while firing PRB or CAPP coal, from the PC-Fired Boilers, S01 and S02; the sampling time for each run shall be **a minimum of** one hour. **The percent removal of selenium shall also be calculated based on the results of the test.**
- o. Method 101A for a stack test or 105 for sludge sampling shall be used for the determination of mercury emissions while firing clarifier sludge unless an alternative method is approved by EPA, from the PC-Fired Boilers, S01 and S02,
- p. Method 202 shall be used for the determination of the condensible portion of total particulate matter.
- q. Compliance with the Hg limit in Condition 2.15.m. shall be determined according to the procedures in 40 CFR 60.50Da(h)(1) through (h)(3) using the CEMS required by Condition 5.2.  
[40 CFR 52.21; 391-3-1-.02(6)(b)1; 40 CFR 60.13]
- r. Compliance with the NO<sub>x</sub> limits in Condition 2.15.a. and 2.15.b. and the SO<sub>2</sub> limits in Condition 2.15.e., 2.15.f., 2.15.g., and 2.15.h. shall be determined using the CEMS required by Condition 5.2.  
[40 CFR 52.21; 391-3-1-.02(6)(b)1; 40 CFR 60.13]
- s. Compliance with the CO limit in Condition 2.15.c. shall be determined using the CEMS required by Condition 5.2.  
[40 CFR 52.21; 391-3-1-.02(6)(b)1; 40 CFR 60.13]
- t. Compliance with the filterable PM limit in Condition 2.15.d. shall be determined using the CEMS required by Condition 5.2.  
[40 CFR 52.21; 391-3-1-.02(6)(b)1; 40 CFR 60.13]
- u. Compliance with the opacity limit in Condition 2.15.p. shall be determined using the COMS required by Condition 5.2.

- v. **Method 0031 shall be used for the determination of emission rates of volatile organic HAPs from the PC-fired Boilers, S01 and S02; Method 0010 shall be used for the determination of emission rates of semi-volatile organic HAPs from the PC-fired Boilers, S01 and S02; Method EPA CTM 033 shall be used for the determination of hydrogen cyanide emission rates from the PC-fired Boilers, S01 and S02; Method 29 shall be used for the determination of phosphorus emission rates from the PC-fired Boilers, S01 and S02; the sampling time for each run shall be a minimum of one hour.**

Minor changes in methodology may be specified or approved by the Director or his/her designee when necessitated by process variables, changes in facility design, or improvement or corrections, which, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

4.2 Within 60 days after achieving the maximum production rate on each coal type (PRB and CAPP) at which each PC-fired boiler, S01 and S02, will be operated, but not later than 180 days after the initial startup of each boiler for each coal type, the Permittee shall conduct the following performance tests and furnish to the Division a written report of the results of such performance tests:

- a. Performance tests on each PC-fired boiler, S01 and S02, for volatile organic compounds at base load and at 50 percent load to verify compliance with Condition No. 2.15.i.  
[40 CFR 52.21 and 391-3-1-.02(6)(b)1.(i)]
- b. Performance tests on each PC-fired boiler, S01 and S02, for particulate emissions (PM) to verify compliance with Condition No. 2.15.d.  
[40 CFR 52.21, 40 CFR 60.13, 40 CFR 60.42a(c) (subsumed), 391-3-1-.02(6)(b)1.(i)]
- c. Performance tests on each PC-fired boiler, S01 and S02, for lead **and other non-mercury metals that are listed in Section 112 of the Clean Air Act** to verify compliance with Condition No. 2.15.j **and Condition No. 2.25. The tests shall be conducted once every 3 years or as requested by the Division.** [40 CFR 52.21 and 391-3-1-.02(6)(b)1.(i)]
- d. Performance tests on each PC-fired boiler, S01 and S02, for fluoride emissions (as HF) to verify compliance with Condition No. 2.15.k. **The tests shall be conducted once every year or as requested by the Division.**  
[~~40 CFR 63, Subpart B, 40 CFR 52.21 and~~ 391-3-1-.02(6)(b)1.(i)]
- e. Deleted.
- f. Performance tests on each PC-fired boiler, S01 and S02, for sulfuric acid mist to verify compliance with Condition No. 2.15.l.  
[40 CFR 52.21 and 391-3-1-.02(6)(b)1.(i)]
- g. Performance tests on each PC-fired boiler, S01 and S02, for hydrochloric acid while firing PRB coal to verify compliance with Condition No. 2.15.o. **The tests shall be conducted once every year or as requested by the Division.**  
[~~40 CFR 63, Subpart B, 40 CFR 52.21 and~~ 391-3-1-.02(6)(b)1.(i)]
- h. Performance tests on each PC-fired boiler, S01 and S02, for hydrochloric acid while firing CAPP coal to verify compliance with Condition No. 2.15.o. **The tests shall be conducted once every year or as requested by the Division.**  
[~~40 CFR 63, Subpart B, 40 CFR 52.21 and~~ 391-3-1-.02(6)(b)1.(i)]

- i. Performance test or sludge sampling on each PC-Fired Boilers, S01 and S02, shall be completed within 90 days of start up for mercury while firing clarifier sludge to very compliance with Condition No. 2.15.n, unless an alternative is approved by EPA. If the facilities emissions exceed 1.6 kg (3.5 lb) per 24-hour period, demonstrated either by stack sampling according to §61.53 or sludge sampling according to §61.54 or another alternative approved by EPA, shall monitor mercury emissions at intervals of at least once per year by use of Method 105, or an alternative approved by EPA.
- j. Performance tests on each PC-fired boiler, S01 and S02, for volatile organic HAPs, semi-volatile organic HAPs, hydrogen cyanide, and phosphorus to verify compliance with Condition No. 2.25. The tests shall be conducted once every 5 years or as requested by the Division.**

5.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.

- a. A Continuous Emissions Monitoring System (CEMS) for measuring NO<sub>x</sub> emissions discharged to the atmosphere from each PC-fired boiler stack, S01 and S02. The one-hour average nitrogen oxides emissions rates shall also be recorded in pound per million Btu heat input [40 CFR 52.21; 391-3-1-.02(6)(b)1; 40 CFR 60.13]
- b. A Continuous Emissions Monitoring System (CEMS) for measuring carbon monoxide emissions discharged to the atmosphere from each PC-fired boiler stack, S01 and S02. The one-hour average carbon monoxide emissions rates shall also be recorded in pound per million Btu heat input. [40 CFR 52.21 and 391-3-1-.02(6)(b)1]
- c. A Continuous Emissions Monitoring System (CEMS) for measuring SO<sub>2</sub> emissions at both the inlet and outlet of the SO<sub>2</sub> control device. The one-hour average sulfur dioxides emissions rates shall be recorded in pound per million Btu heat input [40 CFR 52.21; 391-3-1-.02(6)(b)1; 40 CFR 60.13]
- d. A Continuous Emissions Monitoring Systems (CEMS) to measure and record the concentration of Hg in the exhaust gases from each PC-fired boiler stack according to the requirements in 40 CFR 60.49a(p)(1) through (p)(3). Alternatively, for an affected facility that is also subject to the requirements of 40 CFR 75 Subpart I, the Permittee may install, certify, maintain, operate and quality-assure the data from a Hg CEMS according to 40 CFR 75.10 and appendices A and B to 40 CFR 75, in lieu of following the procedures in 40 CFR 60.49a(p)(1) through (p)(3). [40 CFR 52.21; 391-3-1-.02(6)(b)1; 40 CFR 60.13]
- e. A Continuous Opacity Monitoring System (COMS) on each PC-fired Boiler stack, S01 and S02.
- f. A Continuous Emissions Monitoring System (CEMS) for measuring filterable particulate matter emissions discharged to the atmosphere from each PC-fired boiler stack, S01 and S02. The system shall meet the requirements in 40 CFR 60.48a(p)(2) through (p)(8).
- g. A continuous monitoring system for measuring oxygen or carbon dioxide at each location where SO<sub>2</sub>, PM, CO or NO<sub>x</sub> emission monitors are required.

h. If at any time prior to the commencement of operations of the facility, the Division determines that a Continuous Emissions Monitoring System (CEMS) exists that can reliably and accurately measure hydrochloric acid and/or hydrogen fluoride emissions from the PC-fired boilers in the operating concentrations required by this permit, then the Permittee shall install such device(s) no later than 12 months following receipt of written notice from the Division or prior to the startup of each PC-fired boiler, whichever is later. Any written notice from the Division shall include the basis (e.g., example installations) supporting the Division's determination. The CEMS(s) shall measure and record the hydrochloric acid and/or hydrogen fluoride emissions discharged to the atmosphere from each PC-fired boiler stack, S01 and S02. The one-hour average hydrochloric acid emissions and/or hydrogen fluoride rates shall also be recorded in pound per million Btu heat input. [391-3-1-.02(6)(b)1]

8.3 The Permittee shall obtain a **representative** sample of **the coal as-fired on a daily basis** ~~from each coal shipment~~ for analysis for sulfur content (%S), moisture content, ash content, **chlorine content, fluorine content, antimony content, arsenic content, beryllium content, cadmium content, chromium content, cobalt content, lead content, manganese content, nickel content, selenium content,** and Gross Caloric Value (GCV). The sample shall be acquired and analyzed using the procedures of Section 12.5.2.1 in Method 19 of the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants** (emphasis in original). **These records shall be kept available for inspection by or submittal to the Division for five years from the date of record.** [391-3-1-.02(6)(b)1(i)]

8.25 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition No. 8.24, the following excess emissions, exceedances, and excursions shall be reported: [40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. Excess emissions: (means for the purpose of this Condition and Condition No. 8.24, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition No. 8.24.

b. Exceedances: (means for the purpose of this Condition and Condition No. 8.24, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. Any 30-day rolling average NO<sub>x</sub> emission rate which exceeds 0.07 lb/MMBtu for each PC-Fired Boiler, S01 and S02,

ii. Any 12-month rolling average NO<sub>x</sub> emission rate which exceeds 0.05 lb/MMBtu for each PC-Fired Boiler, S01 and S02, this condition becomes effective 6 months after initial start-up of each PC-Fired boiler, S01 and S02, absent approval by the Division for an extension of this date.

iii. Any 1-hour average CO emission rate which exceeds 0.30 lb/MMBtu for each PC-Fired Boiler, S01 and S02,

- iv. And 30-day rolling average CO emission rate which exceeds 0.10 lb/MMBtu for each PC-Fired Boiler, S01 and S02,
- v. Any 3-hour block average for filterable PM emission rate which exceeds 0.010 lb/MMBtu for each PC-Fired Boiler, S01 and S02,
- vi. Any 24-hour average sulfur dioxide emission rate which exceeds 0.12 lb/MMBtu for each PC-Fired Boiler, S01 and S02,
- vii. Any 30-day rolling average sulfur dioxide emission rate exceeds 0.065 lb/MMBtu when the uncontrolled sulfur dioxide emission rate is less than or equal to 1 lb/MMBtu on a 30-day rolling average for each PC-Fired Boiler, S01 and S02,
- viii. Any 30-day rolling average sulfur dioxide emission rate exceeds 0.08 lb/MMBtu when the uncontrolled sulfur dioxide emission rate is greater than 1 lb/MMBtu but less than 1.25 lb/MMBtu on a 30-day rolling average for each PC-Fired Boiler, S01 and S02,
- ix. Any 30-day rolling average sulfur dioxide emission rate exceeds 0.105 lb/MMBtu when the uncontrolled sulfur dioxide emission rate is greater than 1.25 lb/MMBtu but less than 1.6 lb/MMBtu on a 30-day rolling average for each PC-Fired Boiler, S01 and S02,
- x. Any **12-month rolling annual** average mercury emission rate that exceeds  $13 \times 10^{-6}$  lb/MW-hr while firing PRB coal for each PC-Fired Boiler, S01 and S02,
- xi. Any **12-month rolling annual** average mercury emission rate that exceeds  $6 \times 10^{-6}$  lb/MW-hr while firing CAPP coal for each PC-Fired Boiler, S01 and S02,
- xii. Any 24-hour average mercury emissions rate while firing clarifier sludge that exceeds 7.1 lb.
- xiii. Any six-minute period during which the average opacity, as measured by a continuous opacity monitoring system for either PC-Fired boiler, S01 and S02, exceeds 20 percent.
- xiv. Any time fuel fired in any PC-Fired Boiler, S01 and S02, has a sulfur content which exceeds 3.0 percent sulfur, by weight.
- xv. Any time ultra low sulfur fuel oil combusted for startup in PC-Fired boilers, S01 and S02, in auxiliary boiler, S03, in emergency generator S42 and firewater pump S43 exceeds 0.0015 percent sulfur by weight.
- xvi. Any twelve consecutive month period during which hours of operation of the auxiliary boiler exceeds 500 hours.
- xvii. Any twelve consecutive month period during which hours of operation of emergency generator S42 or firewater pump S43 exceed 500 and 150 hours respectively.
- xviii. Any hour that either PC-Fired boiler, S01 and S02, has a heat input rate that exceeds 6,139 MMBtu/hr.
- xix. Any calendar day that clarifier sludge combustion in either PC-Fired boiler, S01 and S02, exceeds 1.0 percent of the total heat input rate to the boiler, or 61.4 MMBtu/hr.

xx. Any twelve-consecutive month period where emissions of any individual HAP from the facility is equal to or greater than 10 tons.

xxi. Any twelve-consecutive month period where combined HAP emissions from the facility is equal to or greater than 25 tons.

c. Excursions: (means for the purpose of this Condition and Condition No. 8.24, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring).

i. Any exceedance of the filterable PM emission limit and/or SO<sub>2</sub> limits in Condition 2.15 are an excursion for HF and HCl.

**8.27 The Permittee shall use the following equations to calculate the monthly HCl, HF and Total HAP emissions from each PC-fired boiler, S01 and S02. All calculations shall be kept as part of the monthly record. These records shall be kept available for inspection by or submittal to the Division for five years from the date of record. [391-3-1-.02(6)(b)1]**

a. Calculation of monthly HCl emissions from the PC-fired boilers:

$$HCl = \frac{1 \text{ ton}}{2000 \text{ lb}} \sum_{i=1}^n (EF) \times HI_i$$

Where,

HCl = Monthly HCl emissions from each PC-fired boiler in tons per month.

HI<sub>i</sub> = Heat input in MMBtu/hr for the i<sup>th</sup> operating hour in the month as calculated from the Part 75-certified CEMS.

n = Number of operating hours in the month.

EF = (CC/GCV)(1-HCl<sub>R</sub>)(HCl/Cl)

where,

CC = Monthly average chlorine content as computed from data obtained pursuant to Condition No. 8.3.

GCV = Monthly average Gross Caloric Value as computed from data obtained pursuant to Condition No. 8.3.

HCl<sub>R</sub> = Percent removal of hydrogen chloride from stack testing results in Condition No. 4.1(m) and approved by the Division.

HCl/Cl = HCl-to-Cl conversion factor = 36.45/35.45.

- b. Calculation of monthly HF emissions from the PC-fired boilers:

$$HF = \frac{1 \text{ ton}}{2000 \text{ lb}} \sum_{i=1}^n (EF)_i \times HI_i$$

Where,

**HF** = Monthly HF emissions from each PC-fired boiler in tons per month.

**HI<sub>i</sub>** = Heat input in MMBtu/hr for the i<sup>th</sup> operating hour in the month as calculated from the Part 75-certified CEMS.

**n** = Number of operating hours in the month.

$$EF = (FC/GCV)(1-HF_R)(HF/F)$$

where,

**FC** = Monthly average fluorine content as computed from data obtained pursuant to Condition No. 8.3.

**GCV** = Monthly average Gross Caloric Value as computed from data obtained pursuant to Condition No. 8.3.

**HF<sub>R</sub>** = Percent removal of hydrogen fluoride from stack testing results in Condition No. 4.1(m) and approved by the Division.

**HF/F** = HF-to-F conversion factor = 20/19

- c. Calculation of monthly emissions of non-mercury metals (other than selenium) that are included in Section 112 of the Clean Air Act from the PC-fired boilers:

$$Metal_j = \frac{1 \text{ ton}}{2000 \text{ lb}} \sum_{i=1}^n (EF)_j \times \frac{HI_i}{1 \times 10^6}$$

Where,

**Metal<sub>j</sub>** = Monthly emissions of the j<sup>th</sup> non-mercury metal (antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, and nickel) from each PC-fired boiler in tons per month.

**HI<sub>i</sub>** = Heat input in MMBtu/hr for the i<sup>th</sup> operating hour in the month as calculated from the Part 75-certified CEMS.

**n** = Number of operating hours in the month.

**EF: Emission Factor in pounds of pollutant per trillion Btu heat input (lb/TBtu), derived utilizing the following equations:**

<b>Element</b>	<b>Equation</b>
Antimony (Sb)	(0.92) X <sup>0.63</sup>
Arsenic (As)	(3.1) X <sup>0.85</sup>
Beryllium (Be)	(1.2) X <sup>1.1</sup>
Cadmium (Cd)	(3.3) X <sup>0.50</sup>
Chromium (Cr)	(3.7) X <sup>0.58</sup>
Cobalt (Co)	(1.7) X <sup>0.69</sup>
Lead (Pb)	(3.4) X <sup>0.80</sup>
Manganese (Mn)	(3.8) X <sup>0.60</sup>
Nickel (Ni)	(4.4) X <sup>0.48</sup>

where X = (MC<sub>j</sub>/AC \* PM)

where,

**MC<sub>j</sub>** = Monthly average of the j<sup>th</sup> metal content as computed from data obtained pursuant to Condition No. 8.3, expressed in parts per million.

**AC** = Monthly average of the ash content of the coal as computed from data obtained pursuant to Condition No. 8.3.

**PM** = Monthly average particulate matter concentration as measured by the PM CEMS, expressed in lb/MMBtu.

d. Calculation of monthly emissions of selenium from the PC-fired boilers:

$$S_e = \frac{1 \text{ ton}}{2000 \text{ lb}} \sum_{i=1}^n (EF) \times HI_i$$

Where,

**S<sub>e</sub>** = Monthly selenium emissions from each PC-fired boiler in tons per month.

**HI<sub>i</sub>** = Heat input in MMBtu/hr for the i<sup>th</sup> operating hour in the month as calculated from the Part 75-certified CEMS.

**n** = Number of operating hours in the month.

$$EF = (SeC/GCV)(1-Se_R)$$

where,

**SeC** = Monthly average selenium content as computed from data obtained pursuant to Condition No. 8.3.

GCV = Monthly average Gross Caloric Value as computed from data obtained pursuant to Condition No. 8.3.

Se<sub>R</sub> = Percent removal of selenium from stack testing results in Condition No. 4.1(n) and approved by the Division.

- e. Calculation of monthly emissions of all other substances that are listed in Section 112 of the Clean Air Act from the PC-fired boilers:

$$HAP_j = \frac{1 \text{ ton}}{2000 \text{ lb}} \sum_{i=1}^n (EF)_j \times HI_i$$

Where,

HAP<sub>j</sub> = Monthly emissions of the j<sup>th</sup> HAP of all other substances included in section 112 of the Clean Air Act from each PC-fired boiler in tons per month.

HI<sub>i</sub> = Heat input in MMBtu/hr for the i<sup>th</sup> operating hour in the month as calculated from the Part 75-certified CEMS.

n = Number of operating hours in the month.

EF = Tested Emission Factor in lbs/MMBtu from stack testing results in Condition No. 4.1(v) and approved by the Division.

- f. Calculation of monthly emissions of all HAPs that are listed in Section 112 of the Clean Air Act from the auxiliary boiler:

$$AB_j = (EF)_j \times FO$$

Where,

AB<sub>j</sub> = Monthly emissions of the j<sup>th</sup> HAP of all HAPs listed in section 112 of the Clean Air Act from the auxiliary boiler in tons per month.

EF = Emission Factor in lbs/MMBtu from factors presented in Longleaf's auxiliary boiler MACT application.

FO = Gallons of fuel oil fired in the auxiliary boiler in the month.

- g. Monthly mercury emissions using data acquired by the Mercury CEMS.
- h. Total HAPs emitted each month shall be calculated by adding the individual HAP emissions from Condition No. 8.27 (a)-(g).

- 8.28** Within 180 days of the facility initial startup, the Permittee shall submit a detailed example of the records required by Condition No. 8.27. This report shall provide the information (including calculations) necessary to demonstrate how the Permittee will track and record emissions of HAPs from the facility. [391-3-1-.02(6)(b)1 and 391-3-1-.03(2)(c)]
- 8.29** The Permittee shall use the records required in Condition No. 8.27 to determine the total monthly emissions of each HAP and the total monthly emissions of all HAPs emitted from the facility. All calculations, including any Division approved emission factor or CEMS data, shall be kept as part of the records required in Condition No. 8.27. The Permittee shall notify the Division in writing if emissions of any individual HAP exceed 0.83 tons from the facility, or if emissions of all listed HAPs combined exceed 2.08 tons from the facility, during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the applicable emissions limits in Condition No. 2.25.  
[391-3-1-.02(6)(b)1 and 391-3-1-.02(2)(c)]
- 8.30** The Permittee shall use the calculations required by Condition No. 8.27 to determine the twelve-month rolling total emissions of each individual HAP from each month and the twelve-month rolling total combined HAP emissions for each month from the entire facility for each calendar month. The Permittee shall notify the division in writing if the combined HAP emissions from the entire facility equal or exceed 25 tons and/or any individual HAP emissions equal or exceed 10 tons during any consecutive twelve-month period. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition No. 2.25.  
[391-3-1-.02(6)(b)1 and 391-3-1-.02(2)(c)]

**APPENDIX A –NARRATIVE FOR SYNTHETIC MINOR ANALYSIS FOR HAZARDOUS AIR POLLUTANTS**

**APPENDIX B – FINAL PERMIT AMENDMENT 4911-099-0033-P-01-1**

**APPENDIX C – COMMENTS RECEIVED DURING PUBLIC COMMENT PERIOD**

**APPENDIX D – ADDITIONAL CORRESPONDANCE**

Longleaf Energy Associates – dated December 22, 2009