Prevention of Significant Air Quality Deterioration Review

Final Determination

May 2009

Facility Name: Yellow Pine Energy Company, LLC
City: Fort Gaines
County: Clay
AIRS Number: 04-13-06100001
Application Number: 17700
Date Application Received: October 1, 2007

State of Georgia
Department of Natural Resources
Environmental Protection Division
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BACKGROUND

On October 1, 2007, Yellow Pine Energy Company, LLC (hereafter Yellow Pine) submitted its original application for an air quality permit to construct and operate a 110-megawatt (MW) biomass-fired power plant. The facility is located at Georgia Highway 39 in Fort Gaines, Clay County. The proposed project was to include: fluidized bed boiler(s) with a total heat input capacity of 1,529 million British Thermal Units per hour (10^6 Btu/hr); a condensing steam turbine generator; an auxiliary boiler with a heat input capacity of 25 x 10^6 Btu/hr; multi-cell mechanical draft wet cooling tower; a water treatment plant; a wastewater treatment plant and outfall; a back-up emergency diesel generator and diesel firewater pump; ash/inert landfill; aqueous ammonia storage tank; limestone storage bins; a No. 2 fuel oil storage tank; diesel fuel oil storage tanks; and supporting plant equipment. In the original application, the plant would have the capability of firing bituminous coal, petroleum coke (pet coke), or 95% metal-free tire-derived fuel (TDF) in small quantities in addition to biomass fuel. However, subsequent Yellow Pine submittals to EPD indicate that the plant will now have the capability of firing only 95% metal-free tire-derived fuel (TDF) in small quantities in addition to biomass fuel. In addition, the original application indicated the possibility of installing one or two fluidized bed boilers to obtain the required heat input capacity. Based on recently submitted additional information (August 1, 2008 Yellow Pine Submittal to EPD), Yellow Pine proposes to install one boiler to obtain the heat input capacity needed to run the plant. Low sulfur No. 2 fuel oil or propane is proposed for use at start-up of the fluidized bed boiler and as the primary fuel of the auxiliary boiler.

On February 26, 2009, the Division issued a Preliminary Determination stating that the project described in Application No. 17700 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the Yellow Pine facility.

The Division requested that Yellow Pine place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in *The Cuthbert Southern Tribune* (legal organ for Clay County) on March 5, 2009. Georgia EPD held a Question & Answer session and a public hearing on April 7, 2009. The public comment period expired on April 14, 2009.

During the comment period, comments were received from U.S. EPA Region IV, San Joaquin Valley Air Pollution Control District, the facility, and the general public.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B.

U.S. EPA REGION 4 COMMENTS

Comments were received from Gregg M. Worley, Chief of the Air Permits Section, U.S. EPA Region 4, by letter on April 13, 2009. The comments are typed, verbatim, below and were the result of reviews by Katy Forney of U.S. EPA Region 4.

Comment 1:

1. Cooling Tower limits – It does not appear that sufficient information has been provided to set a BACT emission limit for PM emissions from the mechanical draft cooling tower. We concur with the conclusion that drift eliminators are the most effective method of controlling PM emissions from the cooling towers; however, BACT by definition is an emission limitation. Only in situations where it is infeasible to set an emission limit is a work practice/design standard set as BACT instead. Since this is not the case for drift eliminators controlling PM emissions from cooling towers, sufficient information should be provided by the application and an emission limit set before the final PSD permit is issued.

EPD Response:

EPA Draft New Source Review Workshop Manual (October 1990), used as guidance in preparing the draft permit for Yellow Pine, indicates that the reviewing agency must establish an enforceable emission limit for each subject emission unit at the source and for each pollutant subject to review that is emitted from the source. The manual states that if technological or economic limitations in the application of a measurement methodology to a particular emission unit would make an emissions limit infeasible, a design, equipment, work practice, operation standard, or combination thereof, may be prescribed. EPD believes institution of a PM emissions limit for the draft cooling tower would require the institution of performance testing as the means to demonstrate compliance with such limit. EPD is not aware of conducting such testing on similar equipment and believes that such testing of a cooling tower would involve both technological and economic limitations. Therefore EPD believes that the institution of the drift eliminators and associated efficiency requirements are applicable and valid BACT requirements. Therefore, EPD will not modify the permit as requested.

Comment 2:

2. Section 4.0 (page 27) – It is unclear why the preliminary determination makes the statement"…for each delivery of TDF to verify the metal content is at or below 95 permit." It is our understanding that the metal content of the TDF should be at or below 5%, not 95%. Please verify this assumption and correct the preliminary determination as necessary.

EPD Response:

U.S. EPA Region 4 is correct in its assumption. Page 27 of the preliminary determination is hereby amended as follows:

Yellow Pine will be permitted to conduct a trial burn restricting 95 percent metal free TDF combustion during the trial burn to less than 15 percent on a Btu basis for the fluidized bed boiler. The firing of TDF in the fluidized bed boiler is only authorized for a period up to 30 days from the commencement of operation of the bubbling fluidized bed boiler. The facility will be required to obtain certification records from the supplier for each delivery of TDF to verify the metal content is at or below ~~95~~ five percent. The facility will also be required to conduct performance tests for all potential applicable pollutants emissions. The performance tests will be used to determine if any potential pollutant is emitted in significant amount when firing 95 percent metal free TDF as well as allow the facility to collect trial data for any future permitting actions.

Comment 3:

1. Condition 2.5 – It is our understanding that the boiler will not operate less than 80% load, except during periods of startup and shutdown. However, according to this permit condition, the minimum operation load is 80 MW. Based on the maximum operational load of 110 MW, this is 72.7% of the load. 80% of the maximum load is 88 MW. This discrepancy should be corrected along with any underlying analyses, if necessary.

EPD Response:

Please see EPD's Response to Yellow Pine's written Comment 6.

Comment 4:

2. Condition 2.8 & 2.10 – Based on the public notice language and the summary of the project on the first page of the permit, it is our understanding that only low sulfur distillate fuel or propane (i.e., no biomass or TDF) will be fired in the boiler during of startup and shutdown. Based on the two permit conditions reference above, the boiler seems to be able to fire only an exact mixture of 15% fuel oil/propane and 85% biomass during startup and shutdown conditions. Please provide information regarding the intended operation of the boiler during startup and shutdown conditions. We recommend clarifying the preliminary determination and the PSD conditions to reflect the emissions scenario used in the applicably, BACT, and air quality analysis of the permit application.

EPD Response:

U.S. EPA is correct is its understanding. EPD will modify Permit Conditions 2.8 and 2.10 as follows:

2.8 The Permittee shall fire biomass as defined by Permit Condition 2.7 as the main fuel in Source FB at a maximum of 100 percent and a minimum of 85 percent, on a million British Thermal Units per hour (10^6Btu/hr) heat input basis. The Permittee shall not fire biomass as defined by Permit Condition 2.7 ~~at 100 percent on a 10^6 Btu/hr heat input basis~~ during startup and shutdown load as defined in Permit Condition 2.5. ~~During startup and shutdown load as defined in Permit Condition 2.5, the Permittee shall fire biomass as defined by Permit Condition 2.7 at a maximum of 85 percent on a 10^6Btu/hr heat input basis only~~.
[40 CFR 52.21(j)]

2.10 The Permittee shall fire the following fuels in Source FB as main ~~supplemental~~ the fuel ~~at a maximum 15 percent on a 10^6Btu/hr heat input basis~~ during Source FB startup and shutdown load as defined by Permit Condition 2.5 only:
[40 CFR 52.21; 40 CFR 60.42b subsumed]

a. Low sulfur distillate fuel, or

b. Propane

Comment 5:

3. Condition 2.23 – This condition limits the auxiliary boiler to no more than 250 hours per calendar year. Since operational limits are normally based on a rolling 12-month basis, please provide an explanation.

EPD Response:

The auxiliary boiler's operational limits were intended to duplicate the time period included in the definition of annual capacity factor specified in 40 CFR 60.41c. Review of this definition indicates that the factor is based on 12 consecutive calendar months, not 12 calendar months, as previously supposed.

Therefore, EPD will modify the draft permit as follows:

2.23 The Permittee shall not operate the auxiliary boiler (Source ID No. AB) more than 250 hours per ~~calendar year~~ twelve consecutive month period.
[40 CFR 52.21 and 40 CFR Part 63, Subpart B]

7.2 The Permittee shall use the hour meter required by Condition No. 5.3b to determine and record the operating hours for the auxiliary boiler during every calendar month. The Permittee shall use these records to determine the total twelve consecutive month ~~calendar year~~ operating hours for the auxiliary boiler. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

The quantity of monthly operating hours shall be reported in the quarterly report required by Permit Condition 7.7.

The Permittee shall notify the Division in writing if the total twelve consecutive month ~~calendar year~~ operating hours of the auxiliary boiler exceeds 250 hours. This notification shall be postmarked by the fifteenth day of January and shall include an explanation of how the Permittee intends to attain compliance with the operating hours limit in Condition No. 2.23.
[391-3-1-.02(6)(b)1 and 40 CFR 52.21]

7.7 To demonstrate compliance with reporting requirements, Permittee must submit a quarterly compliance report which contains the following information:
[40 CFR 52.21, 40 CFR 60.50b(b) and 40 CFR 63, Subpart B]

a. Company name and address.

b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

c. Date of report and beginning and ending dates of the reporting period.

d. The total fuel use by the fluidized bed boiler, for each calendar month within the reporting period, including, but not limited to, a description of each fuel and the total fuel usage amount with units of measure.

e. A summary of the results of the performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

f. A signed statement indicating that Permittee burned only low sulfur distillate fuel oil or propane in the auxiliary boiler.

g. A signed statement indicating that Permittee burned only low sulfur distillate fuel in the emergency generator and fire water pump.

h. A signed statement indicating that Permittee burned only the permitted fuels at the permitted operating scenarios for each of the fluidized bed boilers in Source FB.

i. The hours of operation for the auxiliary boiler for each calendar month within the ~~quarterly~~ reporting period.

k. If a startup, shutdown, or malfunction occurred during the reporting period for any of the boilers and the actions taken consistent with the Permittee's SSMP, the compliance report must include the information in §63.10(d)(5)(i).

l. If there are no deviations from any emission limits that apply, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

m. A signed statement indicating that Source FB operated at permitted operational loads.

The first quarterly report must cover the period beginning on the compliance date and ending on March 31, June 30, September 30, or December 31, whichever date is the first date that occurs at the end of the quarter in which initial startup is completed. The quarterly report must be post marked or delivered no later by the 30th day following the end of each reporting period, April 30, July 30, October 30, and January 30, respectively. Each subsequent report must cover the reporting period from January 1 through March 31, April 1 through June 30, July 1 through September 30, or October 1 through December 31 and must be post marked or delivered no later than April 30, July 30, October 30, and January 30, respectively, whichever date is the first date following the end of the quarterly reporting period.

An immediate startup, shutdown, and malfunction report is required if there was a startup, shutdown, or malfunction for any of the boilers during the reporting period that is not consistent with the startup, shutdown, and malfunction plan, and any applicable emission limit in the relevant emission standard is exceeded. The actions taken for the event must be reported by fax, email, or telephone within two (2) working days after starting actions inconsistent with the plan. The information in 40 CFR 63.10(d)(5)(ii) must be reported by letter within seven (7) working dates after the end of the event unless an alternative arrangement has been made with the Division.

As a result of this modification, page 54 of the Preliminary Determination is hereby modified as follows:

Auxiliary Boiler – Background

The auxiliary boiler (Source Code AB) has a heat input capacity of 25 x 10^6 Btu/hr, and will be limited to a total of 250 hours per ~~calendar year~~ twelve consecutive months. It was to be manufactured and installed in 2008. This boiler will be used to provide auxiliary steam for the fluidized boiler. According to Application 17700, aside from maintenance testing of the auxiliary boiler, it will only be used during facility startup activities. Primary emissions from the auxiliary boiler are nitrogen oxides, particulate matter, carbon monoxide, volatile organic compounds, and sulfur dioxide. Like the proposed fluidized bed boiler, the proposed auxiliary boiler will be equipped with low NO_x burners.

As a result of this modification, page 87 of the Preliminary Determination is hereby modified as follows:

To demonstrate compliance with operating hours limits, Yellow Pine must maintain operating hours records determined from the required hour meter. These records of the boiler operating hours shall be on a daily basis, and must be maintained for a period of five years from the date they were generated. Yellow Pine must use the operating hours records to calculate monthly operating hours to ensure compliance with applicable ~~calendar year~~ twelve consecutive month operating hours limits. The monthly operating hours data will be used to calculate the ~~calendar year~~ twelve consecutive month operating hours. The facility will be required to report the ~~calendar year~~ twelve consecutive month operating hours from the boiler~~s~~ on a quarterly basis. A report is required when the ~~calendar year~~ twelve consecutive month operating hours limit is exceeded.

As a result of this modification, Notice of MACT Approval for Yellow Pine Energy Company, LLC, Fort Gaines, Clay County Appendix A Page 6 of 23 is hereby modified as follows:

5.5.2 Auxiliary Boiler

The Division has reviewed the proposed operational restrictions that the applicant has proposed as MACT for the boiler. The Division believes that operating hours limitations and good combustion control standards will ensure the facility remains in compliance with the Air Quality Permit.

Yellow Pine proposes to limit operating hours of the auxiliary boiler to 250 hours per calendar year. However, the Division will limit operating hours to 250 hours per twelve consecutive months. To ensure compliance with the operating hours limitation, Yellow Pine must install a non-resettable hour meter to record the operating hours of the boiler. Yellow Pine must also limit the fuel types to propane and low sulfur fuel oil, at a minimum for the auxiliary boiler. Yellow Pine proposes to use low sulfur fuel oil with a sulfur content of 0.05 percent. By the year 2010, the emergency generator and water fuel pump engine to be located at the facility will require the use of diesel fuel with the fuel sulfur content of 15 parts per million (ppm). Therefore, to reduce facility-wide emissions, Yellow Pine will be allowed to only burn fuel oil in the auxiliary boiler with a sulfur content less than or equal to 15 parts per million (ppm) by 2010. Yellow Pine must also employ good combustion controls for the auxiliary boiler.

Comment 6:

4. Condition 5.5 – Use of the phrase "each of the fluidized bed boiler…" implies there is more than one boiler being constructed at the facility. For clarity, we recommend this be corrected in the final permit.

EPD Response:

EPD concurs. However, draft Condition 5.5 has been removed and replaced with a new Condition 5.5. See EPD response to Yellow Pine Comment #3 for more details. The phrase "each of the fluidized bed boiler" has been removed for clarity as EPA suggests. Condition 5.5 now reads:

5.5 The Permittee shall verify that each shipment of fuel oil received for combustion in Sources FB, AB, EG, or FW complies with the sulfur content requirements of Condition Nos. 2.10, 2.22, and 2.28. Verification shall consist of either of the following:

a. Fuel oil receipts obtained from the fuel supplier certifying that the oil meets the sulfur content limits detailed in Conditions 2.10, 2.22, and 2.28.

or

b. Analysis of the fuel oil conducted by methods of sampling and analysis which have been specified or approved by the Division.

The Permittee shall retain the records of such certification or fuel analysis in a form suitable for inspection and/or submittal to the Division.

SAN JOAQUIN VALLEY APCD COMMENTS

Comments were received from Errol Villegas, Planning Manager, San Joaquin Valley Air Pollution Control District (APCD), by letter on April 7, 2009. The comments are typed, verbatim, below and were the result of reviews by Joven Nazareno of San Joaquin Valley APCD.

Comment 1:

Our specific comment pertains to Georgia EPD's proposed NO_x limit of 0.10 lbs/MMBtu as specified in Condition 2.11 on page 7 of the draft permit. It may be of interest to EPD that we have several biomass fuel-fired fluidized bed boilers in the SJVAPCD [San Joaquin Valley Air Pollution Control District] which have been operating Selective Noncatalytic Reduction (SNCR) for several years now. Our lowest permitted NO_x limit is 0.08 lb/MMBtu (actual source testing show an average of 0.06 lb NO_x/MMBtu), which is 0.02 lb/MMBTU lower than being proposed for Yellow Pine. If EPD's proposed 0.10 lb/MMBTu limit is lowered to 0.08 lb/MMBTu, the potential NO_x emissions from 1,529 MMBtu/hr boiler (at maximum firing rate) would be 733.9 lbs/day (0.367 tons/day) less. We believe that it is appropriate for EPD to consider the same NO_x limit that is currently achieved-in-practice by our biomass-fired boiler as well as a shorter averaging period than the proposed 30-day rolling average.

For your information, we currently have SNCR-equipped boilers firing on coal, fluid coke, delayed coke, or tired derived fuel with a permit NO_x limit of 0.04 lbs/MMBtu (24-hour average). In reviewing the draft PSD permit for Yellow Pine, we notice that, on a trial basis, the boiler would also be capable of firing tire-derived fuel in addition to biomass fuel. We would appreciate if EPD can share with us the results of such trial operation.

Mr. Joven R. Nazareno of our Rule Development Section has been researching feasible control technologies that could achieve a much lower NO_x limit than currently allowed for our existing solid fuel-fired boilers. It appears promising to use SCR in conjunction with SNCR. The results of Mr. Nazareo's research will be published in a Feasibility Study Report before the end of this year as required by our Ozone Plan. If indeed a hybrid SCR-SNCR is technologically feasible, then we would likely amend our existing Rule 4352 (Solid Fuel-Fired Boilers, Steam Generators and Process Heaters). He has spoken with Mr. Mark Sajer (Summit Energy Partners) last week regarding the cost effectiveness analysis for regenerative selective catalytic reduction (RSCR) that was submitted to EPD on or about December 3, 2008 which showed $17,100/ton NO_x reduced. Since SJVAPCD's BACT NO_x cost effectiveness threshold is $18,300/ton, we would have required RCSR especially for a new source or modified permitting project in our District. Also he has spoken a few times with Mr. Richard Abrams (Babcock Power) regarding the feasibility of using RSCR with our existing SNCR-equipped units.

EPD Response:

EPD inquired about the capacity of the equipment with the proposed NO_x limit of 0.08 lb/MMBtu. It has been determined that the source in question is a circulating fluidized-bed biomass-fired boiler with a heat input capacity of 352 x 10^6 Btu/hr. Given this information, EPD is not inclined to modify the NO_x emission limit as proposed as it believes that the NO_x limit of 0.08 lb/MMBtu that is currently achieved-in-practice is not appropriate for the proposed Yellow Pine boiler which has a heat input capacity of 1,529 x 10^6Btu/hr which is slightly more than four times that of the source in question with a heat input capacity of only 352 x 10^6 Btu/hr. Furthermore, there is no requirement for BACT limits to have averaging times equal to, or less than, the shortest NAAQS or PSD increment averaging time for a given pollutant. EPD believes that the proposed BACT NO_x emissions limit is protective of the NAAQS and PSD increments.

As indicated on page 37 of the Preliminary Division, EPD conducted incremental cost analysis comparing SNCR and RSCR technologies. As a result, the Division determined that the average cost per ton of NO_x removal and the incremental cost of RSCR versus SNCR per ton of NO_x removal make it economically infeasible. Therefore, EPD believes this control technology is not viable for the proposed fluidized bed boiler. As a result, the proposed NO_x emissions limit and control technology were not modified as a result of this comment.

It should also be noted that Clay County Georgia is classified as an ozone attainment area, while the San Joaquin Valley is classified as a serious nonattainment area for the 8-hour standard and is severe under the State 1-hour standard. Hence, stricter NOx control measures are to be expected in such nonattainment areas.

YELLOW PINE COMMENTS

Verbal Comments were received from Mark S. Sajer, Managing Director, during the April 7, 2009 public hearing.

Comment 1:

In summary, Mr. Sajer indicated that potential sulfur content testing would be costly for the facility, and believed that the sulfur dioxide limit and associated monitoring would be sufficient.

EPD Response:

See EPD's response to Yellow Pine's written Comment 3.

Comment 2:

In summary, Mr. Sajer requested that the definition of the type of wood/biomass fired is modified to match that of the Green-e standard.

EPD Response:

See EPD's response to Yellow Pine's written Comment 1.

Comment 3:

In summary, Mr. Sajer indicated that he believes that the total particulate matter emissions limit should be set based on the results of the performance testing.

EPD Response:

See EPD's response to Yellow Pine's written Comment 7.

Comment 4:

In summary, Mr. Sajer indicated that he believes that the requirement to use water sprays be removed from tripper decks.

EPD Response:

See EPD's response to Yellow Pine's written Comment 13

Comment 5:

In summary, Mr. Sajer requests that the permit is modified to allow the use of limestone or a sodium based sorbent based on its proposed scrubber system vendor's advice that the proposed sulfur dioxide emission limit would require flexibility to use other sorbents in addition to or instead of lime.

EPD Response:

See EPD's response to Yellow Pine's written Comment 5.

Comments were received from Mark S. Sajer, Managing Director, by letter on April 13, 2009.

Comment 1:

A. Biomass Quality, Sulfur Content and SOx Limit. These comments address biomass quality, sulfur content and the related SOx permit limit. Amendments to the draft air permit are requested as noted below.

A1. Biomass Quality, Georgia Green-e Standard.
Yellow Pine requests incorporation of *de minimus* language to incorporate the Georgia Green-e standard. Georgia DNR-EPD is a signatory to the Georgia "Green-e" accreditation standard, which defines biomass's characteristics to qualify for "Renewable Energy Credits" or "RECs" under the program. This is the program Georgia utilities comply with in offering renewable energy to their customers. In turn, Yellow Pine must comply with this standard in supplying RECs to the utilities.

The Georgia "Green-e" certification standard in respect of biomass is as follows:

> "Solid, liquid and gaseous forms of all woody waste biomass excluding: (i) black liquor, (ii) wood that has been coated with paints, plastics or formica, (iii) wood that has been treated for preservation with materials containing halogens, chlorine or halide compounds like CCA-treated materials, or arsenic (CCA = chromated copper arsenate). There may be *de minimus* quantities of qualified wood fuel (<1% of total fuel wood fired) that can contain the above excluded contaminants."

Although Yellow Pine strives to prohibit all such contaminants from the wood waste supplies, such material is received already processed into chips or grindings, which make it impractical to detect *de minimus* amounts. It is requested to amend Part 2.7 of the air permit to allow "*de minimus*" contaminants (i.e. less than 1% by weight) to comply with the EPD approved Georgia Green-e standard and to avoid possible permit violation.

EPD Response:

To the contrary, Green-e is not a 'Georgia standard', and is not a program that is instituted by EPD as Yellow Pine's comment implies. According to its website[1], Green-e is an *independent* consumer protection program for the sale of renewal energy and green house gas reductions in the retail market. Green-e is a voluntary certification program. According to Green-e's fact sheet, it's important that renewable energy certificates (RECs) support new projects built for the voluntary market, not to satisfy a state or federal requirement. That's because consumers who are buying renewable energy want their money to go toward expanding the renewable energy market. Green-e Energy Certified RECs come from new facilities built with the voluntary market in mind.[2]

According to the *Green-Energy National Standard Version 1.6*[3], emission limits for biomass combustion requires that all facilities be compliance with all state and/or federal laws/rules regarding emissions, and must be in compliance with all applicable regional and standards pertaining to New Source Review (NSR), if applicable.

[1] www.green-e.org, accessed April 24, 2009.
[2] http://www.green-e.org/docs/Green-e%20Energy%201-pager.pdf accessed April 28, 2009
[3] http://www.green-e.org/getcert_re_stan.shtml#standard, accessed April 24, 2009.

Yellow Pine is subject to and has completed NSR/PSD based on the application and supplemental information it submitted. As explicitly explained in page 27 of the preliminary determination, the biomass fired at Yellow Pine will consist of wood wastes in chip or shredded form from timber harvesting, pre-commercial thinning of forest plantation stands, harvesting non-commercial, dead or deformed species for fuel purposes and land clearing activities (limbs, tops, stumps and non-commercial trees), and may also include peanut hulls, pecan shells, cotton stalks, lumber and pallet wood wastes (unpainted/untreated only) and similar woody biomass. The application is based on wood waste from timber harvesting (i.e. green tons). Yellow Pine's application, emissions estimates, BACT review, modeling, and BACT determination are based on the use of biomass as specified in its application.

Yellow Pine did not evaluate potential emissions from the use of biomass that would include any of the impurities allowed in the Green-e standard, nor has it provided a request to fire such fuels until submittal of the above referenced comment. If Yellow Pine wishes to incorporate the use of such fuel it must complete the appropriate analysis and submit an application to amend its permit accordingly. However, without the submittal of such data, and in accordance with PSD/BACT limits established based on the information currently submitted, EPD will not modify the draft permit and/or preliminary determination to allow the usage the requested fuel.

Comment 2:
A2. Biomass Test Results.

In a correspondence dated January 21, 2009, Yellow Pine reported to EPD the test results on samples drawn from Yellow Pine's harvest area for the sulfur content and a statistical evaluation of the likely upper sulfur content limit. This report is not noted in Preliminary Determination or on the EPD web site. A copy is attached.

The report indicates that one should expect higher biomass sulfur content than the 0.01% estimate used by EPD in the Preliminary Determination. Using a 95% confidence interval for the sample results and EPD's stated control efficiency of 79% for BACT, the SOx limit is calculated to be 0.014 lb/mmbtu, versus the draft permit limit of 0.01 lb/mmbtu. Yellow Pine previously submitted the NCASI report, which included sample data from pulp mills and stated that biomass sulfur content is highly variable and such variability should be incorporated into engineering calculations, such as the BACT limit derived from such data.

Based on the sample testing results, the sample test results reported by NCASI, and the variability consideration, Yellow Pine requests that the SOx limit in Part 2.14 be amended to 0.014 lb/mmbtu (30-day average with CEMS) as BACT. While this is a small change to the permit limit, it would allow for greater variability and addresses the facts that neither Yellow Pine nor its wood waste suppliers can control the sulfur content in biomass nor is biomass available for purchase on a sulfur specification like coal or other fossil fuels.

EPD Response:

Georgia EPD notes that Georgia Power, for Plant Mitchell's biomass conversion project (also located in Southwest Georgia) also conducted sulfur sampling in local timber. Georgia Power submitted the testing data and their results are similar to Yellow Pine's values submitted in their January 21 2009 letter.

Permit Condition 2.14 will be modified to increase the limit from 0.010 lb/mmbtu to 0.014 lb/mmbtu to reflect the more accurate sulfur content values. This will increase the potential SO2 emissions from the boiler by 27 tpy from 67 ton 94 tpy; this rate is still significantly less than that emission rate used in the air quality modeling.

Comment 3:

A3. Biomass Testing/Certification.

Yellow Pine is not aware of any biomass supplier, which grades, measures or certifies the sulfur content in biomass. In the 30 years the University of Georgia Warnell School of Forestry has reported wood waste sales transactions in *Timber Mart South*, none of the data shows biomass sold at sulfur grades and prices. While it is common for coal to be graded and sold by sulfur content, there are no practical means to do so for biomass, and it is not being transacted today based on a sulfur specification.

It is Yellow Pine's understanding that timber harvesters do not and have not ever sold wood wastes with certified sulfur content. During the public hearing on April 7th, timber harvesters testified that it is impractical to test/certify and that they have no control on the wood waste's sulfur content. The material comes directly from the forest to the plant with its only processing being to reduce the size into chips or grindings. The harvesters do not have the ability to select grades by sulfur content or the ability to wash or alter the sulfur content. Such a "Good Combustion Technique" or "Fuel Selection" technique is not achievable.

At the plant site, fuel is monitored for its BTU content, which captures moisture, ash/inerts and heating value by a calorimeter. However, the measurement of sulfur by elemental analysis is far more complex and costly. Elemental analysis requires a completely different testing laboratory versus a simple calorimeter for BTU measurement. Based on the sample testing cost for the above-noted wood waste samples and 150 loads per day received, elemental testing for sulfur at a certified laboratory would exceed $47 million per year ($900/test x 150 loads/day x 350 days/year = $47 million/year). Randomized testing will require a large number of weekly samples given the high variability of the wood waste (5% x $900/test x 150 loads/day x 350 days/year = $2.4 million/year). The testing cost is prohibitive with no benefit to BACT.

Lastly and most importantly, the test results have no use. The BACT SOx limit is fixed, regardless of any sample testing result. Further, biomass has such low sulfur content, and results in such a low SOx limit, monitored by CEMS, that there is no public benefit to requiring the supplier or Yellow Pine to test biomass for sulfur content.

Given that: (a) it is not possible to control for biomass sulfur content (i.e. Fuel Selection is not feasible), either in the field or in the plant, timber harvesters have no practical means to control or supply by sulfur content; (b) there is no Combustion Technique to adjust for sulfur content in the incoming fuel; (c) Yellow Pine submitted representative samples to EPD upon which the BACT limit can be calculated; (d) the cost of elemental testing is cost prohibitive with no public benefit of the testing; and, (e) the BACT SOx limit is fixed and monitored by CEMS with no improvement to BACT, Yellow Pine requests the deletion of biomass sulfur content in Part 5.5(e). Yellow Pine agrees to certify/test/procure all of the permitted fossil fuels (which have statutory sulfur limits already) and TDF for sulfur content and to report all fuel inputs by BTU consumption.

EPD Response:

The proposed combustion technique does not require sulfur content certification for biomass as Yellow Pine's comment implies. Upon further examination of draft Condition 5.5, the Division has replaced the draft Condition 5.5 with final Condition 5.5 which only addresses sulfur content certifications of the fuel oil. "Good Combustion Techniques" are established as the mechanism for BACT for CO and VOB, However, BACT is defined as the specific emission rate limit. The requirements of draft Condition 5.5 are superfluous in light of the CO CEMS which directly measures CO against the BACT limit, and serves as a potential indicator for good combustion techniques to minimize VOC formation.

Final Condition 5.5 is new and requires sulfur content certification or sampling to demonstrate compliance with Conditions 2.10, 2.22, and 2.28.

Comment 4:

A4. Sand Bed During Biomass Firing.

The Preliminary Determination and Yellow Pine's fluidized bed boiler vendor information stated that when operating on 100% biomass, a sand bed is used. On page 48 of the Preliminary Determination, EPD stated that:

> "… the Division has determined that the potential economic and environmental impacts render lime fluidized bed control technology infeasible"

EPD refers to discussions with a vendor regarding Circulating Fluidized Bed Boiler ("CFB") as the basis for considering limestone addition to the bed. However, this permit specifies a Bubbling Fluidized Bed Boiler ("BFB"). A BFB does not come close to a CFB in terms of its fluid dynamics to react limestone in the bed. A BFB does not mix nor recycle the limestone as a CFB can, nor is there the reaction time. As a result, EPD lists control efficiency for limestone injection into the bed on page 47 for a CFB, not a BFB.

Yellow Pine submitted vendor performance data, which establishes the BFB baseline and uses only a sand bed. The reason a sand bed is sufficient is because of the wood ash reaction to capture sulfur.

The NCASI paper previously submitted reported on the phenomenon that woody biomass is reduced to ash containing a high fraction of CaO and CaCO3, essentially the reactive component of limestone. These elements provide the sulfur (SOx) reduction in the bed, without the use of limestone.

In the Preliminary Determination, EPD does not state that there is inadequate control from the above-noted wood ash-sulfur reaction. As there is an absolute limit on SOx to which Yellow Pine must comply, there is no need to change the manufacturer's recommended practice of using a sand bed. It is requested that Part 2.20 be amended such that a sand bed be used when operating on 100% biomass, and a sand/limestone bed be used when operating on a biomass/TDF mixture.

EPD Response:

The Division agrees that the SO2 emission limit establishes BACT for this facility, and Yellow Pine need not use limestone in the fluidized bed provided that it can comply with the SO2 limit without its use. The use of limestone in the bed was proposed when the facility had also proposed the use of coal and pet coke. The use of a low sulfur fuel such as wood and low-sulfur fuel oil eliminate the need for this additional sulfur reduction step. Condition 2.20 has been removed and marked as reserved.

Comment 5:

A5. Dry Scrubber System.

In EPA documentation on "dry scrubber systems", the "system" consists of a sorbent injection vessel followed by a particulate control device (bag house in the case of Yellow Pine). Yellow Pine's air pollution control vendor, Dustex Corporation, of Kennesaw, Georgia, who is designing the dry scrubber system, noted that the SOx emission from the boiler is so low that it may take both calcium and sodium based sorbents to achieve the SOx limit.

Accordingly, Yellow Pine requests that the word "lime" be amended to "sorbent" through out the permit, and that Yellow Pine reports the "amount and type" of sorbent" used during performance testing to achieve the SOx limit. At issue is that the SOx emission from the boiler is so low Dustex commented that achieving the SOx limit may require flexibility to use other sorbents than lime

EPD Response:

The Division will amend the permit regarding the dry scrubber system as requested as follows:

5.3 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 52.21(j)]

a. Temperature indicator to continuously measure temperature in stack FBS as defined in Permit Condition 2.4 at the point where the exhausts from the fluidized bed boiler enter the stack FBS as defined by Permit Condition 2.4.

b. Non-resettable operating hours meter to continuously measure the operating hours of the Auxiliary Boiler AB.

c. Monitor to continuously determine the operating load of Source FB.

d. Monitor to continuously determine the sorbent ~~lime~~ injection flow rate for each sorbent used into the dry scrubber system (Control Device ID No. DS1) at the Stack FBS as defined in Permit Condition 2.4.

6.4 To demonstrate compliance with Pb, HCl, VOC, and Hg limits, the Permittee shall conduct performance testing using the testing methods in Permit Condition 6.1 for Source FB operating at maximum load as defined by Permit Condition 2.5.

Initial performance testing for these pollutants must be conducted within 60 days after achieving the maximum production rate at which the boiler will be operated, but not later than 180 days after the initial startup of the boiler. Performance tests are required once every twelve (12) months thereafter.

The Permittee shall conduct continuous sorbent ~~lime~~ injection flow rate monitoring for each sorbent used, using the device(s) required by Condition 5.3d, during each test run of the hydrogen chloride performance tests required in this permit condition. The Permittee shall establish the sorbent ~~lime~~ injection flow rate for each sorbent used in terms of pounds of sorbent per million Btu heat input (lbs lime/10^6 Btu) at which compliance with Permit Condition 2.19 can be demonstrated during the test runs. Within 60 days of the completion of testing, the Permittee shall submit a report to the Division containing the emissions test results and the sorbent ~~lime~~ injection flow rates for each sorbent used corresponding to the compliant hydrogen chloride emissions.
[40 CFR 52.21]

7.18 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 7.15, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)(1) and 40 CFR 52.21(j)]

a. Excess emissions: (means for the purpose of this Condition and Condition 7.15, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

i. None required to be reported in accordance with Condition 7.15

b. Exceedances: (means for the purpose of this Condition and Condition 7.15, 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 time Source FB operates at an operational load lower than specified in Permit Condition 2.6
ii. Any time biomass fired in Source FB that does not meet the definition in Permit Condition 2.7

iii. Any time fuel types fired in Source FB are in violation of Permit Conditions 2.8, 2.9, or 2.10

iv. Any time NO_x emissions from Stack FBS as defined in Permit Condition 2.4 exceed the emission limits specified in Permit Condition 2.11

v. Any time SO_2 emissions from Stack FBS as defined in Permit Condition 2.4 exceed the emission limits specified in Permit Condition 2.14

vi. Any time CO emissions from Stack FBS as defined in Permit Condition 2.4 exceed the emission limits specified in Permit Condition 2.15

vii. Any time TDF is fired in Source FB that violates the specifications in Permit Condition 2.21

viii. Any time fuel types fired in Source AB violate Permit Condition 2.22

ix. Any time Source AB's operating hours exceed those specified in Permit Condition 2.23

x. Any time the mass flow rate of CT exceeds that as specified in Permit Condition 2.27

xi. Any time fuel types fired in Source EG or Source FW that violates Permit Condition 2.28

xii. Any time the sulfur content of fuel violates the specifications in Permit Condition 2.29

xiii. Any time opacity from Source FB exceed the limits specified in Permit Condition 2.30

xiv. Any six-minute period during which the average opacity measured and recorded in accordance with Condition No. 5.2.b exceeds 20 percent, except one six-minute average per hour up to 27 percent, from Stack FBS as defined in Permit Condition 2.4

c. Excursions: (means for the purpose of this Condition and Condition 7.8, 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 time any control equipment required in Section 4.0 of the permit is not in operation or is bypassed while applicable equipment is operating.

ii. Any 3-hour block period during which the average opacity from Stack FBS as defined in Permit Condition 2.4, as measured by the COMS, exceeds the opacity value established in accordance with the requirements of Permit Condition 6.3.

iii. Any 3-hour block average of sorbent ~~lime~~ injection flow rate for each sorbent used measured using the device(s) required by Condition 5.3.d that falls below 80 percent of the injection flow rate value established in accordance with the requirements of Permit Condition 6.5.

The Notice of MACT Approval for Yellow Pine Energy Company, LLC, Fort Gaines, Clay County Appendix A Page 17 of 23 of the preliminary determination is hereby amended as follows:

> Yellow Pine must also continuously monitor and record the sorbent ~~lime~~ injection flow rate for each sorbent used for the scrubber system. Yellow Pine must report any instances in which the sorbent ~~lime~~ injection rate for each sorbent used is less than 80 percent of the tested sorbent ~~lime~~ injection rate for each sorbent used at which the fluidized bed demonstrated compliance with the HCl limit.

Comment 6:

B. Operating Load Definition.

B1. Please note that the megawatt rating of the plant is the net plant output using the South East Reliability Council summer rating conditions (95 degrees F, 40% relative humidity and 0.90 power factor). The actual net plant output will vary with ambient conditions. Yellow Pine described its operation in terms of the % of maximum capability (BTU rating), which was converted nominally into megawatts. However, the true measure is percent of maximum capability.

Therefore, it is requested to amend Part 2.5 to define the operating loads as percentage (%) of the maximum rating (1,529 MMBTU/hr) being (a) at 100%, (b) 80% and (c) 30%.

EPD Response:

EPD will modify Permit Condition as follows:

2.5 For the purposes of this Permit: The following operating loads are defined for the Bubbling Fluidized Bed Boiler (Source Code: FB):
[40 CFR 52.21(j)]

a. Maximum Operational Load: Source FB operating at 100 percent load where the heat input capacity of Source Code FB is1,529 x 10^6 Btu/hr ~~110 mega watts (MW)~~.

b. Minimum Operational Load: Source FB operating at 80 percent load based on the heat input capacity of Source Code FB ~~80 MW~~.

c. Startup and Shutdown Load: Source FB operating up to 30 percent load based on the heat input capacity of Source Code FB ~~33 MW~~. Startup load shall last no longer than 14 hours from initial firing.

Comment 7:

C. Total PM Measurement Adjustment.

C1. Non-Filterable PM Adjustment. Yellow Pine's air pollution control vendor, Dustex Corporation, advised that its pollution control equipment captures only the "filterable" portion of Total PM. The system is not capable of capturing all PM.

It is not stated in the Preliminary Determination where EPD obtained its estimate of 0.008 lb/mmbtu for the PM fraction not captured by the air pollution controls. Yellow Pine had requested 0.015 lb/mmbtu in its application.

In EPD's August 22, 2008 "proposed limit" grid provided to Yellow Pine, EPD stated that if the actual non-filterable fraction of PM measured during performance testing was greater than 0.008 lb/mmbtu, then the total limit would be adjusted upward by the excess so measured.

Accordingly, Yellow Pine requests that Part 2.13 be amended to incorporate the above-noted performance testing measurement adjustment such that if the actual testing result of the non-filterable portion is greater than 0.008 lb/mmbtu, then the actual result is used and added to the filterable PM limit (0.010 lb/mmbtu per Part 2.12) to set the Total PM limit.

EPD Response:

The August 22, 2008 document clearly makes the following statement:

> NOTE: Possible limits and requirements – for discussion purposes only. The limits described below should NOT be construed as proposed permit limits.

EPD believes that the total PM_{10} BACT limit determination is consistent with recent BACT determinations for similar projects. No additional detailed information was provided by Yellow Pine to refute this emissions limit. Therefore, EPD sees no need to modify Permit Condition 2.13 as requested.

Comment 8:

C2. PM 2.5 Surrogate. It is not clear in Part 2.12 that the PM10 limit is also the surrogate for the PM2.5 limit. Accordingly, Yellow Pine requests the insertion of language into Part 2.12 to clarify that the PM10 limit is the surrogate limit for PM2.5.

EPD Response:

Page 8 of the preliminary determination states that in accordance with current EPD guidance, particulate matter emissions with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$) are assumed to equal particulate matter emissions with an aerodynamic diameter less than or equal to 10 microns(PM_{10}). In addition, page 39 of the preliminary determination clearly states that emissions of PM_{10} will be used as a surrogate for $PM_{2.5}$. Therefore, EPD sees no need to modify Permit Condition 2.12 as requested.

Comment 9:

D. VOC Measurement Period.
D1. 3-Hour Average. In EPD's August 22, 2008 "proposed limit" grid pr, EPD stated a VOC limit of 0.025 lb/mmbtu (3-hour average). EPD's November 12, 2008 correspondence did not address the VOC limit. The Preliminary Determination does not provide why this limit was lowered or why the 3-hour average was deleted.

Yellow Pine requests that Part 2.16 be amended to restore the limit to 0.025 lb/mmbtu (3-hour average).

EPD Response:

The August 22, 2008 document clearly makes the following statement:

> NOTE: Possible limits and requirements – for discussion purposes only. The limits described below should NOT be construed as proposed permit limits.

Application 17700 proposes the VOC limit of 0.020 lb/mmbtu, which is the emissions limit included in Permit Condition 2.16. The averaging period was not included in the permit condition as it is based on the averaging time of the compliance determination method (Method 25 of 40 CFR 60 Appendix A) by which Yellow Pine will demonstrate compliance with the VOC emissions limit. Therefore, EPD will not modify the permit condition as requested.

Comment 10:

E. Hg Limit – Typographical Correction.

E1. Hg Limit Correction. In Part 2.18 (Hg Limit), there appears to be a typographical error in stating this limit. Yellow Pine requests a correction to state the Hg limit as either 2.5 lb/Tbtu or 2.5 x 10E-05/mmbtu.

EPD Response:

EPD will modify Permit Condition 2.18 as follows:

2.18 The Permittee shall not cause, let, suffer, permit or allow the emission of mercury (Hg) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 2.5 x 10^{-5} pounds per million ~~trillion~~ Btu (lbs/10^{6}~~^{12}~~Btu). The emission limit listed in this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21 and 40 CFR Part 63 Subpart B]

Comment 11:

F. HCl Limit – Averaging or Median.
F1. Limit Basis. Yellow Pine understands that EPD chose the HCl limit based on the NACAA "white paper", which recommended an HCl range for new biomass boilers of 0.006 to 0.012 lb/mmbtu. Yellow Pine previously commented that upon analysis of the underlying NACAA units for HCl, that none of the larger units had in fact achieved 0.006 lb/mmbtu emissions during performance testing. This testing data was provided to EPD in correspondence dated October 10, 2008. Based on that report, and review of Plant Carl's approved limit for HCl under its MACT determination, Yellow Pine requests that Part 2.19 be amended to either use: (a) a 30-day average as granted Plant Carl, or (b) the mid-point of the NACAA range (0.008 lb/mmbtu) at all times.

EPD Response:

As specified on page 3 of EPD's letter dated November 12, 2009 and in the Notice of MACT Approval for Yellow Pine Energy Company, LLC, Fort Gaines, Clay County on page Appendix A Page 20 of 23 of the preliminary determination, EPD believes that the HCl limit established by Permit Condition 2.19 is appropriate and will not be modified as requested.

Comment 12:

G. Water Conservation Considerations.

G1. Georgia Rules. Georgia Rule (3)(8) of 391-3-6-07 requires Yellow Pine to adhere to a water conservation plan, which given new construction, means to minimize water use in the plant's design and operation. Further, by eliminating water systems, piping, values and pumps from certain areas of the plant, the design eliminates possible future leaks and unaccounted water use. Certain design features are incorporated which conflict with the water spray requirements of the draft air permit.

EPD Response:

Comment so noted.

Comment 13:

G2. Plant Equipment. In three areas within plant equipment, the plant's design of enclosures seals on pneumatic ash filling and dry fabric filter devices are sufficient to control for dust emissions. Yellow Pine requests the deletion of "water sprays" in Part 4.5 (c) Fuel Storage Silo, (d) Fly Ash Silo and (e) Tripper Deck Day Silos. All of these silos function without any wetting of the material and/or it is the manufacture's recommendation to keep the contents dry for proper handling in the discharge from the silo. A fabric filter on the vent is designed to capture dust emissions when the silo is being filled.

In respect of Paragraph 4.6, the (i) Fly Ash Truck loading area uses a sealed pneumatic system to load trucks. It is not designed with a water spray, as the material must be handled in dry form to prevent plugging/fouling of the truck trailer. Yellow Pine requests deletion of "water spray" from Part 4.6(i).

EPD Response:

EPD will modify Permit Condition 4.5 as follows:

4.5 To comply with Permit Condition 2.25, The Permittee shall install the following: [40 CFR 52.21(j)]

a. Fuel Process Building 1 (Source ID No. FPB1) – Fabric Filter (Control Device ID No. BH2), enclosures (Control Device ID No. EC1), and water sprays.

b. Fuel Process Building 2 (Source ID No. FPB1) – Fabric Filter (Control Device ID No. BH3), enclosures (Control Device ID No. EC2), and water sprays.

c. Fuel Storage Silo (Source ID No. SLO) – Fabric Filter (Control Device ID No. BH4) and~~,~~ enclosures (Control Device ID No. EC3)~~, and water sprays~~.

d. Fly Ash Silo (Source ID No. FAS) – Fabric Filter (Control Device ID No. BH5), enclosures (Control Device ID No. EC4), ~~water sprays,~~ and a closed vent system to the fly ash silo.

e. Tripper Deck Day Silos 1-5 (Source ID Nos. TDS1 – TDS5) – Fabric Filter (Control Device ID Nos. BH6 – BH10) and~~,~~ enclosures (Control Device ID Nos. EC5 – EC9)~~, and water sprays~~.

The Permittee shall operate control equipment listed in a. through e. of this permit condition at all times the applicable equipment listed in a. through e. of this permit condition is operating, including startup, shutdown, and malfunction.

As a result of this modification, page 87 of the preliminary determination is hereby amended as follows:

Material Storage and Handling [Fuel Process Buildings 1 and 2 (FPB 1 and FPB 2), Tripper Deck Day Silos 1-5 (TDS 1-5), Fuel Storage Silo (SLO), and Fly Ash Silo (AS)]

Monitoring, record keeping, and reporting as described by 40 CFR Part 60 Subpart OOO for applicable pollutants shall be applied as specified, ensuring that monitoring, record keeping, and reporting for both regulations are satisfied. Yellow Pine is also required to monitor, create records, and submit reports for any emission limit and/or operating limit established under 40 CFR Part 52.21. Any other applicable regulation monitoring, record keeping, and reporting requirements not specifically cited in this section as also required.

The following control technologies must be implored to reduce particulate emissions from the applicable sources:

- Fuel Process Building 1 – Fabric Filter, enclosures, and water sprays.
- Fuel Process Building 2 – Fabric Filter, enclosures, and water sprays.
- Tripper Deck Day Silos 1-5 – Fabric Filter~~,~~ and enclosures~~, and water sprays~~.

- Fly Ash Silo – Fabric Filter, enclosure, ~~water sprays,~~ and a closed vent system to the fly ash silo.

Monitoring will consist of records demonstrating that water sprays are applied "as warranted" for adequate dust control. "As warranted" is defined in the permit as dust control sufficient to keep visible emissions below the PSD opacity limit. Weekly observations for any visible emissions will be required as described above. A deviation of the required monitoring as discussed previously above shall be reported as part of the required quarterly report.

The required quarterly report must contain all items as required for applicable equipment and applicable regulations.

Per 40 CFR Part 52.21, all of the required reporting must be submitted on a quarterly basis, subsuming any semiannual or annual reporting established by applicable regulations.

EPD will modify Permit Condition 4.6 as follows:

4.6 To comply with Permit Condition 2.26, The Permittee must install the following: [40 CFR 52.21(j)]

a. Barge/Clamshell Unloading (Source ID No. BCU) – water sprays

b. Conveyor Transfer Towers 1-3 and 5-8 (Source ID Nos. CTT1-CTT3 and CTT5-CTT8) – enclosures (Control Device ID Nos. EC10 – EC16) and water sprays

c. Biomass Storage Piles (Source ID No. BSP) – water sprays

d. Biomass Storage Pile Load-Ins (Source ID No. SSPL) – telescopic chutes (Control Device ID No. BTC) and water sprays

e. Limestone Storage Pile (Source ID No. BSP) – water sprays

f. Limestone Storage Pile Load-Ins (Source ID No. LSPL) – telescopic chute (Control Device ID No. LTC) and water sprays

g. Sand Storage Pile (Source ID No. SSP) – water sprays

h. Sand Storage Pile Load-Ins (Source ID No. SSPL) – telescopic chute (Control Device ID No. STC) and water sprays

i. Fly Ash Trucks (Source ID No. TL) – enclosures (Control Device ID No. EC19) and ~~water sprays;~~ use of a vacuum ring on loading/unloading trucks

j. Paved Roads 1 and 3 (Source ID Nos. PR1 and PR2) – water sprays

The Permittee shall operate control equipment listed in a. through j. of this permit condition at all times the applicable equipment listed in a. through j. of this permit condition is operating, including startup, shutdown, and malfunction.

As a result of this modification, page 88 of the preliminary determination is hereby amended as follows:

Material Storage and Handling [Barge/Clamshell Unloading (BCU), Conveyor Transfer Towers 1-3 and 5-8 (CT 1-3 and 5-8), Biomass Storage Pile (BSP), Limestone Storage Pile (LSP), Sand Storage Pile (SSP), Plant Roads (PR), and Fly Ash Trucks (FT)]

Monitoring, record keeping, and reporting as described by 40 CFR Part 60 Subpart OOO for applicable pollutants shall be applied as specified, ensuring that monitoring, record keeping, and reporting for both regulations are satisfied. Yellow Pine is also required to monitor, create records, and submit reports for any emission limit and/or operating limit established under 40 CFR Part 52.21. Any other applicable regulation monitoring, record keeping, and reporting requirements not specifically cited in this section as also required.

The following control technologies must be implored to reduce particulate emissions from the applicable sources:

Barge/Clamshell Unloading (Limestone, and Sand) – water sprays

Conveyor Transfer Towers 1-3 and 5-8 **–** enclosures and water sprays

Biomass Storage Pile – water sprays; telescopic chute and water sprays for the storage pile load-in

Limestone Storage Pile – water sprays; telescopic chute and water sprays for the storage pile load-in

Sand Storage Pile – water sprays telescopic chute and water sprays for the storage pile load-in

Fly Ash Trucks – ~~water sprays;~~ use of a vacuum ring on loading/unloading trucks

Monitoring will consist of records demonstrating that water sprays are applied "as warranted" for adequate dust control. "As warranted" is defined in the permit as dust control sufficient to keep visible emissions below the PSD opacity limit. Weekly observations for any visible emissions will be required as described above. A deviation of the required monitoring as discussed previously above shall be reported as part of the required quarterly report.

The required quarterly report must contain all items as required for applicable equipment and applicable regulations.

All of the required reporting must be submitted on a quarterly basis, subsuming any semiannual or annual reporting established by applicable regulations.

Comment 14:

G3. Paved Roads. The Georgia Rule requests the use of paved roads to eliminate water sprays for dust control. During earlier discussions with EPD on fugitive dust emissions, Yellow Pine agreed to use paved roads. Accordingly, Yellow Pine requests to delete "water sprays" from the Roads in Part 4.6(j).

EPD Response:

Condition 4.6 is modified to remove item j – the requirement that paved roads be equipped with water sprays. Given that biomass is not prone to generating excessive road dust, water sprays on a paved road are overly onerous/

Comment 15:

H. Timing.

H1. Power Sales Contract Milestone. As discussed with EPD staff during the permit review process, Yellow Pine's viability is based on its power sales contracts with utilities. An earlier contract with Georgia Power Company was terminated because the air permit milestone could not be met. However, all of Yellow Pine's output has since been committed to a group of 37 electric cooperatives and municipal systems.

These contracts contain an air permit milestone to achieve a final, non-appealable air permit by May 31, 2009. Given the statutory 30-day appeal period, Yellow Pine would greatly appreciate all efforts EPD could make to issue its final permit and determination by April 30, 2009 such that the contracts' milestone can be achieved. Management of Yellow Pine is available at any time to discuss the foregoing comments.

EPD Response:

EPD strives to issue permits as expeditiously as possible within the confines of its permitting procedures and ensuring that the permit is not in violation of state and/or federal laws and guidelines.

TOMMY BENNETT COMMENTS

Comments were received from Tommy Bennett, Owner of Bennett Auto Parts, LLC, by Public Written Comment Form on April 7, 2009.

Comment 1:

Move to issue permit as quickly as possible. This facility will use our local natural resources and create jobs and business for a timber industry that is now depressed. The DNR Air Protection in Ga Brochure talks of explosive growth. That is not the case in this area. We need any growth that does and will comply with the rules, regulations and laws.

EPD Response:

Comment so noted.

DAVE EVERSON COMMENTS

Verbal Comments were received from Dave Everson, former Director of Southwest Chamber of Commerce, during the April 7, 2009 public hearing.

Comment 1:

In summary, Mr. Everson expressed his support for the proposed Yellow Pine facility as will provide jobs and revenue to Clay County and its residents. Mr. Everson also asked that EPD reexamine its evaluation on the Yellow Pine facility's ability to fire five percent of tire derived fuel.

EPD Response:

Comment regarding support of the plant is so noted.

With regards to the firing of tire derived fuel (TDF), EPD does provide Yellow Pine with the opportunity to fire TDF up to 15 percent on a heat input basis [which, according to Application 17700, equates to five percent on a percent weight basis] on a trial burn basis. The facility has not been allowed to fire TDF regularly as specified because of Yellow Pine's inability to provide EPD requested TDF specifications from one of its likely TDF suppliers, and because Yellow Pine has indicated that the type of TDF Yellow Pine would need was not currently available, as discussed in EPD's November 12, 2008 letter to Yellow Pine. In addition, Yellow Pine has not adequately demonstrated need for supplemental fuels in general. Therefore, EPD believes it is appropriate to authorize a trial burn of TDF in the permit that would allow EPD to see the impact on emissions and for Yellow Pine to see if the TDF would be advantageous from an operational standpoint.

STAN JONES COMMENTS

Comments were received from Stan Jones, citizen of Alabama, by Public Written Comment Form on April 7, 2009.

Comment 1:

Biomass plant will create jobs in area and produce cleaner and renewable energy. Will boost local economy.

I would like to see your agency abandon the sulfur checking as it will add unnecessary expenses to this project.

EPD Response:
Comment so noted. See EPD Response to Yellow Pine's written Comment 4 in reference to sulfur checking comment.

JONATHAN PARKER COMMENTS

Verbal Comments were received from Jonathan Parker, Register Forester Southern Select Forestry Services, Inc., during the April 7, 2009 public hearing.

Comment 1:

In summary, Mr. Parker expressed his concerns that the Governor's Executive Order which expedites renewable energy permit applications with a 90 day turnaround time for an acceptable application is not being followed since the application review process is in its 20th month. In addition, Mr. Parker expressed concerns of the potential loss of contracts due to the delay in issuance of the proposed Yellow Pine permit. Mr. Parker also commented that that testing of biomass for sulfur in Condition 5.5 is not needed.

EPD Response:

EPD strives to issue permits as expeditiously as possible within the confines of its permitting procedures and ensuring that the permit is not in violation of state and/or federal laws and guidelines.

Yellow Pine's application originally included the request to fire bituminous coal and petroleum coke as supplemental fuels, both of which are not considered renewable fuels. The proposed usage of these fuels was not removed from consideration until so noted in EPD's November 12, 2009 letter. Furthermore, it should be noted that since the original application was submitted in October 2007, EPD has submitted six information requests to Yellow Pine requesting additional information regarding its application.

With regards to the potential of biomass sulfur content performance testing, please see EPD's response to Yellow Pine's written Comment 3.

Comment 2:

In summary, Mr. Parker expressed that he believes that the construction of the proposed Yellow Pine facility will facilitate long term management of the local forests by potentially reducing prescribed burning and open burning.

EPD Response:

Comment so noted.

Comments were received from Jonathan Parker, Register Forester Southern Select Forestry Services, Inc., by Public Written Comment Form on April 20, 2009.

Comment 1:

Please consider the total effect of this plant in terms of "smoke" emissions. This plant will greatly reduce outdoor burning and prescribe (control) fires for forest management.

The Forestry Commission can supply an idea of how many acres of type outdoor fire permits issued within 50 miles of plant site.

Because prescribe burning is only inexpensive way to mange unwanted vegetation, improve wildlife (manage certain ecosystems that require reduced woody understory), etc. a biomass market will improve air quality in my opinion.

EPD Response:

Comment so noted.

Comments were received from Jonathan Parker, Register Forester Southern Select Forestry Services, Inc., by letter on April 20, 2009.

Comment 2:

Our industry badly needs plants like this project. If there is supporting information, or any way we can facility better understanding please let me know.

EPD Response:

Comment so noted.

BYRON SANDS COMMENTS

Verbal Comments were received from Byron Sands, former Clay County Commissioners, during the April 7, 2009 public hearing.

Comment 1:

In summary, Mr. Sands expressed his support for the proposed Yellow Pine facility as will provide jobs and revenue to Clay County and its residents.

EPD Response:
Comment so noted.

DAVID SHIVERS COMMENTS

Verbal Comments were received from David Shivers, Chairman of the Clay County Commissioners, during the April 7, 2009 public hearing.

Comment 1:

In summary, Mr. Shivers expressed his support for the proposed Yellow Pine facility.

EPD Response:
Comment so noted.

EPD CHANGES

Part 60, Chapter I, Title 40 of the Code of Federal Regulations (40 CFR Part 60) New Source Performance Standards (NSPS) Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants has been revised since the issuance of the draft permit and associated preliminary determination. The revised rule includes revisions for affected facilities which commence construction, modification, or reconstruction on or after April 22, 2008. The final became effective April 28, 2009. As a result of the issuance of this rule the following modifications have been made.

Pages 14 and 15 of the preliminary determination are hereby amended as follows:

Part 60, Chapter I, Title 40 of the Code of Federal Regulations (40 CFR Part 60) New Source Performance Standards (NSPS) Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants

This regulation is applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin [40 CFR 60.670(a)]. This regulation applies to applicable sources constructed, modified, or reconstructed after August 31, 1983 [40 CFR 60.670(e)]. This regulation is applicable to the following equipment:

- Crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations.

- Limestone and sand processing, conveying, and storage equipment.

On and after the date on which the performance test required to be conducted by §60.8 is completed, Yellow Pine shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which contain particulate matter in excess of 0.032 ~~0.05~~ g/dscm (0.014~~0.022~~ gr/dscf); and exhibit greater than 7 percent opacity for each individual enclosed storage bins only~~, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device~~ [40 CFR 60.672(a) and Table 2 of 40 CFR 60, Subpart OOO].

On and after the sixtieth day after achieving the maximum production rate at which the applicable equipment will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, Yellow Pine shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected equipment any fugitive emissions which exhibit greater than 7 ~~10~~ percent opacity, except as provided in paragraphs ~~(c),~~ (d)~~,~~ and (e) of 40 CFR 60.672 [40 CFR 60.672(b) and Table 3 of 40 CFR 60, Subpart OOO].

On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, Yellow Pine shall not cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 12 ~~15~~ percent opacity [Table 3 of 40 CFR 60, Subpart OOO ~~40 CFR 60.672(c)~~].

Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section [40 CFR 60.672(d)]. If any transfer point on a conveyor belt or any other affected equipment is enclosed in a building, then each enclosed affected equipment must comply with the emission limits in paragraphs (a) and ~~,~~ (b) ~~and (c)~~ of section 40 CFR 60.672, or the building enclosing the affected facility or facilities must comply with the following emission limits: (1) Yellow Pine shall not cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions that exceed 7 percent opacity, except emissions from a vent as defined in §60.671, and~~.~~(2) Yellow Pine shall not cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in Table 2 of 40 CFR 60, Subpart OOO ~~paragraph (a) of 40 CFR 60.672~~ [40 CFR 60.672(e)].

On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, Yellow Pine shall not cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity [40 CFR 60.672(f) and Table 2 of 40 CFR 60, Subpart OOO]. Any baghouse that controls emission from only an individual, enclosed storage in is exempt form the applicable stack PM concentration limits (and associated performance testing) in Table 2 of 40 CFR 60, Subpart OOO, but must meet the applicable stack opacity limit and compliance requirements in Table 2 of 40 CFR 60, Subpart OOO [40 CFR 60.672(f)]. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions. ~~Multiple storage bins with combined stack emissions shall comply with the emission limits in paragraph (a)(1) and (a)(2) of 40 CFR 60.672 [40 CFR 60.672(g)].~~

~~On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, Yellow Pine shall not cause to be discharged into the atmosphere any visible emissions from: (1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin. (2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line [40 CFR 60.672(h)].~~

Pages 65 and 66 of the preliminary determination are hereby amended as follows:

Part 60, Chapter I, Title 40 of the Code of Federal Regulations (40 CFR Part 60) New Source Performance Standards (NSPS) Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants

Yellow Pine must determine compliance with the particulate matter standards in §60.672(a) (any transfer point on belt conveyors or from any other affected facility any stack emissions) as follows, except as specified in 40 CFR 60.75(e)(3 and (4) of 40 CFR 60.675: (1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter, and (2) Method 9 and the procedures in §60.11 shall be used to determine opacity [40 CFR 60.675(b)].

In determining compliance with the particulate matter standards in §60.672 (b) (any transfer point on belt conveyors or from any other affected equipment any fugitive emissions) and (c) (from any crusher, at which a capture system is not used, fugitive emissions), Yellow Pine must use Method 9 and the procedures in §60.11, with the following additions:

- The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

- The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

- For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible [40 CFR 60.675(c)(1)].

In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f), using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages) [40 CFR 60.675(c)(2)].
When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1), the duration of the Method 9 observations must be 30 minutes (five 6-minute averages. Compliance with the applicable fugitive emission limits in Table 3 of 40 CFR 60, Subpart OOO must be based on the average of the five 6-minute averages. ~~may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: (1) There are no individual readings greater than 10 percent opacity; and (2) There are no more than 3 readings of 10 percent for the 1 hour period~~ [40 CFR 60.675(c)(3)].

~~When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: (1) There are no individual readings greater than 15 percent opacity; and (2) There are no more than 3 readings of 15 percent for the 1 hour period [40 CFR 60.675(c)(4)].~~
In determining compliance with any transfer point on a conveyor belt or any other affected equipment enclosed in a building subject §60.672(e), Yellow Pine must use Method 9 ~~22~~ to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. ~~The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes~~ [40 CFR 60.675(d)].

Yellow Pine may use the alternatives to the reference methods and procedures specified in 40 CFR 60.675(e). To comply with §60.676(d), Yellow Pine must record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a)(1) and (2) ~~and (b)~~ during each particulate matter run and shall determine the averages [40 CFR 60.675(f)]. ~~Initial Method 9 performance tests under §60.11 of this part and §60.675 of this subpart are not required for: (1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin, or (2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding mill, or storage bin in the production line[40 CFR 60.675(h)].~~

Pages 76 and 77 of the preliminary determination are hereby amended as follows:

Table 5-5: Applicable Testing Requirements for Material Storage and Handling [Fuel Process Buildings 1 and 2, Tripper Deck Day Silos 1-5, and Fly Ash Silo]

Equipment/Process	40 CFR Part 60 Subpart OOO	40 CFR Part 52.21
Fuel Process Building 1	Opacity of 7% for individual enclosed storage bins only/ EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11
	PM emissions totaling 0.032 ~~0.05~~ g/dscm (0.014 ~~0.022~~ gr/dscf) / EPA Method 5 or Method 17 of 40 CFR Part 60 Appendix A and 40 CFR 60.675(b)	Not Applicable
Tripper Deck Day Silos 1-5	Opacity of 7% for individual enclosed storage bins only/ EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11	Opacity of 5% each / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11
	PM emissions totaling 0.032 ~~0.05~~ g/dscm (0.014 ~~0.022~~ gr/dscf) / EPA Method 5 or Method 17 of 40 CFR Part 60 Appendix A and 40 CFR 60.675(b)	Not Applicable
Fuel Storage Silo	Opacity of 7% for individual enclosed storage bins only/ EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11	Opacity of 7% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11
	PM emissions totaling 0.032 ~~0.05~~ g/dscm (0.014 ~~0.022~~ gr/dscf) / EPA Method 5 or Method 17 of 40 CFR Part 60 Appendix A and 40 CFR 60.675(b)	Not Applicable

Equipment/Process	40 CFR Part 60 Subpart OOO	40 CFR Part 52.21
Fly Ash Silo	Opacity of 7% for individual enclosed storage bins only/ EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11	Opacity of 7% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11
	PM emissions totaling 0.032 ~~0.05~~ g/dscm (0.014 ~~0.022~~ gr/dscf) / EPA Method 5 or Method 17 of 40 CFR Part 60 Appendix A and 40 CFR 60.675(b)	Not Applicable
Fuel Process Building 2	Not Applicable	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11

Pages 78 and 79 of the preliminary determination are hereby amended as follows:

Table 5-6: Applicable Testing Requirements for Material Storage and Handling [Barge/Clamshell Unloading (BCU), Conveyor Transfer Towers 1-3 (not 2) and 5-8 (CT 1-3 and 5-8)(not 6, 7, 8), Biomass Storage Pile (BSP), Limestone Storage Pile (LSP), Sand Storage Pile (SSP), Plant Roads (PR), and Fly Ash Trucks (FT)]

Equipment/Process	40 CFR Part 60 Subpart OOO	40 CFR Part 52.21
Barge/Clamshell Unloading	Opacity of 7 ~~10~~% / EPA Method 9 of 40 CFR Part 60 Appendix A, the procedures in §60.11, and 40 CFR 60.675(c)	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A, the procedures in §60.11, and 40 CFR 60.675(c) and EPA Method 22 of 40 CFR Part 60 Appendix A
Conveyor Transfer Towers 1, 3, and 5	Opacity of 7 ~~10~~% each / EPA Method 9 of 40 CFR Part 60 Appendix A, the procedures in §60.11, and 40 CFR 60.675(c)	Opacity of 5% each / EPA Method 9 of 40 CFR Part 60 Appendix A, the procedures in §60.11, and 40 CFR 60.675(c) and EPA Method 22 of 40 CFR Part 60 Appendix A
Conveyor Transfer Towers 2, 6, 7, and 8	Not Applicable	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11 and EPA Method 22 of 40

Equipment/Process	40 CFR Part 60 Subpart OOO	40 CFR Part 52.21
		CFR Part 60 Appendix A
Biomass Storage Pile	Not Applicable	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11 and EPA Method 22 of 40 CFR Part 60 Appendix A
Limestone Storage Pile	Not Applicable	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11 and EPA Method 22 of 40 CFR Part 60 Appendix A
Sand Storage Pile	Not Applicable	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11 and EPA Method 22 of 40 CFR Part 60 Appendix A
Plant Roads	Not Applicable	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11 and EPA Method 22 of 40 CFR Part 60 Appendix A
Fly Ash Trucks	Not Applicable	Opacity of 5% / EPA Method 9 of 40 CFR Part 60 Appendix A and the procedures in §60.11 and EPA Method 22 of 40 CFR Part 60 Appendix A

Pages 81 and 82 of the preliminary determination are hereby amended as follows:

Part 60, Chapter I, Title 40 of the Code of Federal Regulations (40 CFR Part 60) New Source Performance Standards (NSPS) Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants

Yellow Pine must, for applicable equipment that uses wet suppression to control emissions from the affected facility, perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. Yellow Pine must initiate corrective action within 24 hours and complete corrective action as expediently as practical if Yellow Pine finds that water is not flowing properly during an inspection of the water spray nozzles. Yellow Pine must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b) [40 CFR 60.674(b)].

Except as specified in paragraph (d) or (e) of 40 CFR 60.674, for applicable equipment that use a baghouse to control emissions, Yellow Pine must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A–7). The Method 22 (40 CFR part 60, Appendix A–7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, Yellow Pine must initiate corrective action within 24 hours to return the baghouse to normal operation. Yellow Pine must record each Method 22 (40 CFR part 60, Appendix A–7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). Yellow Pine may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A–7) to determine what constitutes normal visible emissions from that applciable baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of 40 CFR 60, Subpart OOO. The revised visible emissions success level must be incorporated into the permit for the affected facility, however [40 CFR 60.674(c)].
As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A–7) visible emissions inspections specified in paragraph (c) of 40 CFR 60.674, for applicable equipment that that uses a baghouse to control emissions may use a bag leak detection system. Yellow Pine must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of 40 CFR 60.674(d).

~~Monitoring shall be addressed under 40 CFR Part 52.21.~~

Yellow Pine must record each periodic inspection required under 40 CFR 60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). Yellow Pine must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available for the Division upon request [40 CFR 60.676(b)(1)]. For each bag leak detection system installed and operated according to 40 CFR 60.674(d), Yellow Pine must keep the records specified in 40 CFR 60.676(b)(2) (i) through (iii).

Yellow Pine must submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(b), (e), and f [40 CFR 60.676~~767~~(f)].

The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h) [40 CFR 60.767(g)].

The subpart A requirement under §60.7(a)(2) for notification of the date construction commenced is waived for affected facilities under 40 CFR 60, Subpart OOO [40 CFR 60.676(h)]. ~~anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this 40 CFR Part 60 Subpart OOO but as specified in 40 CFR 60.767(h).~~ Yellow Pine must submit notification of the actual date of initial startup of each affected facility to the Division [40 CFR 60.676(i)]. The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State [40 CFR 60.767(j)].

Page 96 of the preliminary determination is hereby amended as follows:

Section 5.0: Monitoring

Condition 5.1 explains general requirements for the operation of a continuous monitoring system.

Condition 5.2 requires the installation of BACT required CEMS in Stack FBS.

Condition 5.3 requires the a continuous operating hours meter for Source AB, a continuous temperature indicator for Source FB, a continuous means of determining the operating loads of Source FB, and a continuous means for determine the lime injection flow rate into DS1 for Source FB.

Condition 5.4 requires the monitoring of fuel usage from Source FB.

Condition 5.5 requires certification or sampling of fuel oil sulfur content to demonstrate compliance with Condition 2.10, 2.22, and 2.28.

Conditions 5.6 and 5.7 define the monitoring applicable to applicable materials handling equipment, the emergency generator and fire water pump, respectively.

Conditions 5.8 and 5.9 requires the monitoring of applicable materials handling equipment control equipment.

Permit Condition 2.31 of the draft permit was modified as a result of the issuance of the revised 40 CFR 60, Subpart OOO.

2.31 The Permittee shall not cause, let, suffer, permit or allow the emission of PM_{10} from each of the following equipment in amounts equal to or exceeding 0.032 ~~0.05~~ grams per dry standard cubic meter (g/dscm (0.014 ~~0.022~~ grains per dry standard cubic feet [gr/dscf])

a. Fuel Process Building 1 (Source ID No. FPB1)

b. Fuel Storage Silo (Source ID No. SLO)

c. Fly Ash Silo (Source ID No. FAS)

d. Tripper Deck Day Silos 1-5 (Source ID Nos. TDS1, TDS2, TDS3, TDS4, TDS5)

The emission limits listed in a., b., c., and d. of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 40 CFR 60.672(a) and Table 2 of 40 CFR 60, Subpart OOO, subsumed]

Permit Conditions 5.8 and 5.9 were added to the draft permit as a result of the issuance of the revised 40 CFR 60, Subpart OOO.

5.8 For applicable equipment listed in Permit Conditions 4.5 and 4.6 that use wet suppression to control particulate emissions, the Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b).
[40 CFR 60.674(b)]

5.9 For applicable equipment listed in Permit Conditions 4.5 and 4.6 that use a baghouse to control emissions except as specified in paragraph (d) or (e) of 40 CFR 60.674, the Permittee shall conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR 60, Appendix A–7). The Method 22 (40 CFR 60, Appendix A–7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the Permittee shall initiate corrective action within 24 hours to return the baghouse to normal operation. The Permittee must record each Method 22 (40 CFR 60, Appendix A–7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b).

As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A–7) visible emissions inspections specified in paragraph (c) of 40 CFR 60.674, the Permittee may use a bag leak detection system. The Permittee must install, operate, and maintain each bag leak detection system according to paragraphs (d)(1) through (3) of 40 CFR 60.674(d).
[40 CFR 60.674(c) and (d)]

Permit Condition 6.1 of the draft permit was modified as a result of the issuance of the revised 40 CFR 60, Subpart OOO.

6.1 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 are as follows:

a. Method 1 in Appendix A of 40 CFR Part 60 shall be used for the determination of sample point locations.

b. Method 3A or 3B in Appendix A of 40 CFR Part 60 may be used as specified in 40 CFR 60.49Da(J)(3)for the determination of CO_2 and O_2 concentrations from Source FB.

c. Methods 3A in Appendix A of 40 CFR Part 60 shall be used as a backup monitoring system to provide quality-assured monitor data for O_2 and CO_2 Concentrations from Source FB.

d. Method 6C in Appendix A of 40 CFR Part 60 shall be used as a backup monitoring system to provide quality-assured monitor data for SO_2 concentrations from Source FB.

e. Method 7E in Appendix A of 40 CFR Part 60 shall be used as a backup monitoring system to provide quality-assured monitor data for NO_x concentrations from Source FB.

f. CEMs shall be used to determine SO_2 concentrations from Source FB to meet the requirements of §60.47b(a) and (d) and §75.20(c)(1).

g. CEMs shall be used to determine NO_x and CO_2, or O_2 concentrations from Source FB to meet the requirements of §75.20(c)(1).

h. Methods 7, 7A, 7C, 7D, or 7E in Appendix A to part 60 must be used to measure total NO_x emissions, both NO and NO_2. The sections shall not be used, exceptions, and options of Method 7E in appendix A to part 60 as specified in 75.22(a)(5).

i. Performance Specification 4 of Appendix B of 40 CFR Part 60 shall be used to determine CO CEMS performance for Source FB

j. Section 2.1.1 in Appendix A to 40 CFR Part 75, as specified in 40 CFR 60.47(b), shall be used to determine SO_2 span values under paragraph 40 CFR 60.49Da(i)(3)(ii) for Source FB.

k. Section 2.1.2 in appendix A to 40 CFR Part 75 shall be used the NO_X span values.

l. Performance Specification 2 of Appendix B of 40 CFR Part 60 shall be used to determine SO_2, NO_x Calibration Gas Mixtures for Source FB.

m. Performance Specification 1 in 40 CFR Part 60, appendix B shall be used to determine COMs performance for Source FB.

n. Methods 3Aand 6C in Appendix A of 40 CFR Part 60 shall be used to determine calibration gases as specified in section 5 of appendix A to Part 75 for Source FB

o. Method 5 and Method 202 of Appendix A in 40 CFR Part 60 shall be used to determine PM Concentration for Source FB.

p. Methods 2 of Appendix A in 40 CFR Part 60 or its allowable alternatives, as provided in Appendix A of 40 CFR Part 60, except for Methods 2B and 2E in Appendix A of Part 60 shall be used to determine velocity and volumetric flow for Source FB.

q. Method 4 of Appendix A in 40 CFR Part 60 (either the standard procedure described in section 8.1 of the method or the moisture approximation procedure described in section 8.2 of the method) shall be used to correct pollutant concentrations from a dry basis to a wet basis (or from a wet basis to a dry basis) and shall be used when relative accuracy test audits of continuous moisture monitoring systems are conducted. For the purpose of determining the stack gas molecular weight, however, the alternative wet bulb-dry bulb technique for approximating the stack gas moisture content described in section 2.2 of Method 4 may be used in lieu of the procedures in sections 8.1 and 8.2 of the method in Appendix A of Part 60 for Source FB.

r. Method 29 of Appendix A in 40 CFR Part 60 shall be used for the determination of Hg and silver (Ag) concentrations from Source FB.

s. Method 9 of Appendix A in 40 CFR Part 60 shall be used to determine opacity from the auxiliary boiler.

t. ASTM E871-82 (2006), or approved equivalent shall be used to determine biomass moisture content.

u. ASTM D6700-01(2006), or approved equivalent shall be used to determine TDF moisture content.

v. ASTM E711-8, or approved equivalent shall be used to determine the heat content of biomass.

w. ASTM E775-87(2004), or approved equivalent shall be used to determine biomass sulfur content.

x. Method 25 of 40 CFR Part 60 Appendix A shall be used to determine volatile organic compounds concentrations.

y. Method 26 or Method 26A of 40 CFR Part 60 Appendix A shall be used to determine hydrogen chloride concentrations.

z. Method 29 of 40 CFR Part 60 Appendix A shall be used to determine lead concentrations.

aa. Method 19 in Appendix A of 40 CFR Part 60 shall be used for the determination of particulate matter (PM), carbon monoxide, nitrogen oxides, hydrogen chloride, mercury, lead, silver,VOC, and sulfur dioxide emission rates.

bb. Method 5 or 17 with Method 202 of Appendix A Part 60 shall be used to determine PM concentrations for the auxiliary boiler.

cc. Method 9 of Appendix A Part 60, 40 CFR 60.675(c), and §60.11 shall be used to determine opacity for the Emission Group NMH and Emission Group FMH.

dd. Method 5 or 17 of Appendix A Part 60 and 40 CFR 60.765 shall be used to determine PM concentrations for the fly ash silo, the fuel storage silo, fuel process building 1 and tripper deck silos 1-5.

ee. Method 22 shall be used to determine visible emissions from Emission Group NMH and Emission Group FMH.

~~ff. Method 9 of Appendix A Part 60, 40 CFR 60.675(c), and §60.11 shall be used to determine opacity for Emission Group NMH.~~

Permit Condition 7.4 and 7.5 of the draft permit were modified as a result of the issuance of the revised 40 CFR 60, Subpart OOO.

7.4 The Permittee must submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672 (b), (e), and (f).
[40 CFR 60.676~~767~~(f)]

7.5 The Permittee shall record each periodic inspection required under 40 CFR 60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The Permittee shall keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available for the Division upon request. For each bag leak detection system installed and operated according to 40 CFR 60.674(d), the Permittee shall keep the records specified in 40 CFR 60.676(b)(2) (i) through (iii).

The subpart A requirement under §60.7(a)(2) for notification of the date construction commenced is waived for affected facilities under 40 CFR 60, Subpart OOO.

The Permittee must submit notification of the actual date of initial startup of each affected facility to the Division.
~~The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under 40 CFR Part 60 Subpart OOO but as specified in 40 CFR 60.767(h).~~
[40 CFR 676(b) ~~and~~ 40 CFR 60.676(h), and 40 CFR 60.676(i)]

APPENDIX A

AIR QUALITY PERMIT
4911-061-0001-P-01-0

APPENDIX B

WRITTEN COMMENTS
RECEIVED DURING
COMMENT PERIOD