Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

October 12, 2005

CERTIFIED MAIL – Return Receipt Requested

Mr. F. J. Perrett
Environmental Manager
Rayonier Performance Fibers LLC
Fernandina Beach Mill
The Foot of Gum Street
P.O. Box 2002
Fernandina Beach, Florida 32035

RE: Request to Install the No. 6 Power Boiler and the No. 6 Batch Digester System
0890004-018-AC

Dear Mr. Perrett:

On September 12, 2005, the Department's Northeast District office received a request to install the No. 6 Power Boiler and the No. 6 batch digester system at the existing sulfite mill located in Fernandina Beach, Nassau County, Florida. The project has been transferred to the Department's Bureau of Air Regulation office located in Tallahassee. Based on our review of the proposed project, we have determined that the application is incomplete and the following additional information is needed in order to continue processing this application package. Please provide all assumptions, calculations, and reference material(s), that are used or reflected in any of your responses to the following issues:

1. The Department disagrees that the projects are unrelated and should be separately reviewed for PSD applicability. You state that the three existing boilers "... are unreliable and require frequent repair." This means that they experience frequent periods of down time during which they are not available. The new boiler project will clearly provide more operation to support the increased production. Nevertheless, based on timing alone and the proposed netting analysis for the boilers, these projects are considered one project for purposes of PSD applicability. As such, include the emissions increases from the production increase with the netting analysis for the boiler project and the total net emissions increase for each affected pollutant will be compared to Table 400-2 for significance. Therefore, please provide an emissions netting analysis that encompasses all of the permitting projects (contemporaneous emission increases and decreases) for the last five years from the date of the application.

2. From the Department's ARMS database, the following air construction permit projects from the last 5 years have been identified.

Project No. 0890004-014-AC: Brinks Bypass AC
Project No. 0890004-015-AC: Heat Input AC-Power Boilers
Project No. 0890004-017-AC: Subpart MM/Used Oil

Please provide a description and a summary of the annual emissions increases resulting from each project. These appear to be non-PSD minor source projects. Such projects must be included as contemporaneous emissions increases within the netting analysis. The revised netting analysis must also include increases from the requested production increase.

3. If the emissions netting analysis requested in No. 1, above, reflects that the proposed facility's modification is equal to or greater than the significant emission rate for any pollutant pursuant to Table 400-2 in Chapter 62-212, F.A.C., then a processing fee is required pursuant to Rule 62-4.050, F.A.C., and the requirements of Rule 62-212.400(5), F.A.C., must be addressed and provided.

4. The application indicates that "small amounts" of TDF and used oil fuel will be fired. Please identify the maximum hourly and annual throughputs for these fuels. Identify the hourly and annual emissions of metals associated with firing these fuels. Describe the methods that will be used to handle, store and feed TDF. Identify the procedures that will be used to ensure that the used oils meet the requirements for "on-specifications" used oil.

5. For the new No. 6 batch digester system's (BDS) effects on the mill's proposed production increase, provide the actual and future potential pollutant changes from affected emissions units in the pulping operations, the chemical recovery process operations, the bleach plant operations, and the power and steam production operations for the years 2003 and 2004. Please provide all calculations, emissions factors, assumptions and any reference material. Also, include the results of the analysis in the netting analysis. On page 27 of the rule applicability analysis, the discussion for the recovery boiler references 40 CFR 52.21(b)(41)(ii)(c) as the justification for excluding emissions from the netting analysis. This federal rule has not been adopted by Florida. Please revise accordingly.

6. The recovery boiler operated for 8072 hours for the calendar year 2004 and 7871 hours for the calendar year 2003; and, the production reported was 223,276 TADUP (tons of air dried unbleached pulp) for calendar year 2004 and 223,692 TADUP for calendar year 2003. However, the Annual Operation Report showed that the calculated pollutant emissions for NOx, PM/PM10 and CO were approximately twice as much for the calendar year 2004 than what was reported for the calendar year 2003. With all things being approximately equal, please explain why there is such a large difference in the reported emissions between the two years of operation.

7. The Department does not necessarily agree with the method used to estimate past actual NOx emissions. Please provide the emissions data for each of the test runs conducted (lb/MMBtu and lb/hour). Have all test runs been included? Identify the fuel blends and the percentage of each fuel fired during the tests. Identify the annual heat input from each fuel fired during the year. Was the Department's Northeast District Office afforded the opportunity to observe these tests by written notification and/or phone call? How does the method account for the firing of various fuel blends? Were tests also conducted for CO and/or VOC emissions? Identify all emissions tests results (CO, NOx, SO2, and VOC) conducted for Boilers 1 – 3.

8. The application proposes to convert a 1983 (NSPS: 40 CFR 60, Subpart D) traveling grate, coal-fired boiler to a bubbling fluidized bed boiler firing primarily wood waste. The application suggests that the costs of such a conversion will be less than half of the cost of a new "replacement" boiler.

Since initial construction of the 1983 boiler, identify each subsequent modification, the purpose, and the associated costs.

Please verify the costs provided to convert the existing boiler to a bubbling fluidized bed boiler. The estimate appears low given the extent of work proposed.

Please verify the estimated costs of $40 million for an equivalent "new" replacement 525 MMBtu/hour unit for this project. The estimate appears high with respect to recent projects. For example, U.S. Sugar recently constructed a new biomass boiler at its Clewiston facility. The 936 MMBtu/hour unit is a membrane wall boiler with balanced draft stoker, overfire air, rotating feeders, and pneumatic spreaders. The system also includes wet cyclone collectors, an electrostatic precipitator (ESP), a urea-based selective non-catalytic reduction (SNCR) system, and CO/NOx CEMS. The cost of the boiler system was reported to be approximately $40 million.

9. Identify the maximum emissions rates for the 1983 boiler as previously permitted. Are the emissions rates proposed for the converted boiler greater than the previously permitted emissions rates?

10. Discuss and compare the emission rates and dispersion characteristics of the existing stacks with the proposed stack.

11. On page 16 of the rule applicability analysis, Table 7 indicates that the steam measurement is not available. What was the problem with this year?

12. Appendix A identifies the source of the emissions factors used to determine estimated past actual annual emissions. Provide the emissions factors, activity factors, and annual estimates for each boiler. What are the maximum continuous heat input rates and steam production rates for each unit?

13. Identify the scrubber SO2 removal efficiency used to estimate annual emissions from the existing boilers. What is the basis of the removal efficiency? Has the removal efficiency been determined by stack tests? Identify any stack tests conducted related to SO2 emission rates.

14. Table 13 identifies "baseline" SO2 emissions from the pulping systems of 65.42 tons/year, which is based on actual emissions from 2000 and 2001. However, new federal regulations implemented more stringent controls for these units. Revise the baseline SO2 emissions accordingly.

15. Permit No. 0890004-010-AC established a facility-wide pulp production limit of 153,205 ADMT/year. Prior to this limit, was the facility restricted by permit as to production? Prior to the addition of the No. 6 digester, what was the maximum annual production rate (potential) of the facility?

16. Please perform SO2 NAAQS and PSD Class II increment modeling taking into Rayonier's requested new boiler with its new stack parameters, the lagoon and Rayonier's interaction with Smurfit-Stone's Fernandina Beach Mill. All property boundaries used in this modeling should be based on fence lines or boundaries that are routinely patrolled to prevent access of the public to the property.

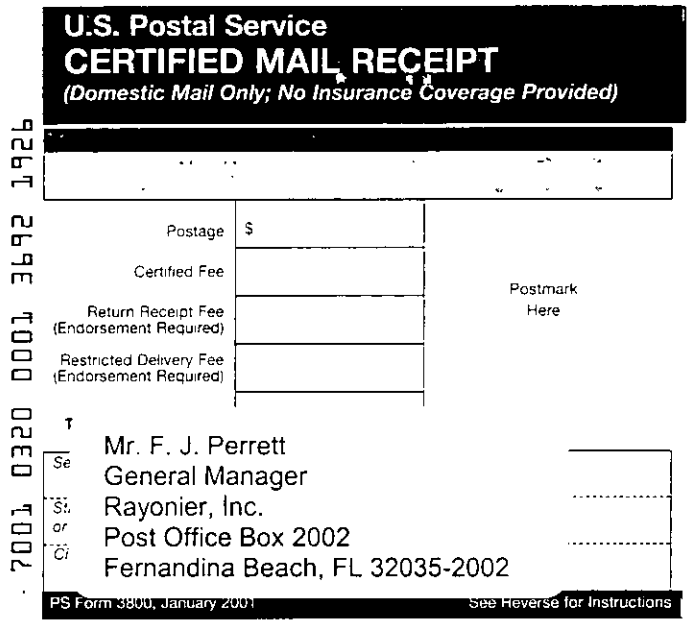
The Department will resume processing this application after receipt of the requested information. If you have any questions regarding this matter, please call Bruce Mitchell at (850)413-9198 or Cleve Holladay at (850)921-8986.

Sincerely,

Jeffery F. Koerner, P.E.
Permitting North Administrator
Bureau of Air Regulation

JFK/bm

cc: Chris Kirts, DEP - NED
David Tudor, Contact, RPF
David A. Buff, P.E., GAI



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Mr. F. J. Perrett
General Manager
Rayonier, Inc.
Post Office Box 2002
Fernandina Beach, FL 32035-2002

PS Form 3800, January 2001 See Reverse for Instructions