

# Florida Department of Environmental Protection

## Memorandum

TO: Joseph Kahn, Division of Air Resource Management  
THRU: Trina Vielhauer, Bureau of Air Regulation  
Jeff Koerner, New Source Review Section *JK*  
FROM: Corrie Branum, New Source Review Section *CB*  
DATE: April 17, 2008  
SUBJECT: Final Air Permit No. 0890004-021-AC  
Rayonier Performance Fibers, LLC  
Fernandina Beach Dissolving Sulfite Pulp Mill  
No. 6 Power Boiler, Miscellaneous Permit Revisions

The Final Permit for this project is attached for your approval and signature. The purpose of this project is to revise original air construction permit No. 0890004-018-AC for the No. 6 Power Boiler to:

- Increase the steam production limit;
- Authorize the firing of spent sulfur liquor;
- Remove the Boiler MACT provisions of Subpart DDDDD in 40 CFR Part 63; and
- Authorize a temporary trial burn of effluent treatment system solids. The trial burn has been added to section G of the final permit.
- Updated the numbering on conditions in section A.

The existing plant is located in Nassau County at Foot of Gum Street in Fernandina Beach, Florida. The project results in minor revisions and clarifications to permit conditions in the original air construction permit.

I recommend your approval of the attached Final Permit for this project.

Attachments

TLV/jfk/cb

**FINAL DETERMINATION**

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**PERMITTEE**

Rayonier Performance Fibers LLC  
Post Office Box 2002  
Fernandina Beach, FL 32035

**PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation, New Source Review Section  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

**PROJECT**

Project No. 0890004-021-AC  
Fernandina Beach Dissolving Sulfite Pulp Mill

Rayonier Performance Fibers operates an existing dissolving sulfite pulp mill (SIC No. 2611) located in Nassau County at the Foot of Gum Street in Fernandina Beach, Florida. The permit is to revise original air construction permit No. 0890004-018-AC for the No. 6 Power Boiler to: increase the steam production limit; authorize the firing of spent sulfur liquor; remove the Boiler MACT provisions of Subpart DDDDD in 40 Code of Federal Regulations Part 63; and authorize a temporary trial burn of effluent treatment system solids.

**NOTICE AND PUBLICATION**

The Department distributed an Intent to Issue Permit package on March 20, 2008. The applicant published the Public Notice of Intent to Issue in the News-Leader on April 2, 2008. The Department received the proof of publication on April 10, 2008.

**COMMENTS**

No comments on the Draft Permit were received from the public, the Department's Northeast District Office, the EPA Region 4 Office, the National Park Service, or the applicant.

**CONCLUSION**

The final action of the Department is to issue the permit.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

*In the Matter of an Application for Permit by:*

Rayonier Performance Fibers, LLC  
Post Office Box 2002  
Fernandina Beach, FL, 32035

Authorized Representative:

Mr. F.J. Perrett, General Manager

Project No. 0890004-021-AC  
Fernandina Beach Mill  
No. 6 Power Boiler, Permit Revisions  
Nassau County

Enclosed is the final air construction permit, which revises original air construction permit No. 0890004-018-AC for the No. 6 Power Boiler to: increase the steam production limit; authorize the firing of spent sulfur liquor; remove the Boiler MACT provisions of Subpart DDDDD in 40 Code of Federal Regulations Part 63; and authorize a temporary trial burn of effluent treatment system solids. The existing plant is located in Nassau County at the Foot of Gum Street in Fernandina Beach, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made to the permit as drafted. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief  
Bureau of Air Regulation

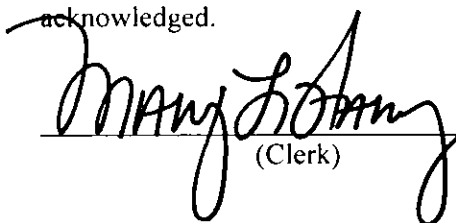
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit and Final Determination) was sent by electronic mail with received receipt requested before the close of business on 4/18/08 to the persons listed below.

- Mr. F.J. Perrett, Rayonier Performance Fibers, LLC ([jack.perrett@rayonier.com](mailto:jack.perrett@rayonier.com))
- Mr. Dave Rogers, Rayonier Performance Fibers, LLC ([david.rogers@rayonier.com](mailto:david.rogers@rayonier.com))
- Mr. Dave Tudor, Rayonier Performance Fibers, LLC ([david.tudor@rayonier.com](mailto:david.tudor@rayonier.com))
- Mr. David Buff, Golder Associates, Inc. ([dbuff@golder.com](mailto:dbuff@golder.com))
- Ms. Kathleen Forney, EPA Region 4 ([Forney.Kathleen@epa.gov](mailto:Forney.Kathleen@epa.gov))
- Mr. Chris Kirts, NED Office ([Christopher.Kirts@dep.state.fl.us](mailto:Christopher.Kirts@dep.state.fl.us))

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

  
\_\_\_\_\_  
(Clerk)

4/18/08  
(Date)



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## FINAL PERMIT REVISION

### PERMITTEE

Rayonier Performance Fibers, LLC  
The Foot of Gum Street  
Fernandina Beach, Florida 32035-1309

*Authorized Representative:*

Mr. F.J. Perrett, General Manager

Air Permit No. 0890004-021-AC Expires: March 1, 2009 Fernandina Beach Mill No. 6 Power Boiler Miscellaneous Revisions
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### FACILITY AND PROJECT

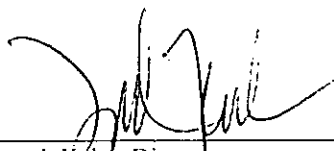
Rayonier Performance Fibers, LLC operates the Fernandina Beach Mill, which is an existing dissolving sulfite pulp mill (SIC No. 2611) located in Nassau County, at The Foot of Gum Street in Fernandina Beach, Florida. The UTM map coordinates are: Zone 17; 454.7 km East; and, 3392.2 km North.

Original air construction Permit No. 0890004-018-AC was issued to authorize: an increase in the permitted throughput capacity for the facility operations; installation of the new No. 6 Power Boiler to replace existing Nos. 1-3 Power Boilers; installation of three evaporator bodies to evaporate moisture from hot caustic extract; and to recognize the production of the No. 6 Batch Digester. This project is a revision of the original air construction permit to: increase the recognized maximum steam production rates; authorize spent sulfite liquor as an approved fuel; remove the industrial boiler MACT provisions (Subpart DDDDD, 40 Code of Federal Regulations (CFR) Part 63); and authorize a trial burn of effluent treatment system solids in the No. 6 Power Boiler. For more information on these projects refer to the project description found on the next page.

This air construction permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

### ATTACHMENTS

Appendix SS-1, Stack Sampling Facilities  
Table 297.310-1, Calibration Schedule

  
\_\_\_\_\_  
Joseph Kahn, Director  
Division of Air Resource Management

4/18/08  
\_\_\_\_\_  
Effective Date

JK/tlv/cb

## **PROJECT DESCRIPTIONS**

### **Permit No. 0890004-018-AC, Original Air Construction Permit**

Original air construction Permit No. 0890004-018-AC authorized: an increase in the permitted throughput capacity for the facility operations; installation of the new No. 6 Power Boiler to replaces existing Nos. 1-3 Power Boilers; installation of three evaporator bodies to evaporate moisture from hot caustic extract (HCE); and specification of the production of the No. 6 Batch Digester. The increase in production will occur in two stages and depends on the installation of some additional equipment including: addition of a new HCE washer press roll; first improvements to pulp machine (drying and head-box); addition of a new HCE evaporator train; installation of a new HCE blow heat recovery system to control all HCE cells; addition of a new HCE cell; installation of a new HCE washer; second improvements to pulp machine (drying and speed increase); and installation of a new post-HCE washer. The No. 6 Power Boiler is a refurbished coal-fired boiler that contains the following controls: settling chamber (ash hopper), 4-field electrostatic precipitator, alkaline wet scrubber, staged combustion, flue gas recirculation, and the capability to add a selective non-catalytic reduction system.

### **Air Permit No. 0890004-021-AC, Revised Air Construction Permit**

This project revises the original air construction permit for the No. 6 Power Boiler to: authorize increases the steam production limits without changes to the maximum heat input rates to reflect the actual thermal efficiency of the boiler; authorize the firing of spent sulfite liquor to be an authorized fuel; remove the industrial boiler MACT provisions (Subpart DDDDD, 40 CFR Part 63) that have been vacated by the EPA; and authorize a trial burn of effluent treatment system solids.

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permitted to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy any record that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. a description of and cause of non-compliance; and
  - b. the period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and

403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- (X) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
  - the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurement;
  - the dates analyses were performed;
  - the person responsible for performing the analyses;
  - the analytical techniques or methods used; and
  - the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



**SPECIFIC CONDITIONS:**

**A. No. 6 Power Boiler.**

<u>E.U. ID No.</u>	<u>Brief Description</u>
022	Bubbling Fluidized Bed No. 6 Power Boiler with a Settling Chamber followed by an ESP for PM emissions control and a Wet Alkali Scrubber for SO <sub>2</sub> emissions control

Emissions Unit 022 identifies the No. 6 Power Boiler, which is a converted existing power boiler. It will be firing mostly biomass (green bark, chips, knots, fines and landscape waste), tires, No. 2 fuel oil for startup, No. 6 fuel oil (max. sulfur content of 2.5%, by weight), spent sulfite liquor and small amounts of facility-generated on-spec used oil (to be blended with the No. 6 fuel oil). The boiler was originally constructed in 1983 as a traveling grate coal-fired boiler.

The converted boiler will include staged combustion and flue gas recirculation (FGR) to reduce NO<sub>x</sub> emissions. Due to the planned conversion, there is some uncertainty associated with the emissions characteristics. A selective non-catalytic reduction (SNCR) system may be installed to control NO<sub>x</sub> emissions. This would generally consist of an ammonia tank, pumps, piping, compressed air delivery, injectors, and a control system.

Particulate matter emissions will be controlled with a large settling chamber followed by an electrostatic precipitator (ESP). Large ash particles settle out in the chamber and are removed from the bottom hopper by a screw conveyor system. The design includes a four-field ESP with collector plates and rigid electrodes. Each field will have a dedicated transformer/rectifier (T/R) set and ash hopper. Ash will be removed by a screw conveyor system.

Acid gases will be controlled by a wet alkaline scrubber located after the ESP and induced draft fan. The wet scrubber will spray approximately 4000 gpm of re-circulated alkaline scrubber water over a series of chevrons and louver-type packings to reduce acid gas emissions. The design pressure drop across the system will be approximately 2 inches of water column. Emissions exhaust at a volumetric flow rate of 183,421 acfm and a temperature of 150° F through the single wet scrubber stack that will be approximately 10 feet in diameter and 190 feet above ground level.

{Permitting note(s): This emissions unit is regulated under: 40 CFR 60, Subpart D; adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

**The following specific conditions apply to the emissions unit listed above:**

**General**

**A.0. General.**

a. Power Boilers Nos. 1, 2 and 3 shall be permanently shutdown once Power Boiler No. 6 becomes commercially operational and has been compliance tested.

[Rules 62-4.070(3) and 62-212.400(5), F.A.C.]

**b. References/Acronyms.**

1. SIP: Florida's State Implementation Plan.
2. NSPS: New Source Performance Standards.
3. NESHAP: National Emission Standards for Hazardous Air Pollutants.
4. AC: Air Construction Permit.
5. PSD NSR: Prevention of Significant Deterioration New Source Review.
6. CEMS: continuous emissions monitoring system.
7. COMS: continuous opacity monitoring system.

c. Unless otherwise stated, the "Administrator" is the Department's "Secretary" or its designee.

**d. Control Equipment.**

1. To control particulate matter, the permittee shall install a settling chamber (or equivalent) followed by a 4-field electrostatic precipitator designed to achieve at least the emissions standards specified in this permit.
2. To control acid gases, the permittee shall install a wet alkaline scrubber designed to achieve at least the emissions standards specified in this permit.
3. To control nitrogen oxides, the converted boiler shall be designed with staged combustion and include flue gas recirculation (FGR). In addition, the permittee is authorized to install (as necessary) a selective non-catalytic reduction system (SNCR) with ammonia injection to achieve at least the emissions standards specified in this permit.

[Rule 62-4.070(3), F.A.C.]

### **Operational Parameters**

#### **A.1. Permitted Capacity.** The maximum heat input rates are:

- a. The maximum heat input rate is 525 MMBtu/hour based in a 24-hour average, which is approximately 330,000 lb/hour of steam production. Initial and annual compliance testing shall be conducted within 90% of this permitted steam rate. If the initial compliance tests cannot be performed at this level, the AC will be modified to reflect the actual installed capacity; and,
- b. The maximum annual heat input rate is 450 MMBtu/hour which is approximately 286,000 lb/hr of steam production. This will require recordkeeping on a 12-month rolling average basis.

[Rules 62-4.070(3), 62-204.800 and 62-212.200 (PTE), F.A.C.; and, application received September 12, 2005]

#### **A.2. Methods of Operation.** This boiler may be fired with:

- a. Biomass, consisting of green bark, knots, chips, fines and landscape waste.
- b. Tire derived fuel (TDF).
- c. No. 6 fuel oil with a maximum sulfur content of 2.5%, by weight, during startup, shutdown, or as a temporary alternate fuel during solid fuel feed upsets.
- d. Facility-generated on-specification used oil with a maximum sulfur content of 2.5%, by weight, and shall be blended with the No. 6 fuel oil or spent sulfite liquor prior to firing.
- e. No. 2 fuel oil for startup.
- f. Spent sulfite liquor with a maximum sulfur content of 5.5%, by weight, for startup, shutdown, or as a temporary alternate fuel during solid fuel feed upsets. The maximum firing rate is 1200 gph of this fuel.

[Application Nos. 0890004-018-AC and 0890004-021-AC; Rule 62-710.210, F.A.C.; and, 40 CFR Part 279]

#### **A.3. Hours of Operation.** The hours of operation are not limited, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, application received September 12, 2005]

### **Emission Limits and Standards**

*{Permitting Note: Unless otherwise specified, the averaging times for these specific conditions A.4. and thru A.11. are based on the specified averaging time of the applicable test method. The standards apply to all authorized fuels.}*

#### **A.4. Particulate Matter (PM).**

- a. As determined by an EPA Method 5 or 17 compliance test, PM emissions shall not exceed 0.07 lb/MMBtu heat input; nor 36.75 lbs/hr and 138.0 TPY.

[Application Nos. 0890004-018-AC and 0890004-021-AC; and Rule 62-4.070(3), F.A.C.]

- b. As determined by an EPA Method 5 or 5B compliance test, no owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which:

- (1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel or fossil fuel and wood residue; nor 52.5 lbs/hr.

[NSPS; and, 40 CFR 60.42(a)(1)]

c. As determined by an EPA Method 5 compliance test, PM emissions shall not exceed 0.2 lb/MMBtu heat input of carbonaceous fuel plus 0.1 lb/MMBtu heat input of fossil fuel; nor 105 lbs/hr.

[SIP; and, Rule 62-296.410(2)(b)(2) and Chapter 62-297, F.A.C.]

**A.5. Sulfur Dioxide (SO<sub>2</sub>).**

a. As determined by CEMS data, no owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:

- (1) 340 nanograms per joule heat input (0.80 lb per million Btu and 420 lbs/hr) derived from liquid fossil fuel or liquid fossil fuel and wood residue, and measured as any three-hour period (arithmetic average of three contiguous one-hour periods).

[NSPS; 40 CFR 60.43(a)(1); 40 CFR 60.45(g)(2); Application Nos. 0890004-018-AC and 0890004-021-AC; and, Rule 62-212.400(2)(g), F.A.C.]

b. In order to escape PSD NSR requirements and as determined by CEMS data, SO<sub>2</sub> emissions shall not exceed 210.0 tons per consecutive 12-month rolling total. All valid CEMS data (including startups, shutdowns and malfunctions) shall be used to determine compliance with this limit.

[Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400(2)(g), F.A.C.; Application Nos. 0890004-018-AC and 0890004-021-AC; and, supplemental information received November 7, 2005]

**A.6. Nitrogen Oxides (NO<sub>x</sub>).**

a. As determined by CEMS data, no owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub>, in excess of:

- (1) 129 nanograms per joule heat input (0.30 lb per million Btu and 101.20 lbs/hr), and measured as any three-hour period (arithmetic average of three contiguous one-hour periods).

[NSPS; 40 CFR 60.44(a)(2); 40 CFR 60.45(g)(3); Application Nos. 0890004-018-AC and 0890004-021-AC; and, Rule 62-212.400(2)(g), F.A.C.]

b. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NO_x} = \frac{w(260)+x(86)+y(130)+z(300)}{w+x+y+z}$$

where:

PS<sub>NO<sub>x</sub></sub> = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and,

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

[NSPS; and, 40 CFR 60.44(b)]

c. In order to escape PSD NSR requirements and as determined by CEMS data, NO<sub>x</sub> emissions shall not exceed 380.0 tons per consecutive 12-month rolling total. All valid CEMS data (including startups, shutdowns and malfunctions) shall be used to determine compliance with this limit.

[NSPS; Application Nos. 0890004-018-AC and 0890004-021-AC; 40 CFR 60.45(g); and, Rule 62-212.400(2)(g), F.A.C.]

**A.7. Carbon Monoxide (CO).** As determined by CEMS data, CO emissions shall not exceed 157.5 lbs/hr, 30-day rolling average; nor, 591.3 tons per consecutive 12-month rolling total. These limits are based on 0.3 lb/MMBtu heat input. All valid CEMS data (including startups, shutdowns and malfunctions) shall be used to determine compliance with this limit.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Application Nos. 0890004-018-AC and 0890004-021-AC]

**A.8. Volatile Organic Compounds (VOC).** As determined by an EPA Method 25A compliance test, VOC emissions shall not exceed 0.002 lb/MMBtu heat input; nor 1.05 lbs/hr and 3.94 TPY.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Application Nos. 0890004-018-AC and 0890004-021-AC]

**A.9. Visible Emissions.**

a. As determined by COMS data, no owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which:

- (1) Exhibit greater than 20 percent opacity (6-minute average) except for one six-minute period per hour of not more than 27 percent opacity.

[NSPS; 40 CFR 60.42(a)(2); and, 40 CFR 60.45(g)(1) Application Nos. 0890004-018-AC and 0890004-021-AC]

b. As determined by a DEP Method 9 compliance test, visible emissions shall not exceed 30 percent opacity except that a density of 40 percent opacity is permissible for not more than two minutes in any one hour.

[SIP; and, Rule 62-296.410(2)(b)1. and Chapter 62-297, F.A.C.]

**A.10. Fuel Oil Sulfur Content.** As determined by a lab analysis, the sulfur content of the as-fired No. 6 fuel oil shall not exceed 2.5 percent, by weight and spent sulfite liquor shall not exceed 5.5 percent, by weight.

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and Application Nos. 0890004-018-AC and 0890004-021-AC]

**A.11. "On-Specification" Used Oil.** The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. Only "on-specification" used oil generated by the facility shall be fired in this emissions unit. The "on-specification" used oil shall be blended with the No. 6 fuel oil prior to firing. "On-specification" used oil is defined as that which meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired. See Specific Conditions A.47. and A.48.

<u>CONSTITUENT / PROPERTY *</u>	<u>ALLOWABLE LEVEL</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100 °F minimum
PCBs	less than 50 ppm

\* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11]

b. Upon request, a certification shall be provided that the used oil (prior to blending with the No. 6 fuel oil) complies with the limits listed above, the provisions of 40 CFR 279 and 761, and shall be recorded and retained on file.

c. "On-specification" used oil may be fired as follows:

1. Any time provided the maximum concentration of PCBs is less than 2 ppm. The analysis and recordkeeping apply to each amount prior to blending even if to be blended with 90% virgin oil.
2. Only during normal operating temperature and not during startup and shutdown if the maximum concentration of  $2 \leq \text{PCB} \leq 50$  ppm.

[40 CFR 279 and 761; and, Rule 62-4.070(3), F.A.C.]

### **Excess Emissions**

*{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS provision.}*

**A.12. SIP Excess Emissions – Allowed.** Excess emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

**A.13. SIP Excess Emissions – Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

**A.14. NSPS Excess Emissions.** Excess emission and monitoring system performance reports shall be submitted to the Administrator for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in Sec. 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

- (1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
  - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.
- (3) Nitrogen oxides. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

[40 CFR 60.45(g)]

### **Monitoring of Operations**

**A.15. Determination of Process Variables.**

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

**A.16. Steam Monitoring**. The permittee shall continuously monitor the steam production rate to demonstrate compliance with the requirements of this permit.

[Rule 62-4.070(3), F.A.C.]

**Continuous Monitoring Requirements**

**A.17.** Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, carbon monoxide emissions and oxygen, in accordance with 40 CFR 60.13, 40 CFR 60.45, and 40 CFR 60, Appendices B and F.

[40 CFR 60.13; 40 CFR 60.45(a); 40 CFR 60, Appendices B and F; Rule 62-4.070(3), F.A.C.; and, application project No. 0890004-018-AC]

**A.18.** The owner or operator shall install, calibrate, maintain, and operate a continuous flow monitoring system in accordance with 40 CFR 60, Performance Specification 6 of Appendix B and Procedure 1 of Appendix F.

[Application project No. 0890004-018-AC; and, 40 CFR 60, Appendices B and F]

**A.19.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas.....	{1}	500
Liquid.....	1,000	500
Solid.....	1,500	1000
Combinations.....	$1,000y + 1,500z$	$500(x+y) + 1,000z$

{1} Not applicable.

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel, and
- z = the fraction of total heat input derived from solid fossil fuel.

(4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.

(5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and non-fossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

[40 CFR 60.45(c)]

**A.20.** For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF[20.9/(20.9\text{-percent } O_2)]$$

where:

E, C, F, and % O<sub>2</sub> are determined under 40 CFR 60.45(f).

[40 CFR 60.45(e)]

**A.21.** The values used in the equation under 40 CFR 60.45(e)(1) is derived as follows:

(1) E = pollutant emissions, ng/J (lb/million Btu).

(2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by  $4.15 \times 10^{-4}$  M ng/dscm per ppm ( $2.59 \times 10^{-9}$  M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.

(3) % O<sub>2</sub>, %CO<sub>2</sub> = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).

(4) F, F<sub>c</sub> = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F<sub>c</sub>), respectively. Values of F and F<sub>c</sub> are given as follows:

(iii) For liquid fossil fuels including crude, residual, and distillate oils,  $F = 2.476 \times 10^{-7}$  dscm/J (9,220 dscf/million Btu) and  $F_c = 0.384 \times 10^{-7}$  scm CO<sub>2</sub> /J (1,430 scf CO<sub>2</sub> /million Btu).

(v) For bark  $F = 2.589 \times 10^{-7}$  dscm/J (9,640 dscf/million Btu) and  $F_c = 0.500 \times 10^{-7}$  scm CO<sub>2</sub> /J (1,840 scf CO<sub>2</sub> /million Btu). For wood residue other than bark  $F = 2.492 \times 10^{-7}$  dscm/J (9,280 dscf/million Btu) and  $F_c = 0.494 \times 10^{-7}$  scm CO<sub>2</sub> /J (1,860 scf CO<sub>2</sub> /million Btu).

(5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F<sub>c</sub> factor (scm CO<sub>2</sub> /J, or scf CO<sub>2</sub> /million Btu) on either basis in lieu of the F or F<sub>c</sub> factors specified in 40 CFR 60.45(f)(4):

$$F = 10^6 \frac{[227.2 (\text{pct. H}) + 95.5 (\text{pct. C}) + 35.6 (\text{pct. S}) + (\text{pct. N}) - 28.7 (\text{pct. O})]}{\text{GCV}}$$

$$F_c = \frac{2.0 \times 10^{-5} (\text{pct. C})}{\text{GCV (SI units)}}$$

$$F = 10^6 \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{\text{GCV (English units)}}$$

$$F_c = \frac{20.0(\%C)}{\text{GCV (SI units)}}$$

$$F_c = \frac{321 \times 10^3(\%C)}{\text{GCV (English units)}}$$

- (i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-73 (Reapproved 1979), 89, or D3176-74 or 89 (solid fuels) or computed from results using ASTM method D1137-53 or 75, D1945-64, 76, 91, or 96 or D1946-77 or 90 (Reapproved 1994) (gaseous fuels) as applicable. (These five methods are incorporated by reference-see 40 CFR 60.17.)
  - (ii) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 (Reapproved 1978), 96, or D5865-98 for solid fuels and D1826-77 or 94 for gaseous fuels as applicable. (These two methods are incorporated by reference-see 40 CFR 60.17.)
  - (iii) For affected facilities which fire both fossil fuels and non-fossil fuels, the F or F<sub>C</sub> value shall be subject to the Administrator's approval.
- (6) For affected facilities firing combinations of fossil fuels or fossil fuels and wood residue, the F or F<sub>C</sub> factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^n X_i F_i \quad \text{or} \quad F_C = \sum_{i=1}^n X_i (F_C)_i$$

where:

X<sub>i</sub> = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

F<sub>i</sub> or (F<sub>C</sub>)<sub>i</sub> = the applicable F or F<sub>C</sub> factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(f)]

### **Test Methods and Procedures**

**A.22.** In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d).

[40 CFR 60.46(a)]

**A.23. Boiler Thermal Efficiency.** In conjunction with the initial performance tests, the permittee shall determine the installed boiler's thermal efficiency while combusting 100% wood and also 100% fuel oil.

[Rule 62-4.070(3), F.A.C.]

**A.24.** The owner or operator shall determine compliance with the particulate matter, SO<sub>2</sub>, and NO<sub>x</sub> standards in 40 CFR 60.42, 60.43, and 60.44 as follows:

(1) The emission rate (E) of particulate matter, SO<sub>2</sub>, or NO<sub>x</sub> shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

where:

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O<sub>2</sub> = oxygen concentration, percent dry basis.

F<sub>d</sub> = factor as determined from Method 19.

[40 CFR 60.46(b)(1)]



**A.25. PM Emissions.**

a. For the NSPS limit, EPA Method 5 shall be used to determine the particulate matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and EPA Method 5B shall be used to determine the particulate matter concentration (C) after FGD systems. See Specific Condition A.4.a.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train shall be set to provide an average gas temperature of  $160 \pm 14$  °C ( $320 \pm 25$  °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of EPA Method 3B shall be used to determine the O<sub>2</sub> concentration (%O<sub>2</sub>). The O<sub>2</sub> sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of the sample O<sub>2</sub> sample concentrations at all traverse points.

(iii) If the particulate run has more than 12 traverse points, the O<sub>2</sub> traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O<sub>2</sub> traverse points.

[40 CFR 60.46(b)(2)]

b. For the SIP limit, the test method for PM shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. See Specific Condition A.4.b.

c. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rules 62-296.410(3)(b) & (c), F.A.C.]

d. A compliance test shall be conducted initially and once each federal fiscal year.

e. Within 90 days of first firing spent sulfite liquor, the permittee shall conduct an initial compliance test while firing spent sulfite liquor at permitted capacity. Thereafter, a compliance test while firing spent sulfite liquor shall be conducted if spent sulfite liquor is fired for 400 hours or more during the federal fiscal year.

[Rule 62-297.310(7)(a)4., F.A.C.]

**A.26. Sulfur Dioxide Emissions.**

a. EPA Method 6 shall be used to determine the SO<sub>2</sub> concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of EPA Method 3B shall be used to determine the O<sub>2</sub> concentration (%O<sub>2</sub>). The O<sub>2</sub> sample shall be taken simultaneously with, and at the same point as, the SO<sub>2</sub> sample. The SO<sub>2</sub> emission rate shall be computed for each pair of SO<sub>2</sub> and O<sub>2</sub> samples. The SO<sub>2</sub> emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

[40 CFR 60.46(b)(4)]

b. A compliance test shall be conducted initially and in accordance with 40 CFR 60.8. Continuous compliance shall be demonstrated by the required emissions monitoring system.

[40 CFR 60.8; and, Rule 62-297.310(7)(a)4., F.A.C.]

**A.27. Nitrogen Oxides Emissions.**

a. EPA Method 7 shall be used to determine the NO<sub>x</sub> concentration.

(i) The sampling site and location shall be the same as for the SO<sub>2</sub> sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

- (ii) For each NO<sub>x</sub> sample, the emission rate correction factor, grab sampling and analysis procedure of EPA Method 3B shall be used to determine the O<sub>2</sub> concentration (%O<sub>2</sub>). The sample shall be taken simultaneously with, and at the same point as, the NO<sub>x</sub> sample.
- (iii) The NO<sub>x</sub> emission rate shall be computed for each pair of NO<sub>x</sub> and O<sub>2</sub> samples. The NO<sub>x</sub> emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

[40 CFR 60.46(b)(5)]

b. A compliance test shall be conducted initially and in accordance with 40 CFR 60.8. Continuous compliance shall be demonstrated by the required emissions monitoring system.

[40 CFR 60.8; and, Rule 62-297.310(7)(a)4., F.A.C.]

**A.28. CO Emissions.** The test method for carbon monoxide emissions shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C. A compliance test shall be conducted initially and in accordance with 40 CFR 60.8. Continuous compliance shall be demonstrated by the required emissions monitoring system.

[40 CFR 60.8; and, Rules 62-297.401 and 62-297.310(7)(a)4., F.A.C.]

**A.29. VOC Emissions.**

a. The test method for VOC emissions shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C. A compliance test shall be conducted initially and in accordance with 40 CFR 60.8.; and, once every five years for renewal.

b. Within 90 days of first firing spent sulfite liquor, the permittee shall conduct an initial compliance while firing spent sulfite liquor at permitted capacity. Thereafter, a compliance test while firing spent sulfite liquor shall be conducted prior to renewing the Title V air operation permit.

[40 CFR 60.8; and, Rules 62-297.401 and 62-297.310(7)(a)4., F.A.C.]

**A.30. Visible Emissions.**

a. For the NSPS limit, EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. Compliance shall be demonstrated by COMS. See Specific Condition **A.11.a.**

[40 CFR 60.11; and, 40 CFR 60.46(b)(3)]

b. For the SIP limit, the test method for visible emissions shall be DEP Method, incorporated in Chapter 62-297, F.A.C. See Specific Conditions **A.11.b.** and **A.36.**

c. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rules 62-296.410(3)(a) & (c), F.A.C.]

d. A compliance test shall be conducted initially and in accordance with 40 CFR 60.8. Continuous compliance shall be demonstrated by COMS.

[40 CFR 60.8; and, Rule 62-297.310(7)(a)4., F.A.C.]

**A.31. DEP Method 9.** The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be

the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:

- a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
- b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.

[Rule 62-297.401, F.A.C.]

**A.32. Fuel Analyses.** For Power Boiler No. 6, the following fuel sampling and analysis protocol shall be used:

- a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition, by analyzing a representative sample of the blended fuel oil following each fuel delivery.
- b. Record hourly fuel totalizer readings with calculated hourly feed rates for each fuel fired, the ratio of fuels fired, the density of each fuel, and the percent sulfur content, by weight, of each fuel.
- c. The analyses of the No. 6 fuel oil, as received from the supplier in a bill of lading, shall include the following:
  1. Density (ASTM D 1298-80 or the latest edition).
  2. Calorific heat value in Btu per pound (ASTM D 240-76 or the latest edition).
  3. Sulfur content, by weight (ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition).
- d. On a quarterly basis, an analyses of the wood fuel and spent sulfite liquor shall include the following:
  1. Calorific heat value in Btu per pound (ASTM D2015-77, or the latest edition).
  2. Moisture content (ASTM D2016-74, 83, or the latest edition).
  3. Sulfur content, by weight (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods: EPA Publication SW-846 Third Edition (November 1986), or the latest edition).

[40 CFR 60, Subpart A]

**A.33. Required Number of Test Runs.** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

**A.34. Operating Rate During Testing.**

- a. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions

unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

b. If the new emissions unit is unable to achieve the designed permitted capacity (at least 90%) for the initial tests, then this permit will be revised to reflect the true installed capacity.

[Rule 62-4.070(3), F.A.C.]

**A.35. Calculation of Emission Rate.** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

**A.36. Applicable Test Procedures.**

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

**A.37. Required Stack Sampling Facilities.** When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

**A.38. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not

be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant

emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

### **Recordkeeping and Reporting Requirements**

#### **A.39. Notification.**

a. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's NED office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's NED.

[Rule 62-210.700(6), F.A.C.]

b. If CEMS or COMS data indicates non-compliance, the permittee shall notify the Department's NED office within one working day of such determination.

[Rule 62-4.070(3), F.A.C.]

**A.40. Plant Operation - Problems.** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Department as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations.

[Rule 62-4.130, F.A.C.]

**A.41. Test Reports.**

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's NED on the results of each such test.
- (b) The required test report shall be filed with the Department's NED as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's NED to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
  2. The facility at which the emissions unit is located.
  3. The owner or operator of the emissions unit.
  4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  8. The date, starting time and duration of each sampling run.
  9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  10. The number of points sampled and configuration and location of the sampling plane.
  11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  12. The type, manufacturer and configuration of the sampling equipment used.
  13. Data related to the required calibration of the test equipment.
  14. Data on the identification, processing and weights of all filters used.
  15. Data on the types and amounts of any chemical solutions used.
  16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  18. All measured and calculated data required to be determined by each applicable test procedure for each run.
  19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
  20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
  21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

**A.42.** Monthly records shall be kept of the quantity of “on-specification” used oil fired in these emissions units. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. See Specific Conditions **A.13.** and **A.48.**

[Rule 62-213.440(1)(b)2.b., F.A.C.; and, 40 CFR 279.61 and 761.20(e)]

**A.43.** The permittee shall include in the “Annual Operating Report for Air Pollutant Emitting Facility” a summary of the “on-specification” used oil fired in the No. 6 Power Boiler during the calendar year. See Specific Conditions **A.13.** and **A.47.**

[Rule 62-213.440(1)(b)2.b., F.A.C.]

**A.44. NSPS Excess Emission and Monitoring System Performance Reports.** Excess emission and monitoring system performance reports shall be submitted to the Administrator for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in Sec. 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

(1) **Opacity.** Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

(2) **Sulfur dioxide.** Excess emissions for affected facilities are defined as:

(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard established under 40 CFR 60.43. See Specific Condition **A.5.a.(1).**

(3) **Nitrogen oxides.** Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44. See Specific Condition **A.6.a.(2).**

[40 CFR 60.45(g)(1), (2) & (3)]

**A.45.** Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a)]

**A.46.** Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator:

(1) Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

(2) Approves the use of an equivalent method;

(3) Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;

(4) Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard; or

(5) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)(1), (2), (3), (4) & (5)]

**A.47.** Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations

during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

**A.48.** The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

[40 CFR 60.8(d)]

**A.49.** The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (1) Sampling ports adequate for test methods applicable to such facility. This includes
  - (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and
  - (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)(1), (2), (3) & (4)]

**A.50.** Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)]

**B. No. 6 Batch Digester.**

**B.1.** The new No. 6 batch digester is in operation and included in with the "batch digesters" under Emissions Unit 005, Vent Gas Scrubber and Direct Contact Condenser", and is subject to the terms and conditions established for this emissions unit in Title V permit, No. 0890004-011-AV, specifically in Subsection G., which is incorporated by reference.

{Emission Unit 005 includes the vent gas scrubber (wet scrubber), which controls emissions from numerous vents from the cooking acid plant, the red stock washers, the unwashed stock tank, the spent sulfite liquor storage tanks, the spent sulfite liquor washer area, the digesters, and the blow pits. The scrubber is a packed bed containing 10 feet of packing consisting of two packed sections. The lower section is designed for sulfur dioxide emissions control via gas absorption using alkaline scrubbing media (soda ash, sodium hydroxide, etc.). The spent scrubber media is bled first to other closed sources to make maximum use of the alkali to remove sulfur dioxide, and then to sewer via closed piping to number 1 Pump Station. The sulfur dioxide concentration in the stack is continuously measured with a CMS.



The upper packed section of the vent gas scrubber is designed to condense methanol from the gas stream by direct contact with fresh well water, i.e. the Direct Contact Condenser. This is a once through process. The condensed methanol held in the water is sent to the biological effluent treatment system for treatment in order to comply with the requirements of 40 CFR 63, Subpart S.}

**C. Multiple Effect Evaporators (3 Bodies).**

**C.1.** The permittee is authorized to install three (3) new Multiple Effect Evaporators (MEEs) bodies, which are refurbished existing units. They will form a new train to be used to increase the solids concentration of weak HCE, a byproduct stream from the manufacturing process that can be used at Kraft mills as a sodium source. All of the MEEs will vent through a common condenser used to collect methanol and then vented to the atmosphere via the sulfur dioxide recovery scrubber for the recovery boiler. The new bodies will be lumped in with the two sets of MEEs and will now be described as “three” sets of MEEs under Emissions Unit 021, and subject to the terms and conditions established for this emissions unit in Title V permit, No. 0890004-011-AV, specifically in Subsection G., which is incorporated by reference.

{Emissions Unit 021 includes the Evaporator Vents Methanol Condenser System. The steam that is used to eject the vent gases from the two sets of multiple effect evaporators along with the evaporator vent gases themselves, are piped to a pre-condenser which condenses the steam followed by the main condenser which condenses the methanol. The water used to condense the steam and methanol is reclaimed from the biological effluent treatment system after the methanol has been digested.

The condensate from the pre-condenser and the main condenser are sewered to the biological effluent treatment system via the Number 3 Pump Station for compliance with the 40 CFR 63, Subpart S requirements.

The non-condensable gases from the main condenser are sent to the multi-stage wet scrubber/Brinks Demister at the Recovery boiler (Emissions Unit No. 006).}

**D. Facility.**

**D.1. Capacity.**

- a. Except as provided below, the facility’s production shall not exceed 162,000 air dried metric tons (ADMT) per consecutive 12-months, rolling total.
- b. Upon successful installation and submittal of the engineering report of the HCE blow heat recovery system to control VOC emissions from all of the HCE cells, the facility’s production shall not exceed 175,000 ADMT per consecutive 12-months, rolling total.

[Rules 62-4.070(3), 210.200(PTE) and 62-212.400(5), F.A.C.]

**D.2.** The application indicates the following preliminary schedule for commencing construction:

Date	Activity
February 2006	Add a new HCE washer press roll
February 2007	Begin first improvements to pulp machine (drying and head-box)
	Add a new HCE evaporator train
February 2008	Install a new HCE blow heat recovery system to control all HCE cells
	Add a new HCE cell
	Install a new HCE washer
	Begin second improvements to pulp machine (drying and speed increase)
	Install a new post-HCE washer

\* It is noted that some of the later changes are contingent on the success of the earlier stages.

**D.3.** The permittee is authorized to perform the following construction and work:

- a. add a new HCE washer press roll;
- b. begin first improvements to pulp machine (drying and head-box);
- c. add a new HCE evaporator train; install a new HCE blow heat recovery system to control all HCE cells;
- d. add a new HCE cell;
- e. install a new HCE washer; begin second improvements to pulp machine (drying and speed increase); and,
- f. install a new post-HCE washer.

The permittee shall obtain prior written approval for any substantial changes to the work described above and in the application for this project.

**D.4.** Within fourteen (14) days of completing each of the above stages of work, the permittee shall provide a written notice of the following:

- a. type of work;
- b. date completed;
- c. deviations from original proposal; and,
- d. a discussion of any emissions impacts.

**D.5.** Attached to each required Annual Operating Report, the permittee shall provide a summary of the following to the compliance authority:

- a. a summary of work performed to date;
- b. a summary of work remaining;
- c. a preliminary schedule for completing any remaining work; and,
- d. the current production capacity of the mill (ADMT per year).

**D.6.** Performance tests.

a. Prior to increasing plant production beyond 162,000 ADMT per year, the permittee shall install a new HCE blow heat recovery system designed to reduce VOC emissions by 60% from all HCE cells. Upon successful completion of this system, the permittee shall conduct an engineering study to determine the effectiveness of this system in capturing and reducing VOC emissions to achieve designed efficiency. A test protocol shall be submitted to the Department for review and approval prior to commencing the engineering study. Within 60 days of completing the engineering study, the permittee shall submit a report summarizing: the final installed design, material flow rates, emissions, emissions capture, emissions control, and any necessary adjustments.

[Rule 62-4.070(3), F.A.C.]

**E. Miscellaneous.**

**E.1. Report of Actual Emissions.** The permittee shall maintain and submit actual annual emissions for a period of 5 years following completion of each project phase. Emissions related to demand growth that could have been accommodated prior to the project must be shown and discussed. This requirement shall be fulfilled by submittal of a report in conjunction with the required Annual Operating Report.

[Rule 62-4.070(3) and 62-212.400(5), F.A.C.]

**E.2. Testing While Burning TDF.** A one-time test shall be conducted while burning the maximum percentage of TDF expected using EPA Method 29 pursuant to 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.

[Rule 62-4.070(3) and Chapter 62-297, F.A.C.; and, 40 CFR 60, Appendix A]

**F. Bleach Plant.**

**F.1.** The dissolving-grade bleaching system shall achieve compliance with the bleach plant provisions of 40 CFR 63.445 *as expeditiously as practicable*, but in no event later than 4 years from the issuance of this air construction permit.

[40 CFR 63.440(d)(2) and 63.445]

**G. Temporary Trial Burn of Effluent Treatment System Solids for No. 6 Power Boiler**

This section authorizes a temporary trial burn of effluent treatment system solids in the No. 6 Power Boiler to gather emissions and operational data. The results may later be used in an application for a permanent request to allow the firing of effluent treatment system solids.

**G.1. Authorization:** The permittee is authorized to conduct a temporary trial burn of effluent treatment system solids in the No. 6 Power Boiler (EU-022). Primary and secondary sludges are the only authorized solids that may be burned during the trial. Both sludges must be pressed to approximately 70% solids by weight or less. Up to 500 oven-dried tons of effluent treatment system solids may be fired during the trial burn. [Application No. 0890004-021-AC]

**G.2. Notification:** At least 15 days prior to conducting the tests, the permittee shall provide a schedule of the testing program to the Compliance Authority. The Compliance Authority may waive the 15-day advance notice requirement. The schedule shall be updated as necessary. [Application No. 0890004-021-AC]

**G.3. Emissions Tests:** Based on existing continuous emissions monitoring system (CEMS) data, the permittee shall monitor SO<sub>2</sub>, NO<sub>x</sub>, opacity, CO, and oxygen. During the trial burn, the permittee shall conduct three stack test runs to monitor PM, VOC, dioxins, hydrogen chloride, HAP metals, mercury and boiler ash. Tests shall be conducted under the maximum expected firing rates. The maximum firing rates during the tests will be used to determine the maximum allowable firing rates for any future permanent authorization. [Application No. 0890004-021-AC]

**G.4. Test Schedule:** The testing program shall commence upon first fire of effluent treatment system solids. All tests shall be completed within 30 days of first fire. If the permit has not expired, the permittee may request additional time from the Bureau of Air Regulation to complete the testing program. [Application No. 0890004-021-AC]

**G.5. Report:** Within 60 days of completing the testing program, the permittee shall submit a report summarizing the following: test program and procedures, data collection methods, tested configurations, analytical results, and a conclusion. A copy of the report shall be submitted to the Compliance Authority. [Application No. 0890004-021-AC]

## APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

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Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

**APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)**  
**(continued)**

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1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or, fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

**TABLE 297.310-1 CALIBRATION SCHEDULE**  
**(version dated 10/07/96)**

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004" 2%
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter	5%

{electronic file name: 297310-1.doc}

**Harvey, Mary**

**From:** Harvey, Mary  
**Sent:** Friday, April 18, 2008 2:48 PM  
**To:** 'Mr. F.J. Perrett, Rayonier Performance Fibers, LLC'; 'Mr. Dave Rogers, Rayonier Performance Fibers, LLC'; 'Mr. Dave Tudor, Rayonier Performance Fibers, LLC'; 'Mr. David Buff, Golder Associates, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Kirts, Christopher  
**Cc:** Branum, Corrie; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL  
**Attachments:** 0890004.021.AC.F\_pdf.zip

<b>Tracking:</b>	<b>Recipient</b>	<b>Read</b>
	'Mr. F.J. Perrett, Rayonier Performance Fibers, LLC'	
	'Mr. Dave Rogers, Rayonier Performance Fibers, LLC'	
	'Mr. Dave Tudor, Rayonier Performance Fibers, LLC'	
	'Mr. David Buff, Golder Associates, Inc.'	
	'Ms. Kathleen Forney, EPA Region 4'	
	Kirts, Christopher	
	Branum, Corrie	Read: 4/18/2008 2:50 PM
	Walker, Elizabeth (AIR)	
	Gibson, Victoria	Read: 4/18/2008 2:50 PM

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site:  
<http://www.adobe.com/products/acrobat/readstep.html>.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

4/18/2008

## Harvey, Mary

---

**From:** Jack.Perrett@rayonier.com  
**Sent:** Friday, April 18, 2008 2:57 PM  
**To:** Harvey, Mary  
**Subject:** Re: RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL

Mary,

We received the permit.

Thank you,

Jack Perrett



## Harvey, Mary

---

**From:** David.Rogers@rayonier.com  
**Sent:** Friday, April 18, 2008 3:27 PM  
**To:** Harvey, Mary  
**Cc:** Kirts, Christopher; Branum, Corrie; Mr. Dave Tudor, Rayonier Performance Fibers, LLC; Mr. David Buff, Golder Associates, Inc.; Walker, Elizabeth (AIR); Ms. Kathleen Forney, EPA Region 4; Mr. F.J. Perrett, Rayonier Performance Fibers, LLC; Gibson, Victoria  
**Subject:** Re: RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL  
**Attachments:** 0890004.021.AC.F\_pdf.zip



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\_pdf.zip (577 ...

We received the email of the final permit. Thank you.

David Rogers  
Manager, Environmental Operations  
Rayonier Fernandina Mill

"Harvey, Mary"  
<Mary.Harvey@dep.  
state.fl.us>

04/18/2008 02:48  
PM

To  
"Mr. F.J. Perrett, Rayonier  
Performance Fibers, LLC"  
<jack.perrett@rayonier.com>, "Mr.  
Dave Rogers, Rayonier Performance  
Fibers, LLC"  
<david.rogers@rayonier.com>, "Mr.  
Dave Tudor, Rayonier Performance  
Fibers, LLC"  
<david.tudor@rayonier.com>, "Mr.  
David Buff, Golder Associates,  
Inc." <dbuff@golder.com>, "Ms.  
Kathleen Forney, EPA Region 4"  
<Forney.Kathleen@epa.gov>, "Kirts,  
Christopher"  
<Christopher.Kirts@dep.state.fl.us>  
cc

"Branum, Corrie"  
<Corrie.Branum@dep.state.fl.us>,  
"Walker, Elizabeth \ (AIR\)"  
<Elizabeth.Walker@dep.state.fl.us>,  
"Gibson, Victoria"  
<Victoria.Gibson@dep.state.fl.us>  
Subject  
RAYONIER PERFORMANCE FIBERS, LLC -  
PROJECT #0890004-021-AC-FINAL

Dear Sir/Madam:

## Harvey, Mary

---

**From:** Branum, Corrie  
**To:** Harvey, Mary  
**Sent:** Friday, April 18, 2008 2:49 PM  
**Subject:** Read: RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL

### Your message

**To:** 'Mr. F.J. Perrett, Rayonier Performance Fibers, LLC'; 'Mr. Dave Rogers, Rayonier Performance Fibers, LLC'; 'Mr. Dave Tudor, Rayonier Performance Fibers, LLC'; 'Mr. David Buff, Golder Associates, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Kirts, Christopher  
**Cc:** Branum, Corrie; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL  
**Sent:** 4/18/2008 2:48 PM

was read on 4/18/2008 2:50 PM.

## Harvey, Mary

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**From:** Gibson, Victoria  
**To:** Harvey, Mary  
**Sent:** Friday, April 18, 2008 2:50 PM  
**Subject:** Read: RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL

### Your message

**To:** 'Mr. F.J. Perrett, Rayonier Performance Fibers, LLC'; 'Mr. Dave Rogers, Rayonier Performance Fibers, LLC'; 'Mr. Dave Tudor, Rayonier Performance Fibers, LLC'; 'Mr. David Buff, Golder Associates, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Kirts, Christopher  
**Cc:** Branum, Corrie; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL  
**Sent:** 4/18/2008 2:48 PM

was read on 4/18/2008 2:50 PM.

## Harvey, Mary

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**From:** Kirts, Christopher  
**To:** Harvey, Mary  
**Sent:** Wednesday, April 23, 2008 8:25 AM  
**Subject:** Read: RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL

Your message

**To:** 'Mr. F.J. Perrett, Rayonier Performance Fibers, LLC'; 'Mr. Dave Rogers, Rayonier Performance Fibers, LLC'; 'Mr. Dave Tudor, Rayonier Performance Fibers, LLC'; 'Mr. David Buff, Golder Associates, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Kirts, Christopher  
**Cc:** Branum, Corrie; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL  
**Sent:** 4/18/2008 2:48 PM

was read on 4/23/2008 8:25 AM.

## Harvey, Mary

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**From:** Buff, Dave [DBuff@GOLDER.com]  
**Sent:** Monday, April 21, 2008 9:30 AM  
**To:** Harvey, Mary  
**Subject:** RE: RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL

David A. Buff, P.E., Q. E. P.  
Golder Associates Inc.  
Phone: (352)336-5600 x 545  
Fax: (352)336-6603 Mobile: (352)514-5600  
E-Mail: [dbuff@golder.com](mailto:dbuff@golder.com)

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**From:** Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]  
**Sent:** Friday, April 18, 2008 2:48 PM  
**To:** Mr. F.J. Perrett, Rayonier Performance Fibers, LLC; Mr. Dave Rogers, Rayonier Performance Fibers, LLC; Mr. Dave Tudor, Rayonier Performance Fibers, LLC; Buff, Dave; Ms. Kathleen Forney, EPA Region 4; Kirts, Christopher  
**Cc:** Branum, Corrie; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** RAYONIER PERFORMANCE FIBERS, LLC - PROJECT #0890004-021-AC-FINAL

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Thank you,

DEP, Bureau of Air Regulation

4/21/2008