Buckeye Florida, Limited Partnership
Foley Mill

Facility ID No.: 1230001
Taylor County

Title V Air Operation Permit Revision

FINAL Permit Project No.: 1230001-039-AV

Permitting and Compliance Authority:
Florida Department of Environmental Protection
Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256
Telephone: 904-256-1700
Fax: 904-256-1587

Title V Air Operation Permit Revision
FINAL Permit No.: 1230001-039-AV

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Permittee:
Buckeye Florida, Limited Partnership
Foley Mill

FINAL Permit No.: 1230001-039-AV
Facility ID No.: 1230001
SIC Nos.: 26 (2631, 2653)
Project: Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating the terms and conditions of the following Construction Permits: No. 1230001-023-AC/PSD-FL-397 (Foley Energy Independence Project), No. 1230001-036-AC/PSD-FL-397A (Extension of Foley Energy Independence Project permit), and No. 1230001-038-AC (Natural Gas Project for Bark Boiler No. 1 and Recovery Boiler No. 3).

This facility is located east of US 19, south of SR 30, southeast of Perry, Taylor County; UTM Coordinates: Zone 17, 256.7 km East and 3328.7 km North; Latitude: 30°03'59" North and Longitude: 83°33'12" West.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix A, Glossary
Appendix 40 CFR 60, Subpart A - General Provisions.
Appendix 40 CFR 63, Subpart A - General Provisions.
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix C of 40 CFR 63
40 CFR 60 Appendix B Performance Specification 1
40 CFR 60 Appendix B Performance Specification 2
40 CFR 60 Appendix B Performance Specification 3
40 CFR 60 Appendix B Performance Specification 5
40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Appendix SC, Specific Conditions
Appendix AR, Applicable Rules
Appendix NAR, Non-applicable Rules
Appendix CAM
Appendix E (Summary of Final BACT Determinations) and Appendix F (Standard Continuous Emissions Monitoring Requirements)
USEPA Region 4 Alternative Monitoring Approval Letter dated July 20, 2001
USEPA Region 4 Alternative Monitoring Approval Letter dated March 5, 2002
USEPA Region 4 Alternative Monitoring Approval Letter dated April 14, 2003
USEPA Region 4 Alternative Monitoring Approval Letter dated March 31, 2004
USEPA Region 4 Clean Condensate Alternative Letter dated April 3, 2006
USEPA RTP Alternative Test Method – Brown Stock Washers Approval Letter dated May 12, 2006
FDEP EMS Alternative Procedure – Methanol Analysis (EPA Method 308) Approval dated August 11, 2004

Effective Date:	**April 9, 2010**
REVISION DATE:	**April 26, 2010**
2nd REVISION DATE:	**April 16, 2013**
Renewal Application Due Date:	**August 27, 2014**
Expiration Date:	**April 9, 2015**

_____
Richard S. Rachal III. P.G.
Acting Program Administrator
Waste & Air Resource Management

RSR:jw

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Title V Air Operation Permit and attachments was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on April 16, 2013 to the persons listed below.

Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)
Mr. Howard Drew, Buckeye Florida., Limited Partnership (Howard_Drew@bkitech.com)
Mr. David Weeden, Buckeye Florida, Limited Partnership (Dave_Weeden@bkitech.com)
Mr. David A. Buff, P.E., Golder Associates, Inc. (dbuff@golder.com)
Ms. Tammy McWade, DARM, DEP (tammy.mcwade@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 ack

_____ April 16, 2013
(Clerk) (Date)

Section I. Facility Information.

Subsection A. Facility Description.

Buckeye Florida Limited Partnership Foley Mill is a softwood, Kraft pulp mill that manufactures bleached market pulps and dissolving cellulose pulps. The dissolving cellulose pulp produced at this plant is used in products such as food casings, rayon industrial cord, acetate fibers and plastics, as well as thickeners for personal care products, food and pharmaceuticals The bleached market pulps are used in products such as disposable diapers, feminine hygiene products and incontinence products.

Major activities areas include: wood handling facility, pulping system, purification, chemical recovery, power house**,** drying/ converting/ warehouse, and associated processes and equipment.

Also included in this permit are miscellaneous unregulated and insignificant emissions units and/or activities.

Based on the Title V permit renewal application received 08-06-2012, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

EU No.	**Description**
002	No.1 POWER BOILER
003	No.2 POWER BOILER
004	No.1 BARK BOILER
006	No.2 RECOVERY BOILER
007	No.3 RECOVERY BOILER
011	No.4 RECOVERY BOILER
019	No.2 BARK BOILER
021	No.2 SMELT DISSOLVING TANK
022	No.3 SMELT DISSOLVING TANK
023	No.4 SMELT DISSOLVING TANK
024	No.4 LIME KILN AND STORAGE BINS (2)
025	2 LIME SLAKERS
040	TALL OIL PROCESSING
041	No.2 PURIFICATION PLANT
045	No.1 PURIFICATION PLANT
046	PULPING SYSTEM MACT I

Unregulated Emissions Units and/or Activities

Refer to Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History
Statement of Basis

These documents are on file with permitting authority:

Title V Permit Revision application received August 6, 2012

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendices. The permittee shall comply with all listed Appendices. Each document is an enforceable part of this permit unless otherwise indicated.

[Rule 62-213.440, F.A.C.]

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor.

[Rule 62-296.320(2), F.A.C.; Construction Permit No. AC62-107858; Construction Permit No. AC62-141924, Construction Permit No. AC62-141925; Construction Permit No. AC62-141926; Construction Permit No. AC62-141919; Construction Permit No. AC62-141920; Construction Permit No. AC62-141921; Construction Permit No. AC62-141922; Construction Permit No. AC62-141916; Construction Permit No. AC62-141917; Construction permit No. AC62-141918; Construction Permit No. AC62-107857; Construction Permit No. AC62-143536; Construction Permit No. AC62-172092; Construction Permit No. 1230001-013-AC]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered at this time.

[Rule 62-296.320(1)(a), F.A.C.]

5. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements:

The following requirements are "not federally enforceable":

- The application of wetting agents to stock piles to control emissions;
- The use of enclosed and semi-enclosed conveyors;
- Wind curtains; and
- The implementation of good housekeeping practices.

Additional measures employed in specific areas of the mill are described below.

Woodyard Area

Wood chips and wood wastes are transported throughout the wood yard area on semi-enclosed conveyor systems. Short drop points (conveyor to conveyor) are semi-enclosed. Longer drop points (stack-outs to storage piles) have a curtain, which encloses or semi-encloses the drop point. This reduces airborne particulate matter caused by wind shear and also helps to prevent material loss from the conveyor systems. The materials that do fall from the conveyors are collected periodically and transported to the wood wastes storage pile or to the Solid Waste Management Area.

Batch Digesting System Area

Wood chips are transported from the wood yard area to the digester chip feeder systems by means of semi-enclosed conveyor systems. The digester chip feeder systems are enclosed along the top floor of the batch digester system area. Wood chip overflows from the chip feeder systems are collected and conveyed by a drop chute to a ground level dumpster. The dumpster and fallen chips from the transport conveyor systems are periodically collected and taken to the wood wastes storage pile or to the Solid Waste Management Area.

Lime Kiln & Causticizing Area

Lime dust overflows and losses are generally by using enclosed or semi-enclosed conveying systems. Oversized lime balls from the lump crusher are diverted to a dumpster where they are collected and periodically taken to lime mud reclaim area for recycling back into the system. Lime mud off of the pre-coat filters can be diverted from the kiln to the reclaim mat for eventual recycling back into the system. The reclaim mat is enclosed on three sides to minimize airborne particles caused by wind shear. Dusting from lime spills is typically minimized by the use of wetting agents until they can be cleaned up and taken to the reclaim area. Vacuum trucks (super-sucker) are the preferred method used to clean up lime spills.

Facility Roads & Traffic

The major facility roadways and high traffic areas are paved. The maximum vehicle speed limit inside the facility is 10 miles per hour. The combined effect minimizes particulate emissions due to vehicular traffic.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the Title V Renewal permit application received 05-12-05, Attachment BF-FI-C3]

6. Startup, Shutdown, Malfunction Plan. For the No. 1 Power Boiler (EU 002) and the No. 1 Bark Boiler (EU 004) as the control devices for compliance with 40 CFR 60 Subpart S, No. 2 Recovery Boiler (EU 006), No. 3 Recovery Boiler (EU 007), No. 4 Recovery Boiler (EU 011), No. 2 Smelt Dissolving Tank (EU 021), No. 3 Smelt Dissolving Tank (EU 022), No. 4 Smelt Dissolving Tank (EU 023), No. 4 Lime Kiln (EU 024), No. 2 Purification Plant (041), and Pulping System MACT I (EU 046), the Permittee shall adopt and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction. The plan shall meet the requirements of 40 CFR 63.6(e)(3) including containing a program of corrective action for malfunctioning processes and the air pollution control and monitoring equipment used to comply with the relevant standards of 40 CFR Part 63. The current SSM Plan shall be maintained at the facility and be available for inspection and copying by the Administrator upon request. If the SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), the Permittee shall maintain at the facility each previous (i.e., superseded) version of the SSM Plan, and shall make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a Part 70 or 71 permit revision. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield.

Emissions Unit 045 (including the air pollution control and monitoring equipment), shall have a SSM Plan no later than the established compliance date for compliance with bleach plant provisions of §63.445 of 40 CFR 63 Subpart S.

[40 CFR 63.6(e) and 63.863(a)]

7. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which is day one.

[Rule 62-213.440, F.A.C.]

Annual Reports and Fees

8. Additional Testing Requirements. See Appendix RR, Facility-wide Reporting Requirements, for additional details.

[Rule 62-297.310, F.A.C.]

9. Prevention of Accidental Releases (Section 112(r) of CAA).

The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921; Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 10162
Fairfax, VA 22038
Telephone: (703) 227-7650

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

10. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year.

[Rule 62-210.370(3), F.A.C.]

11. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/Air/permitting/tvfee.htm.

[Rule 62-213.205, F.A.C.]

12. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3)(a)2. & 3. and (b); and 62-213.900, F.A.C.]

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

14. Submittals. All reports, tests, notifications or other submittals required by this permit shall be submitted to the Department's Northeast District, Air Section:

Florida Department of Environmental Protection
Northeast District Office
Air Resource Section
7777 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256
Telephone: 904/256-1700
Fax: 904/256-1590

15. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency, Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

Applicable and Non-Applicable Requirement Determinations

16. The DEP has determined that the applicable requirements in the attached Appendix SC (Specific Conditions) Applicability List, based on applicant submittal, were identified in the permit application .

[Rule 62-213.460, F.A.C. (Permit Shield)]

17. The applicable requirements identified in the attached Appendix AR (Applicable Rules) Applicability List, based on applicant submittal, and listed in the application are included in the permit in a correct manner to the best knowledge of the DEP

[Rule 62-213.460, F.A.C. (Permit Shield)]

18. The non-applicable requirements identified in the attached Appendix NAR (Non-applicable Rules) Non-Applicability List, based on applicant submittal, and listed in the application were specifically determined to be not applicable to this facility for the reason noted for each requirement. [Rule 62-213.460, F.A.C. (Permit Shield)]

19. Reserved.

Terms

20. The term "immediately" as used in Condition 12.(8) of APPENDIX TV-6, Title V Conditions, shall mean "within 24 hours or the next working day".
[Construction permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

21. The term "work site" as used in TV28 of APPENDIX TV, Title V General Conditions of this permit shall mean "facility".
[Construction permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

22. The term "monitoring information" as used in TV29 of APPENDIX TV, Title V General Conditions shall include electronic data.
[Construction permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

Production Capacity

23. The rated capacity of the No. 2 Mill BSW system shall not exceed 1100 metric tons (1213 short tons) ADUP per day.
[Construction Permit No. 1230001-014-AC]

24. The total mill pulp production capacity for the No. 1 Mill and the No. 2 Mill combined shall not exceed 2,532 tons per day air-dried unbleached pulp (ADUP) and 924,180 tons per year ADUP. This information shall be used for PSD purposes.

Annual Emission Reporting (Emission Units as Indicated Below)

25. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

b. The permittee shall report to the Department within 60 days after the end of each calendar year during the five-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

1) The name, address and telephone number of the owner or operator of the major stationary source;
2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
4) Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the Department requires the annual reporting of actual SAM, SO_2, TRS and VOC emissions for the following units: No. 1 Power Boiler, No. 2 Power Boiler, No. 1 Bark Boiler, No. 2 Bark Boiler, No. 2 Recovery Boiler, No. 3 Recovery Boiler and the Pulping and MEE Systems.

[Application 1230001-023-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
002	No. 1 Power Boiler (Babcock & Wilcox Co.). The emissions unit is an existing emissions unit constructed in 1953. The total maximum operational heat input of this emissions unit is 249 MMBtu/hr. This emissions unit is capable of serving the mill with 195,000 lb/hr of steam flow. At permitted capacity, the exhaust gas flow rate is 80,000 acfm with an exit temperature of 325° F. Exhaust gases exit a stack that is 13 feet in diameter and 225 feet tall. Low Volume, High Concentration (LVHC) Noncondensible gases (NCG) from the Pulping System (Nos. 1 and 2 Batch Digester Systems, Blow Heat Recovery System, the Turpentine Recovery System (includes the Turpentine Condenser, Decanter, Weir Box, and Underflow Tank), Nos. 1-4 Multiple Evaporator Systems, and the pulping process condensate collection system are collected and routed to a packed-bed, scrubber, manufactured by Croll Reynolds Inc., Model 36T-16H (a pre-scrubber), prior to entering the boiler for compliance with 40 CFR 63.443 (Phase I) compliance. This boiler is utilized as the secondary control device for compliance with these Subpart S standards. The No. 1 Bark Boiler is the primary control device. Weak wash is utilized as the scrubbing media in the pre-scrubber. The scrubber flow rate and pressure drop are continuously monitored. The control efficiency, as confirmed by test data, is a minimum of 50%. The boiler is authorized to operate as the secondary 40 CFR 63.443 (Phase I) control device for a period not to exceed 960 hours per year. This emissions unit is not subject to CAM.

{Permitting note(s): This emissions unit is regulated by 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400(2)(a)2.b., F.A.C., - PCP Exemptions, Rule 62-296.406, F.A.C. – Fossil Fuel Steam Generators with Less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units, Rule 62-296.404, F.A.C. – Kraft Pulp Mills, BACT Determination dated 01-25-90, and 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable.

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

A.1. Permitted Capacity. The maximum heat input rate is 249 MMBtu/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1230001-017-AC, Construction Permit No. 1230001-018-AC]

A.2. Methods of Operation. This boiler may be fired with the following fuels:

1. Natural gas.

2. No. 6 fuel oil with a sulfur content that shall not exceed 2.5% by weight and may include facility generated used oil.

3. No. 2 fuel oil (typically used as a pilot fuel during startups, shutdowns, and malfunctions and for dry out fires after a water wash).

4. The No. 1 power boiler shall fire no more than 5,623,000 gallons of oil (e.g. residual oil, distillate oil, and facility-generated on-specification used oil), during any consecutive 12-month rolling average.

5. NCGs during periods when the boiler is being utilized for their destruction. Such operation shall occur for a period not to exceed 960 hours per year.

6. Facility-generated Tall Oil[1] and Tall Oil manufactured offsite. The Tall Oil may or may not be blended with No. 6 fuel oil. The sulfur content of No. 6 fuel is limited to 2.5 % by weight regardless of whether it is blended with the tall oil. The sulfur content of the as-fired blended No. 6/ Tall Oil fuel shall not exceed 2.5% by weight. The sulfur content of Tall Oil manufactured offsite shall not exceed 2.5% by weight.

[1]The sulfur content of the facility-generated Tall Oil based on composite sampling submitted by the applicant on August 11, 2003, is typically 0.065 - 0.08 percent by weight.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-023-AC; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

A.3. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1230001-017-AC, Construction Permit No. 1230001-018-AC]

A.4. Methods of Operation –Tall Oil**.** Tall oil shall be added to the No. 6 fuel oil tank where it shall be fired alone as a fuel or after it is blended with No. 6 fuel oil.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

A.5. Methods of Operation –Tall Oil Generated Offsite**.** Prior to burning tall oil that is generated offsite, the permittee shall conduct analysis pursuant to Condition A.16.

If the analysis results indicate constituent concentrations equal to or less than those stated in Condition A.16., along with a sulfur content equal to or less than the sulfur content limitation stated in Condition A.2.6., the tall oil shall be deemed suitable for combustion. The analysis results shall be reported to the Department in the Quarterly Report.

If the analysis results indicate constituent concentrations above those stated in Condition A.16., the tall oil shall be deemed not suitable for combustion. The permittee shall not fire the tall oil as a fuel and immediately cease deliveries of tall oil from the given supplier. In addition, the permittee shall provide the Department immediate written notification, including a copy of the analysis results, the quantity of tall fired if any, and the proposed means of its disposal.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

A.6.a. Particulate Matter Emissions. Particulate Matter emissions shall not exceed 47.9 lbs/hr and 209.96 TPY.

[Rule 62-296.406(2), F.A.C.; Rule 62-210.200(42), F.A.C.; BACT dated 01-25-90; Construction Permit 1230001-017-AC, Construction Permit No. 1230001-018-AC]

A.6.b. Particulate Matter Emissions- Soot Blowing & Load Change. Particulate Matter emissions shall not exceed an average of 0.3 lb/MMBTU heat input while boiler cleaning (soot blowing) or during a load change. These excess emissions resulting from operation in this mode shall not exceed 3 hours in any 24-hour period. Best operational practices to minimize emissions shall be adhered to and the duration of excess emissions shall be minimized.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

[Rule 62-210.700(3), F.A.C.]

A.7. Sulfur Dioxide Emissions. Sulfur Dioxide emissions shall be limited to a maximum sulfur content of 2.5%, by weight, in the No. 6 fuel oil and/or Tall Oil, and 671.9 lbs/hr and 2943.18 TPY.

[Rule 62-296.406(3), F.A.C.; Rule 62-210.200(42), F.A.C.; BACT dated 01-25-90; Construction Permit 1230001-017-AC, Construction Permit No. 1230001-018-AC]

A.8. Total Reduced Sulfur (TRS) Emissions. When NCG gases are collected and routed to this Emissions Unit, TRS emissions shall not exceed 5 ppmvd @ 10% O_2, as a 12 hour average; 2.28 lbs/hr and 1.1 TPY. TRS Emissions shall be incinerated for a minimum of 0.5 second and at a minimum of 1200°F.

[Rule 62-296.404(3)(f)1., F.A.C.; Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC, Construction Permit No. 1230001-018-AC]

A.9.a. Visible Emissions. Visible Emissions shall not exceed 20% opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[Rule 62-296.406(1), F.A.C.; BACT Determination dated 01-25-90; Construction Permit 1230001-017-AC, Construction Permit No. 1230001-018-AC]

A.9.b. Visible Emissions - Soot Blowing & Load Change. Excess emissions resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60% opacity, and provided (1) best operation practices to minimize emissions are adhered to and (2) the duration of excess emissions is minimized.

Visible emissions above 60% opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions for boilers that are operating continuous opacity monitors.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

[Rule 62-210.700(3), F.A.C.]

A.10. Tall Oil As A Fuel Firing Limitation. The quantity of Tall Oil fired as a fuel, including a Tall Oil/No. 6 Fuel Oil blend, shall be included in the fuel oil firing limitations established in any other issued air construction permit.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. Table 2-1 does not supersede any of the terms or conditions of this permit.}

A.11.i. Sulfur Dioxide. The permittee shall conduct sulfur dioxide emissions compliance test upon request by the Department in accordance with the requirements of Rule 62-297.310(7)(b), F.A.C. The test Method shall be EPA Method 6 incorporated and adopted by reference in Chapter 62-297, F.A.C. At all other times, compliance with the emission limit shall be demonstrated by complying with **Condition A.12.a.**

[Rules 62-297.401(6), F.A.C.; Construction Permit No. 1230001-017-AC, 1230001-018-AC]

A.11.ii. Fuel Sulfur Content. The permittee shall monitor the fuel sulfur content according to the following conditions:

a. For each delivery of No. 6 residual fuel oil, the permittee shall retain records of the quantity of oil delivered and the certified vendor analysis identifying the sulfur content of the oil delivered. For each day deliveries are made, the permitittee shall recalculate the fuel oil sulfur content of the common tank based on the previous tank conditions and the amounts and sulfur contents of the deliveries made during the day. For incidental amounts of facility-generated on-specification used oil added to the residual oil tank, the amount of used oil added shall be tracked and sulfur content shall be assumed equivalent to that of the oil in the common tank prior to adding the used oil. At least once during each calendar month, the permittee shall take a sample from the common tank and have it analyzed for the sulfur content and heating value. The analytical results shall be maintained on site and a summary report provided with the Annual Operating Report (AOR).

b. For each delivery of distillate oil, the permittee shall retain records of the quantity of oil delivered and the certified vendor analysis identifying the sulfur content of the oil delivered. The actual fuel sulfur content may be calculated or a sample shall be taken and analyzed for the sulfur content. This shall be the fuel sulfur content used for emissions calculations until a subsequent delivery.

c. The following approved analytical methods shall be used for oil: ASTM Method D-129, ASTM D-1552, ASTM D-2622, and ASTM D-4294. Other more recent or equivalent ASTM methods or Department approved methods are also acceptable.

d. The provisions for facility generated on-specification used oil are specified in Subsection R, Common Conditions – Used Oil of this permit.

e. The permittee shall use vendor information to determine the sulfur content of natural gas.

The actual fuel sulfur content shall be used to determine the sulfuric acid mist (SAM) and sulfur dioxide (SO_2) emissions for Power Boiler No. 1.

[Permit Nos. 1230001-023-AC/PSD-FL-397, 1230001-023-AC/PSD-FL-397A, Rules 62-4.070(3) and 62-212.400 (PSD), F.A.C.]

A.12.a. Particulate Matter and Sulfur Dioxide Emissions. In lieu of stack testing, a record shall be maintained of acceptable fuel oil analyses of all fuel oil received for at least a five-year period. This information shall be reported annually each federal fiscal year.

When fuel oil or a Tall Oil/No. 6 fuel oil blend is fired in this power boiler, compliance with the permit limits (in lbs/hr) shall be determined by using the fuel oil/Tall Oil usage rate [the average for each contiguous 3-hour period (i.e., 0000-0300; 0300-0600; etc.)], fuel oil sulfur content and EPA emissions factors to the calculate particulate matter emissions and SO_2 emissions since the particulate matter and SO_2 are a function of fuel oil sulfur content. The equations are:

1. [[9.19 (S) + 3.22]/1000] x Fuel Oil/Tall Oil Usage [gallons per hr (3-hr avg)] = lbs PM per hour

2. [[157 (S)]/1000] x Fuel Oil/Tall Oil Usage [gallons per hr (3-hr avg)] = lbs SO_2 per hour

where S = weight percent sulfur (i.e., if 1.9%, insert 1.9)

Permitting Note: The 3-hour averaging period is consistent with the manual stack test methods (when applicable), which are normally conducted as three separate 1-hour runs and averaged to determine compliance.}

[Permit No. AO62-230933; Construction Permit No. 1230001-017-AC; Construction Permit 1230001-018-AC; Construction Permit No. 1230001-025-AC; Construction Permit No. 1230001-027-AC]

A.12.b. Particulate Matter– Soot Blowing. The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, 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 the fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

A.9.c. Stack Testing Facilities Location. The stack testing facilities location, as approved by the Department, shall be 0.51 duct diameters from the upstream flow disturbance to the ports and 1.34 duct diameters downstream. There shall be 25 traverse points for particulate matter emissions testing.

[Rule 62-297.310(7)(a)2., F.A.C.; Stack Testing Location Request dated August 26, 2009]

A.13. TRS Emissions. The test method for total reduced sulfur shall be EPA Method 16, 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. EPA Method 16, 16A, or 16C shall be required for instrument certification and compliance testing. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.

{Permitting Note: Buckeye shall use 80,000 acfm (design) to determine the lb/hr value in the event that an actual velocity measurement cannot be obtained during compliance testing}

[Rules 62-296.404(4)(e)3., 62-297.310(7)(a)1., (7)(a)3., (7)(a)4.b. F.A.C., 62-297.401(16), F.A.C.; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-018-AC]

A.14.a. Visible Emissions**.** The test method for visible emissions shall be DEP Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401(9)(c), F.A.C., Construction Permit No. 1230001-017-AC]

A.14.b. Visible Emissions– Soot Blowing and Load Change. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

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

A.14.c. Visible Emissions. The visible emissions compliance testing required in Conditions A.14.a. and A.14.b. shall be conducted at the next scheduled mill outage if fuel oil or tall oil has been fired in the boiler since the most recent scheduled mill outage in accordance with the Settlement Agreement dated May 29, 1990. The boiler shall be tested without interference from the Nos. 1 and 2 Bark Boilers. The Department reserves the right to require testing for operation permit renewal (every 5 years).

[Settlement Agreement between P&G Cellulose Co. & BAR dated 05-29-90]

A.15. <u>Sulfur Content and Density of Tall Oil.</u> The Permittee shall follow procedures (1)–(10) below[1] to determine the density and sulfur content of tall oil:

As-Fired Sulfur Content in Tall Oil/No. 6 fuel oil blended fuel:

(1) A representative sample of the tall oil/No. 6 fuel oil blended fuel shall be collected at the outlet of the No. 6 fuel oil tank once a month, if any tall oil was placed in the No. 6 fuel oil tank during the month.
(2) The collected sample of the tall oil/No. 6 fuel oil blended fuel shall be submitted to an independent laboratory for analysis of the sulfur content of the blended fuel within 2 working days of collection.
(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(4) The Permittee shall obtain the results of the testing stated in Condition A.15.(2) to verify the blended fuel meets the as-fired fuel sulfur content stated in Condition A. 2.6.
(5) If the analysis result indicates compliance with the as-fired sulfur content stated in Condition A.2.6., the result shall be reported to the Department in the Quarterly Report (as required by Condition A.22).
(6) If the analysis result indicates noncompliance with the as-fired sulfur content stated in Condition A.2.6., the facility shall provide the Department immediate written notification, including a copy of the analysis results.

Sulfur Content in Tall Oil directly from Tall Oil Storage Tank:

(7) A representative sample of the tall oil intended to be fired as fuel shall be collected at the outlet of the Tall Oil Storage Tank on a monthly basis.
(8) The collected sample of the tall oil shall be submitted to an independent laboratory for analysis of the sulfur content within 2 working days of collection.
(9) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(10) The Permittee shall obtain the results of the testing stated in Condition A.15.(8) and report the results to the Department in the Quarterly Report (as required by Condition A.22.

[1]Testing required only if Tall Oil is fired as a fuel during any calendar month.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

A.16. Tall Oil Generated Offsite Analysis. The permittee shall conduct the following additional analysis using approved methods or obtain a vendor certified analysis of the tall oil for the stated constituents:

Constituent	Concentration
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

Once an initial test is completed for a given supplier located within the United States, tall oil shall be sampled and analyzed for the constituents stated in the table above once a calendar month (with at least 21 days elapsed time between sample collection), during any month in which such tall oil is burned as an authorized fuel.

For a supplier located outside the United States, the tall oil shall be sampled and analyzed for the constituents stated in the table above on a per delivery basis.

The same requirements for suitability as a fuel, ceasing deliveries from a given supplier, and reporting of analysis results to the Department shall apply as is specified for a suppler located within the United States.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Continuous Monitoring

A.17. TRS Emissions. This emissions unit shall be equipped with a device to continuously monitor temperature at the point of combustion and oxygen. The temperature devices shall be certified by the manufacturer to be accurate to within +1 percent of the temperature being measured. The temperature device shall continuously record the temperature. The oxygen monitors shall be certified by the manufacturer to be accurate to within 0.1 percent oxygen by volume.

[Rule 62-296.404(5)(c), F.A.C., Construction Permit No. 1230001-018-AC]

A.18.i. TRS Pre-Scrubber Parameter Monitoring. Weak wash, from the lime mud washing system, (scrubbing media) shall be continuously added to the pre-scrubber at a minimum of 50 gallons per minute based on a 3-hour average. This flow set point shall be continuously monitored and verified on an annual basis. Monitoring records shall be maintained and available for inspection by the Department.

[Construction Permit No. 1230001-018-AC]

A.18.ii. Fuel Monitors. The permittee shall operate and maintain equipment to continuously monitor and record the flow rates of each authorized liquid and gaseous fuel (e.g. flow meters with integrators) fired in the No. 1 Power Boiler.

[Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-4.070(3) and 62-210.370, F.A.C.]

Recordkeeping and Reporting Requirements

A.19. TRS Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

[Rule 62-296.404(6)(a), F.A.C.; Construction Permit No. AC62-141927; Construction Permit No. 1230001-018-AC]

A.20. TRS Surrogate Parameters- Files. The owner or operator shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(b), F.A.C.; Construction Permit No. AC62-141927; Construction Permit No. 1230001-018-AC].

A.21. TRS Surrogate Parameter -Excess Emissions Notification. The owner or operator shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition A.25.1.

[Rule 62-296.404(6)(d), F.A.C.; Construction Permit No. AC62-141927; Construction Permit No. 1230001-018-AC]

A.22.i. Tall Oil Fired. The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

A.22.ii. Fuel Oil Fired. The permittee shall keep records on a monthly basis to record the type and quantity of fuel oil fired by the Power Boiler No. 1. Within seven days following each month, the permittee shall record the gallons of oil fired for each month and each consecutive 12-month period. The fuel firing rates shall be used to determine the SAM and SO_2 emissions. [Construction Permit No. 1230001-023-AC; Rules 62-4.070(3) and 62-212.400 (PSD), 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 or NESHAP provision.}

A.23. Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department 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.

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

A.24. TRS Surrogate Parameter – Excess Emissions. Excess emissions shall be deemed to occur if the minimum temperature and/or the minimum incineration time stated in Condition A.8. are not met.

[Rule 62-296.404(5)(d), F.A.C.]

A.25. TRS Surrogate Parameter -Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions as indicated by the appropriate surrogate parameters occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the emissions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

2. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

   a. Operation of all equipment within permit limits for loading rates and other process parameters,

   b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

   c. Training of personnel in the operation and maintenance of equipment,

   d. Visual and instrument inspections of equipment on a regular basis, and

   e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

[Rules 62-296.404(6)(c)(3) and (4), F.A.C.; Construction Permit No. 1230001-018-AC]

A.26. Excess Emissions – Startup and Shutdown. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

[Rule 62-210.700(2), F.A.C.]

A.27. Excess Emissions – Malfunction. Excess Emissions resulting from 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 2 hours in any 24 hour period unless authorized by the Department for longer duration.

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

A.28. Redirection of NCG Gases- No. 1 Bark Boiler Malfunction. With regard to instances of a malfunction in the No. 1 Bark Boiler involving uncontrolled NCG venting, the mill shall discontinue venting NCGs as soon as possible by doing either of the following:

- Restore operation of the No. 1 Bark Boiler, firing up to 100% auxiliary fuel, as needed to restore the furnace temperature if it is possible to quickly restore NCG incineration; or
- If the No. 1 Power Boiler is online, immediately put this emissions unit into NCG incineration service. If the pre-scrubber is off-line, it shall be brought online within 30 minutes of the malfunction, unless there is malfunction of the redirection equipment (i.e. the weak green liquor pump at the pre-scrubber, the process safety steam level of the No. 1 Power Boiler) ; or
- If the No. 1 Power Boiler has been offline, immediately initiate the boiler startup operations (i.e. warm the boiler, etc.), to redirect otherwise vented NCG gases to the No. 1 Power Boiler for their incineration/destruction. The pre-scrubber shall be brought online within 30 minutes of the malfunction, unless there is malfunction of the redirection equipment (i.e. the weak green liquor pump at the pre-scrubber, the process safety steam level of the No. 1 Power Boiler). The pre-scrubber shall be online before the NCG gases is directed to the No.1 Power Boiler for destruction.

[Rule 62-4.070, F.A.C.; Additional Information response dated August 27, 2008]

A.29. Excess Emissions. Excess emissions 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.30. Excess Emissions – Subpart S. Periods of excess emissions reported under 40 CFR Part 63, Subpart A (Condition No. P.17.) shall not be a violation of Condition P.2. provided that the total time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 1% for the No. 1 Power Boiler and No. 1 Bark Boiler combined.

[40 CFR 63.443(e)(1); Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC; Construction Permit No. 1230001-017-AC]

Startup, Shutdown, Malfunction Plan

A.31. This emissions unit is also subject to the SSM plan requirements of Facility-wide Condition No. II.6.

Common Conditions

A.32. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
R	Used oil
P	40 CFR 63 Subpart S
Appendix 40 CFR 63	General Provisions of 40 CFR 63

New Applicable Requirements

A.33. This emission unit is also subject to 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable.

[Rule 62-213.440, F.A.C.]

A.34. Compliance Date: The owner or operator shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart DDDDD no later than January 31, 2016.

[40 CFR 40 CFR 63.7495(b)].

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
003	No. 2 Power Boiler (Babcock & Wilcox Co.). The boiler has 4 burners with a front firing arrangement. The boiler was originally constructed in 1954. The total maximum operation heat input of this emissions unit is 249 MMBtu/hr. This emissions unit is capable of serving the mill with 195,000 lb/hr of steam flow. At permitted capacity, the exhaust gas flow rate is 80,000 acfm with an exit temperature of 325° F. Exhaust gases from the boiler exit through a common stack with E.U. 002, 003, 004, 019 that is 13 feet in diameter and 225 feet tall. This emissions unit does not have add-on control device, therefore CAM is not applicable to this emissions unit.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.406, F.A.C. – Fossil Fuel Steam Generators with Less than 250 Million Btu per Hour heat Input, New and Existing Emissions Units, BACT Determination dated 01-25-90 - and 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable.

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

B.1. Permitted Capacity. The maximum heat input rate is 249 MMBtu/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1230001-017-AC]

B.2. Methods of Operation. This boiler may be fired with natural gas only.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-023-AC/PSD-FL-397 , Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

B.3. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 1230001-017-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

B.4. Particulate Matter Emissions. Particulate Matter Emissions shall be limited by the firing of natural gas only.

[Rule 62-296.406(2), F.A.C.; Rule 62-210.200(42), F.A.C.; Construction Permit No. 1230001-023-AC/PSD-FL-397]

B.5. Sulfur Dioxide Emissions**.** Sulfur Dioxide Emissions shall be limited by the firing of natural gas only.

[Rule 62-296.406(3), F.A.C.; Rule 62-210.200(42), F.A.C.; Construction Permit No. 1230001-023-AC/PSD-FL-397]

B.6. Visible Emissions**.** Visible Emissions shall not exceed 20% opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[Rule 62-296.406(1), F.A.C.; Rule 62-210.200(42), F.A.C.; Construction Permit 1230001-017-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. Table 2-1 does not supersede any of the terms or conditions of this permit.}

B.7.a. Visible Emissions. The test method for visible emissions shall be DEP Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed once each federal fiscal year.

[Rule 62-297.401(9)(c), F.A.C.; Construction Permit 1230001-017-AC]

B.7.b. Since the boiler is now restricted to natural gas as it's only fuel condition B.7.a. is sufficient to determine compliance on an annual basis.

[Settlement Agreement between P&G Cellulose Co. & BAR dated 05-29-90, Rule 62-4.070, F.A.C.]

B.8. Fuel Fired. The permittee shall keep records on a monthly basis to record the quantity of fuel (natural gas) fired by the Power Boiler No. 2. Within seven days following each month, the permittee shall record the cubic feet fired for each month and each consecutive 12-month period. The permittee shall use vendor information to determine the sulfur content of natural gas.The fuel firing rates shall be used to determine the SAM and SO_2 emissions.
[Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-4.070(3) and 62-212.400 (PSD), 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 or NESHAP provision.}

B.9. Excess Emissions- All Methods of Operation– Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department 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.

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

B.10. Excess Emissions – Startup and Shutdown. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

[Rule 62-210.700(2), F.A.C.]

B.11. Excess Emissions- Malfunction. Excess Emissions resulting from malfunctions 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 2 hours in any 24 hour period unless authorized by the Department for longer duration.

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

B.12. Excess Emissions. Excess emissions 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.]

Continuous Monitoring

B.13. Fuel Monitors. The permittee shall operate and maintain equipment to continuously monitor and record the flow rate~~s~~ of natural gas (e.g. flow meters with integrators) fired in the No. 2 Power Boiler.

[Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-4.070(3) and 62-210.370, F.A.C.]

Common Conditions

B.14. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
Appendix 40 CFR 63	General Provisions of 40 CFR 63

New Applicable Requirements

B.15. This emission unit is also subject to 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable.

[Rule 62-213.440, F.A.C.]

B.16. Compliance Date: The owner or operator shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart DDDDD no later than January 31, 2016.

[40 CFR 40 CFR 63.7495(b)].

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
004	No. 1 Bark Boiler with particulate matter emissions controlled by a cyclone collector and a wet, Venturi scrubber manufactured by Ducon (92 R/180 Type VVC). Fly ash collected by the cyclone collector is recirculated back to the boiler. Following the scrubber is a chevron type demister (entrainment separator). Water is utilized as the scrubbing media. The control efficiency is estimated at 95%. At permitted capacity, the exhaust gas flow rate from the boiler is 115,073 acfm with an exit temperature of 160° F. Exhaust gases from the boiler exit through a common stack with E.U. 002, 003, 004, 019 that is 13 feet in diameter and 225 feet tall. As the primary control device for 40 CFR 63.443 (Phase I) compliance, Low Volume, High Concentration (LVHC) Noncondensible Gases (NCGs) from the from the Pulping System (Nos. 1 and 2 Batch Digester Systems, Blow Heat Recovery System, the Turpentine Recovery System (includes the Turpentine Condenser, Decanter, Weir Box, and Underflow Tank), Nos. 1-4 Multiple Evaporator Systems, and the pulping process condensate collection system are collected and transported to this boiler for destruction. The secondary control device is the No. 1 Power Boiler. This emissions unit is subject to CAM for Particulate Matter emissions.

{Permitting note(s): This emissions unit is regulated by 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400(2)(a)2.b., F.A.C., - PCP Exemptions, Rule 62-296.410, F.A.C. – Carbonaceous Fuel Burning Equipment, Rule 62-296.404, F.A.C. – Kraft Pulp Mills; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C., and 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable.

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

No. 1 Bark Boiler:

C.1. Permitted Capacity. The maximum heat input rate shall not exceed 300 MMBtu/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AC62-141927, Construction Permit No. 1230001-017-AC]

C.2. Methods of Operation. This boiler may be fired with the following fuels:

1. Carbonaceous Fuel consisting of wood materials such as bark, chips, sawdust and other such wood fiber material. Projected wood waste utilization rate is 23.5 TPH at 30% moisture.

2. No. 6 fuel oil with a sulfur content that shall not exceed 2.5% by weight (which may contain facility generated used oil) fired as 100% fuel oil only during startups, shutdowns, malfunctions or temporary loss of bark. The utilization rate (maximum burner capacity at 10% overfire) shall not exceed a heat input rate 92.4 MMBtu/hr (616 gallons per hour, based upon 150,000 Btu per gallon heat content). See Condition C.2.4. and C.2.6.

3. No. 2 fuel oil fired typically as a pilot fuel during startups, shutdowns, malfunctions and for dry out fires after a water wash. Sulfur content that shall not exceed 0.5% by weight. Except for SSM, this emissions unit is not permitted to fire 100% fuel oil. The utilization rate shall not exceed a heat input rate 92.4 MMBtu/hr (660 gallons per hour, based upon 140,000 Btu per gallon heat content). See Condition C.2.4. and C.2.6.

4. The maximum fuel oil (No. 6 fuel oil, No. 2 fuel oil, tall oil, supplemental used oil) firing rate shall be limited to 92.4 MMBtu/hr.

5. Natural gas fired typically as a pilot fuel during startups, shutdowns, malfunctions and for dry out fires after a water wash. Natural gas may also be fired as a supplemental fuel to provide flame stability while also combusting carbonaceous fuel. The maximum heat input rate from natural gas shall be limited to 92.4 MMBtu/hr (92,400 cubic feet per hour at 1000 Btu per cubic foot heat content). See Condition C.2.6.

6. The maximum fossil fuel heat input to Bark Boiler No. 1 shall be limited to 184.8 MMBtu/hr.

7. NCGs during periods when the boiler is being utilized for their destruction.

8. Facility-generated Tall Oil[1] and Tall Oil manufactured offsite. The Tall Oil may or may not be blended with No. 6 fuel oil. The sulfur content of No. 6 fuel is limited to 2.5 % by weight regardless of whether it is blended with the tall oil. The sulfur content of the as-fired blended No. 6/ Tall Oil fuel shall not exceed 2.5% by weight. The sulfur content of Tall Oil manufactured offsite shall not exceed 2.5% by weight.

[1]The sulfur content of the facility-generated Tall Oil based on composite sampling submitted by the applicant on August 11, 2003, is typically 0.065 - 0.08 percent by weight.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment; Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-023-AC/PSD-FL-397, Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC, Construction Permit No. 1230001-038-AC]

C.3. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1230001-017-AC]

C.4. Methods of Operation –Tall Oil**.** Tall oil shall be added to the No. 6 fuel oil tank where it shall be fired alone as a fuel or after it is blended with No. 6 fuel oil.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

C.5. Methods of Operation –Tall Oil Generated Offsite**.** Prior to burning tall oil that is generated offsite, the permittee shall conduct analysis pursuant to Condition C.28.

If the analysis results indicate constituent concentrations equal to or less than those stated in Condition C.28., along with a sulfur content equal to or less than the sulfur content limitation stated in Condition C.2.6., the tall oil shall be deemed suitable for combustion. The analysis results shall be reported to the Department in the Quarterly Report.

If the analysis results indicate constituent concentrations above those stated in Condition C.28., the tall oil shall be deemed not suitable for combustion. The permittee shall not fire the tall oil as a fuel and immediately cease deliveries of tall oil from the given supplier. In addition, the permittee shall provide the Department immediate written notification, including a copy of the analysis results, the quantity of tall fired if any, and the proposed means of its disposal.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

No. 1 Multiple Effect Evaporator System:

C.6. Permitted Capacity. For testing, NSPS, and PSD purposes, the maximum total process input rate shall not exceed 156,000 lbs/hr of Black Liquor Solids (BLS).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141918]

C.7. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141918]

No. 2 Multiple Effect Evaporator System:

C.8. Permitted Capacity. For testing, NSPS, and PSD purposes, the maximum total process input rate shall not exceed 195,000 lbs/hr of Black Liquor Solids (BLS).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141919]

C.9. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141919]

No. 3 Multiple Effect Evaporator System:

C.10. Permitted Capacity. For testing, NSPS, and PSD purposes, the maximum total process input rate shall not exceed 195,000 lbs/hr of Black Liquor Solids (BLS).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141920]

C.11. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141920]

No. 4 Multiple Effect Evaporator System:

C.12. Permitted Capacity. For testing, NSPS, and PSD purposes, the maximum total process input rate shall not exceed 260,000 lbs/hr of Black Liquor Solids (BLS).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141921]

C.13. Hours of Operation. The hours of operation are not limited.

No. 1 Batch Digester System:

C.14. Permitted Capacity. For testing, NSPS, and PSD purposes, the maximum hourly production rate shall not exceed 61.1 TPH Air Dried Unbleached Pulp (ADUP).[1] The maximum daily production shall not exceed 1320 TPD ADUP (1200 TPD BDUP).[2]

[1]This is equivalent to 55 TPH Bone Dry Unbleached Pulp (BDUP) and based on a nominal utilization rate of 231,833 lbs/hr wood chips (bone dry) and 77,245 lbs/hr cooking liquor (bone dry and as Na_2O).

[2]Used for PSD review purposes

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141916]

C.15. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141916]

No. 2 Batch Digester System:

C.16. Permitted Capacity. For testing, NSPS, and PSD purposes, the maximum hourly production rate shall not exceed 55.6 TPH Air Dried Unbleached Pulp (ADUP).[1] The maximum daily production shall not exceed 1333 TPD ADUP (1200 TPD BDUP).[2]
[1]This is equivalent to 50 TPH Bone Dry Unbleached Pulp (BDUP) and based on a nominal utilization rate of 212,333 lbs/hr wood chips (bone dry) and 70,748 lbs/hr cooking liquor (bone dry and as Na_2O).

[2]Used for PSD review purposes

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141917]

C.17. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141917]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for these conditions is based on the specified averaging time of the applicable test method.}

No. 1 Bark Boiler

C.18. Particulate Matter Emissions. Particulate matter emissions shall not exceed 0.158 lb per MMBtu heat input, 47.3 lbs/hr, and 207 TPY when firing only carbonaceous fuel or 0.1 lb per MMBtu heat input (equivalent to 9.24 lbs/hr and 40.47 Tons/Yr at a maximum heat input rate of 92.4 MMBtu/hr) when firing only fuel oil/tall oil.

[Requested by applicant; Rule 62-296.410(1)(b)2., F.A.C.; Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment; Construction Permit 1230001-017-AC, Construction Permit No. 1230001-038-AC]

C.19. Sulfur Dioxide Emissions. Sulfur Dioxide (fuel oil combustion) emissions shall be limited to a maximum sulfur content in No. 6 fuel oil of 2.5 % by weight (equivalent to 248.4 lbs/hr and 1088 Tons/yr at a maximum heat input rate of 92.4 MMBtu/hr). The total SO_2 emission limit (fuel oil combustion and the combustion of non-condensible gases) shall be 675.1 lbs/hr and 2957 TPY.

[Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment; Construction Permit 1230001-017-AC, Construction Permit 1230001-038-AC; Rule 62-296.405(1)(c)1.j.,F.A.C. subsumed]

C.20. Total Reduced Sulfur (TRS) Emissions**.** Total Reduced Sulfur emissions shall not exceed 5 ppmvd @ 10% O_2 as a 12-hour average; 2.43 lbs/hr and 10.64 TPY. TRS Emissions shall be incinerated for a minimum of 0.5 second and at a minimum of 1200°F.

[Construction Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment; Construction permit No. AC62-141918; Construction Permit No. AC62-141919; Construction Permit No. AC62-141920; Construction Permit No. AC62-141921; Construction Permit No. AC62-141917; Construction Permit No. AC62-141916; Rule 62-296.404(3)(f)1., F.A.C. ; Construction Permit 1230001-018-AC]

C.21. Visible Emissions. Visible emissions shall not exceed 30% opacity, except that a up to 40% Opacity is permissible for not more than 2 minutes in any one hour.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. The Department may require a special compliance test in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.410(1)(b)1., F.A.C.; Rule 62-296.404(2)(b), F.A.C. ; Construction Permit No. AC62-141927 May 17, 1990 Amendment Construction Permit 1230001-017-AC; Permit No. AO62-202122 June 30, 1992 Amendment

C.22. Tall Oil As A Fuel Firing Limitation. The quantity of Tall Oil fired as a fuel, including a Tall Oil/No. 6 Fuel Oil blend, shall be included in the fuel oil firing limitations established in any other issued air construction permit.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.23. Particulate Matter Emissions. The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. This compliance test shall be performed once each federal fiscal year.

[Rule 62-296.410(3), F.A.C.; Rules 62-297.401(5), F.A.C.; Construction Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment; Construction Permit 1230001-017-AC]

C.24.i. Sulfur Dioxide Emissions. The test method for sulfur dioxide emissions shall be EPA Method 6 or EPA Method 6C incorporated and adopted by reference in Chapter 62-297, F.A.C. This compliance test shall be performed once each federal fiscal year.

[Rules 62-297.401(6), F.A.C.; Construction Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment ; OGC File No. 90-0191 dated 02/23/90, ASP-89-B-01,Construction Permit 1230001-017-AC; Construction Permit 1230001-032-AC]

C.24.ii. Fuel Sulfur Content. The permittee shall monitor the fuel sulfur content according to the following conditions:

a. For each delivery of No. 6 residual fuel oil, the permittee shall retain records of the quantity of oil delivered and the certified vendor analysis identifying the sulfur content of the oil delivered. For each day deliveries are made, the permitittee shall recalculate the fuel oil sulfur content of the common tank based on the previous tank conditions and the amounts and sulfur contents of the deliveries made during the day. For incidental amounts of facility-generated on-specification used oil added to the residual oil tank, the amount of used oil added shall be tracked and sulfur content shall be assumed equivalent to that of the oil in the common tank prior to adding the used oil. At least once during each calendar month, the permittee shall take a sample from the common tank and have it analyzed for the sulfur content and heating value. The analytical results shall be maintained on site and a summary report provided with the Annual Operating Report (AOR).

b. For each delivery of distillate oil, the permittee shall retain records of the quantity of oil delivered and the certified vendor analysis identifying the sulfur content of the oil delivered. The actual fuel sulfur content may be calculated or a sample shall be taken and analyzed for the sulfur content. This shall be the fuel sulfur content used for emissions calculations until a subsequent delivery.

c. The following approved analytical methods shall be used for oil: ASTM Method D-129, ASTM D-1552, ASTM D-2622, and ASTM D-4294. Other more recent or equivalent ASTM methods or Department approved methods are also acceptable.

d. The provisions for facility generated on-specification used oil are specified in Subsection R, Common Conditions - Used Oil.

e. The permittee shall use vendor information to determine the sulfur content of natural gas.

The actual fuel sulfur content shall be used to determine the sulfuric acid mist (SAM) and sulfur dioxide (SO_2) emissions for Bark Boiler No. 1.

[Permit Nos. 1230001-023-AC/PSD-FL-397, 1230001-023-AC/PSD-FL-397A, Rules 62-4.070(3) and 62-212.400 (PSD), F.A.C.]

C.25. Total Reduced Sulfur Emissions. The test method for total reduced sulfur emissions shall be EPA Method 16, 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.

[Rule 62-297.401(16), F.A.C.; Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment; Rules 62-296.404(4)(e)3., 62-297.310(7)(a)1., (7)(a)3., (7)(a)4.b. F.A.C.; Construction Permit No. 1230001-018-AC]

C.26. Visible Emissions. The test method for visible emissions shall be DEP Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C., and shall be performed once each federal fiscal year.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.410(3), F.A.C.; Rule 62-297.401(9)(c), F.A.C.; Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment; Construction Permit No. 1230001-017-AC; Permit No. AO62-202123 June 30, 1992 Amendment]

C.27. Sulfur Content and Density of Tall Oil. The Permittee shall follow procedures (1)–(10) below[1] to determine the density and sulfur content of tall oil:

As-Fired Sulfur Content in Tall Oil/No. 6 fuel oil blended fuel:

(1) A representative sample of the tall oil/No. 6 fuel oil blended fuel shall be collected at the outlet of the No. 6 fuel oil tank once a month, if any tall oil was placed in the No. 6 fuel oil tank during the month.
(2) The collected sample of the tall oil/No. 6 fuel oil blended fuel shall be submitted to an independent laboratory for analysis of the sulfur content of the blended fuel within 2 working days of collection.

(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(4) The Permittee shall obtain the results of the testing stated in Condition C.27.(2) to verify the blended fuel meets the as-fired fuel sulfur content stated in Condition C.2.6.

(5) If the analysis result indicates compliance with the as-fired sulfur content stated in Condition C.2.6., the result shall be reported to the Department in the Quarterly Report (as required by Condition C.31).
(6) If the analysis result indicates noncompliance with the as-fired sulfur content stated in Condition C.2.6., the facility shall provide the Department immediate written notification, including a copy of the analysis results.

Sulfur Content in Tall Oil directly from Tall Oil Storage Tank:

(7) A representative sample of the tall oil intended to be fired as fuel shall be collected at the outlet of the Tall Oil Storage Tank on a monthly basis.
(8) The collected sample of the tall oil shall be submitted to an independent laboratory for analysis of the sulfur content within 2 working days of collection.
(9) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(10) The Permittee shall obtain the results of the testing stated in Condition C.27.(8) and report the results to the Department in the Quarterly Report (as required by Condition C.31.

[1]Testing required only if Tall Oil is fired as a fuel during any calendar month.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

C.28. Tall Oil Generated Offsite Analysis. The permittee shall conduct the following additional analysis using approved methods or obtain a vendor certified analysis of the tall oil for the stated constituents:

Constituent	**Concentration**
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

Once an initial test is completed for a given supplier located within the United States, tall oil shall be sampled and analyzed for the constituents stated in the table above once a calendar month (with at least 21 days elapsed time between sample collection), during any month in which such tall oil is burned as an authorized fuel.

For a supplier located outside the United States, the tall oil shall be sampled and analyzed for the constituents stated in the table above on a per delivery basis.

The same requirements for suitability as a fuel, ceasing deliveries from a given supplier, and reporting of analysis results to the Department shall apply as is specified for a suppler located within the United States.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Continuous Monitoring Requirements

C.29.i. Total Reduced Sulfur (TRS). The emissions unit shall be equipped with devices to continuously monitor temperature at the point of combustion and oxygen. The temperature devices shall be certified by the manufacturer to be accurate to within + 1 percent of the temperature being measured. The oxygen monitors shall be certified by the manufacturer to be accurate to within 0.1 percent oxygen by volume.

[Rule 62-296.404(5)(c), F.A.C.; Permit No. AC62-141927; Construction Permit No. AC62-141927 May 17, 1990 Amendment, Construction Permit No. 1230001-018-AC]

C.29.ii. Fuel Monitors. The permittee shall operate and maintain equipment to continuously monitor and record the flow rates of each authorized liquid and gaseous fuel (e.g. flow meters with integrators) fired in the No. 1 Bark Boiler. These records shall be correlated with periods of start-up, shutdown, malfunction, and normal operation.
The firing rates of bark/wood shall be determined from actual monitored steam production rates, known boiler efficiencies, the bark/wood heating value, and the contributions from other fuels fired.
[Construction Permit Nos. 1230001-023-AC/PSD-FL-397 and 1230001-038-AC; Rules 62-4.070(3) and 62-210.370, F.A.C.]

Compliance Assurance Monitoring (CAM) Requirements

C.30. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Recordkeeping and Reporting Requirements

C.31.i. Tall Oil Fired. The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition.

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

C.31.ii. Fuel Oil Fired. The permittee shall keep records on a monthly basis to record the type and quantity of fuel oil fired by the Bark Boiler No. 1. Within seven days following each month, the permittee shall record the gallons of fuel oil fired for each month and each consecutive twelve month period. The fuel firing rates shall be used to determine the SAM and SO_2 emissions.
[Construction Permit No. 1230001-023-AC; Rules 62-4.070(3) and 62-212.400 (PSD), F.A.C.]

C.32. Total Reduced Sulfur (TRS) – Quarterly Reports. The Permittee shall submit a Total Reduced Sulfur (TRS) emissions and surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

(c) Evaluation of Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. N/A

2. N/A

3. For other regulated non-NSPS total reduced sulfur emissions units, the excess emissions as indicated by the appropriate surrogate parameters occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown, or malfunction of the missions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

   a. Operation of all equipment within permit limits for loading rates and other process parameters,

   b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

   c. Training of personnel in the operation and maintenance of equipment,

   d. Visual and instrument inspections of equipment on a regular basis, and

   e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

(d) The owner or operator of any Kraft pulp mill or tall oil plant shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Rule 62-296.404(6)(c)1. through 3., F.A.C.

[Rules 62-296.404(6)(a), (b), (c)(3), (c)(4), and (d), F.A.C.; Permit No. AC62-141927; Construction Permit No. 1230001-017-AC, Construction Permit No. 1230001-018-AC]

C.33. Excess Emissions- All Methods of Operation– Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department 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.

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

C.34. Excess Emissions – Startup, Shutdown, and Malfunction. Excess emissions resulting from startup, shutdown, or malfunction of any emission unit 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 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration.

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

C.35. Redirection of NCG Gases- No. 1 Bark Boiler Malfunction. With regard to instances of a malfunction in the No. 1 Bark Boiler involving uncontrolled NCG venting, the mill shall discontinue venting NCGs as soon as possible by doing either of the following:

- Restore operation of the No. 1 Bark Boiler, firing up to 100% auxiliary fuel, as needed to restore the furnace temperature if it is possible to quickly restore NCG incineration; or
- If the No. 1 Power Boiler is online, immediately put this emissions unit into NCG incineration service. If the pre-scrubber is off-line, it shall be brought online within 30 minutes of the malfunction, unless there is malfunction of the redirection equipment (i.e. the weak green liquor pump at the pre-scrubber, the process safety steam level of the No. 1 Power Boiler) ; or
- If the No. 1 Power Boiler has been offline, immediately initiate the boiler startup operations (i.e. warm the boiler, etc.), to redirect otherwise vented NCG gases to the No. 1 Power Boiler for their incineration/destruction. The pre-scrubber shall be brought online within 30 minutes of the malfunction, unless there is malfunction of the redirection equipment (i.e. the weak green liquor pump at the pre-scrubber, the process safety steam level of the No. 1 Power Boiler). The pre-scrubber shall be online before the NCG gases is directed to the No.1 Power Boiler for destruction.

[Rule 62-4.070, F.A.C.; Additional Information response dated August 27, 2008]

C.36. Excess Emissions. Excess emissions 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.]

C.37. Periods of excess emissions reported under 40 CFR Part 63, Subpart A (Condition No. P.17.) shall not be a violation of Condition P.2. provided that the total time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 1% for the No. 1 Power Boiler and No. 1 Bark Boiler combined.

[40 CFR 63.443(e)(1); Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

Startup, Shutdown, Malfunction Plan

C.38. This emissions unit is also subject to the SSM plan requirements of Condition II.6.

Common Conditions

C.39. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
R	Used oil
P	40 CFR 63 Subpart S
Appendix 40 CFR 63	General Provisions of 40 CFR 63

New Applicable Requirements

C.40. This emission unit is also subject to 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable.

[Rule 62-213.440, F.A.C.]

C.41. Compliance Date: The owner or operator shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart DDDDD no later than January 31, 2016.

[40 CFR 40 CFR 63.7495(b)]

C.42. Actual Emissions Reporting: Permit 1230001-038-AC is based on an analysis that compared baseline actual emissions with projected actual emissions and the project avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C.

b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

(1) The name, address and telephone number of the owner or operator of the major

stationary source;

(2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C.;

(3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

(4) Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

d. For this project, the following are the estimated baseline actual emissions: SO_2 -- 62.50 tons/year; NOx -- 202.08 tons/year; CO -- 535.92 tons/year; PM -- 113.94 tons/year; PM_{10} -- 111.67 tons/year; $PM_{2.5}$ -- 111.66 .tons/year; VOC -- 30.37 tons/year; SAM -- 2.78 tons/year; Pb -- 1.50E-02 tons/year; Hg -- 6.04E-04 tons/year; Fl -- 0.012 tons/year; CO_2 -- 187,481 tons/year; CH_4 -- 63.06 tons/year; N_2O -- 8.28 tons/year; GHG -- 187,552 tons/year; and CO_2e -- 191,372 tons/year.

e. For this project, the following are the estimated maximum projected actual emissions: SO_2 -- 85.76 tons/year; NOx -- 216.52 tons/year; CO -- 546.07 tons/year; PM -- 118.08 tons/year; PM_{10} -- 115.73 tons/year; $PM_{2.5}$ -- 115.72 tons/year; VOC -- 30.99 tons/year; SAM -- 3.81 tons/year; Pb -- 1.56E-02 tons/year; Hg -- 6.40E-04 tons/year; Fl -- 0.0143 tons/year; CO_2 -- 195,853 tons/year; CH_4 -- 64.02 tons/year; N_2O -- 8.43 tons/year; GHG -- 195,925 tons/year; and CO2e -- 199,810 tons/year.

f. For this project, the following are the estimated maximum projected actual emission increases: SO_2 -- 23.26 tons/year; NOx -- 14.44 tons/year; CO -- 10.15 tons/year; PM -- 4.14 tons/year; PM_{10} -- 4.06 tons/year; $PM_{2.5}$ -- 4.05 tons/year; VOC -- 0.62 tons/year; SAM -- 1.03 tons/year; Pb -- 5.60E-04 tons/year; Hg -- 3.60E-05 tons/year; Fl -- 0.0023 tons/year; CO_2 -- 8372 tons/year; CH_4 -- 0.96 tons/year; N_2O -- 0.14 tons/year; GHG -- 8373 tons/year; and CO_2e -- 8437 tons/year.

g. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. For this project, the permittee shall use the following methods in reporting the actual annual emissions for Bark Boiler No. 1:

a. Unless otherwise approved by the Department, the permittee shall use the same emissions factors for reporting the actual annual emissions as used in the application to establish baseline emissions.

b. As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

[Application No. 1230001-038-AC; Rules 62-212.300(1)(e), and 62-210.370, F.A.C.]

Subsection D. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
006	Recovery Boiler No. 2

Originally the No. 2 Recovery Boiler was constructed as a direct contact evaporator (DCE) design recovery boiler manufactured by Babcock & Wilcox. The furnace was constructed in 1957 and is not of membrane wall construction to minimize air in-leakage (Old Design Kraft Recovery Furnace – 62-210.200(219), F.A.C.).

Project 1230001-023-AC authorized conversion of the boiler to a low-odor, non-direct contact evaporator unit. The maximum firing rate is 97,600 lb/hour of BLS to facilitate the recovery of the cooking liquor.

The total maximum operation heat input of this emissions unit is 625 MMBtu/hr based on a fuel heating value of 6400 Btu/lb of BLS. At the maximum firing rate, the boiler will produce approximately 380,000 lb/hour of steam. Residual fuel oil is fired during startup, shutdown and occasionally to supplement BLS. The following pollutants and parameters will be continuously monitored and recorded: CO, NO_X, TRS, oxygen and opacity.

At permitted capacity, the exhaust gas flow rate is 122,849 dcfm at 8% oxygen with an exit temperature of 340° F. Exhaust gases exit a stack that is 10 feet in diameter and 225 feet tall.

Particulate matter emissions are controlled by an ESP. The ESP was manufactured by Joy Western and originally installed in 1972. It was upgraded by Environmental Elements Corporation in 2003 with the following specifications: dry-bottom; rigid electrodes; two chambers; four fields per chamber; a design inlet flow rate of 230,000 acfm at 500° F; an inlet dust loading of 2-3 grains per acf; and a collection area of 380.9 $feet^2$/1,000 acfm.

Opacity emissions are continuously monitored with a COMS manufactured by Land Instruments International, Model Number (M/N) 4500 MKII+.

TRS emissions are continuously monitored with a Thermo Environmental M/N 43C continuous emission monitor.

Fuel flow of ultra low sulfur distillate (ULSD) fuel is continuously monitored with a Badger Meter, Inc. M/N 25 continuous flow monitor.

Oxygen is continuously monitored with a Thermo Environmental M/N 25595003 continuous emission monitor.

Carbon Monoxide emissions are continuously monitored with a Thermo Scientific M/N 48c continuous emission monitor.

Oxides of Nitrogen emissions are continuously monitored with a Thermo Scientific M/N 42i continuous emission monitor.

This emissions unit has a CEMS required for compliance purposes, therefore, it is exempt from CAM for TRS monitoring.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills; 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

D.1. Authorized Fuels. This boiler may be fired with:

1. Black liquor solids (BLS). [Black Liquor at approximately 72% BLS content and 11.4 lb/gallon density];

2. No. 6 Fuel Oil with a maximum sulfur content not to exceed 2.5% by weight (with or without any prior blending with facility-generated on-specification used oil). This fuel shall be fired as a startup, shutdown, and supplemental fuel (e.g. maintain the flame stability of the boiler);

3. No. 2 distillate oil with a maximum sulfur content of 0.5% by weight as a pilot fuel during startup, shutdown, and for drying equipment after a water wash. The usage is limited to 50,000 gallons per year, unless otherwise requested;

4. Natural Gas as a pilot fuel during startup, shutdown and for drying equipment after a water wash;

5. Facility-generated Tall Oil[1] and Tall Oil manufactured offsite. The Tall Oil may or may not be blended with No. 6 fuel oil. The sulfur content of No. 6 fuel is limited to 2.5 % by weight regardless of whether it is blended with the tall oil. The sulfur content of the as-fired blended No. 6/ Tall Oil fuel shall not exceed 2.5% by weight. The sulfur content of Tall Oil manufactured offsite shall not exceed 2.5% by weight;

6. Virgin, Ultra Low Sulfur Diesel with a maximum sulfur content not to exceed 15 ppm (0.0015 percent by weight) prior to injection into the black liquor feed line, i.e. a USLD/BLS blend.

[1]The sulfur content of the facility-generated Tall Oil based on composite sampling submitted by the applicant on August 11, 2003, is typically 0.065 - 0.08 percent by weight.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Permit No. AO62-191214; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC; Construction Permit No. 1230001-028-AC]

D.2. Permitted Capacity.

a. Black Liquor Solids: The maximum operating capacity is 97,600 lb/hour of BLS based on a 1-hour average, which is equivalent to a heat input rate of 625 MMBtu per hour based on a fuel heating value of 6,400 Btu/lb of BLS. This is also equivalent to approximately 13,171 gallons per hour of black liquor fired.[1]

b. Fuel Oil and/or Tall Oil[2]: The total maximum oil firing rate shall not exceed 2,192 gallons of oil per hour, which is equivalent to a heat input rate of 320 MMBtu per hour based on a fuel heating value of 146 MMBtu per 1,000 gallons of oil. The oil firing system consists of eight oil burners. Each oil burner has a capacity of 40 MMBtu per hour.

c. Virgin ULSD: The maximum total addition rate of virgin ULSD into the black liquor feed line shall not exceed 2.0 gallons per minute [based on a 24-hour average].

d. Virgin ULSD/BLS Blend: For each 1.0 gallon of virgin ULSD added into the black liquor feed line, 3.1 gallons of black liquor solids shall be reduced from the maximum permitted input to the boiler.[3]

e. On-spec Used Oil. The on-specification used oil shall be blended with authorized oil prior to firing in this emissions unit.

[1] Assumes a density of 11.4 lb/gallon of BLS, 65% solids content.
[2] Tall Oil may be facility-generated or manufactured offsite as specified in Construction Permit Nos. 1230001-025-AC and 1230001-027-AC.
[3] Assumes a heating value of 136,000 Btu/gallon and a density of 7.13 lb/gallon for ULSD.

[Rules 62-4.160(2), 62-4.070(3), and 62-210.200(PTE), F.A.C.; Permit No. AO62-191214; Construction Permit 1230001-017-AC; Construction Permit No. 1230001-023-AC, Construction Permit No. 1230001-028-AC, Construction Permit No. 1230001-030-AC]

D.3. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1230001-017-AC]

D.4. Methods of Operation –Tall Oil**.** Tall oil shall be added to the No. 6 fuel oil tank where it shall be fired alone as a fuel or after it is blended with No. 6 fuel oil.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

D.5. Methods of Operation – Tall Oil Generated Offsite**.** Prior to burning tall oil that is generated offsite, the permittee shall conduct analysis pursuant to Condition D.26.

If the analysis results indicate constituent concentrations equal to or less than those stated in Condition D.26., along with a sulfur content equal to or less than the sulfur content limitation stated in Condition D.1.5., the tall oil shall be deemed suitable for combustion. The analysis results shall be reported to the Department in the Quarterly Report.

If the analysis results indicate constituent concentrations above those stated in Condition D.26., the tall oil shall be deemed not suitable for combustion. The permittee shall not fire the tall oil as a fuel and immediately cease deliveries of tall oil from the given supplier. In addition, the

permittee shall provide the Department immediate written notification, including a copy of the analysis results, the quantity of tall fired if any, and the proposed means of its disposal.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

D.6. Methods of Operation – Fuel Firing Restrictions. No more than 1,700,000 gallons of oil shall be fired in the No. 2 Recovery Boiler during any consecutive 12-month period, rolling total.[1] The term oil, for the purposes of this permit condition, shall include all amounts of residual oil, distillate oil, ULSD, Tall Oil[2], and on-specification used oil as authorized by this permit for this emissions unit.

[1] As stated in Technical Evaluation and Preliminary Determination for Permit No. 1230001-023-AC, the oil firing restriction maintains an annual capacity factor of less than 10% for fossil fuel firing at the emissions unit.

[2] In Construction Permit No. 1230001-027-AC, the applicant self-restricted the amount of Tall Oil (not considered a fossil fuel) fired to within previously established fuel oil firing limitations for fuel firing emissions units. Refer to Condition D.12.

[Rules 62-4.070(3), 62-4.160, 62-210.200(Definitions - PTE); 62-212.400(12)(c), F.A.C., Construction Permit No. 1230001-023-AC; Construction Permit No. 1230001-028-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

D.7.a. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.030 grain per dry standard cubic foot (gr/dscf) (0.069 gram per dry standard cubic meter (g/dscm)) corrected to 8 percent oxygen and 31.6 lb/hour based upon the average of three stack test runs.

[Construction Permit No. 1230001-023-AC including BACT Determination]

D.7.b. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen.

[40 CFR 63.862(a)(1)(i)(A)]

D.7.c. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 3 lbs/3000 lbs BLS; 97.6 lbs/hr and 427.49 TPY. The amount of BLS fired in this recovery boiler shall be continuously monitored and recorded.

[Rule 62-296.404(2), F.A.C.; Permit No. AO62-191214; Construction Permit 1230001-017-AC]

D.8. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) emissions shall not exceed 17.5 ppmvd @ 8% O2 as a 12-hr avg; 11.38 lbs/hr and 49.86 TPY.

[Rule 62-296.404(3)(c)1.a., F.A.C.; Permit No. AO62-191214; Construction Permit 1230001-017-AC]

D.9.a. Visible Emissions. As determined by the existing continuous opacity monitoring system (COMS) and/or EPA Method 9, the opacity from each recovery boiler shall not exceed 20% opacity based on 6-minute averages except for the following periods of startup, shutdown and malfunction.

(i) *Startup*: When the No. 2 Recovery Boiler is being started up from outages, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Opacity in excess of 35% during startups 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 four hours per startup.

(ii) *Shutdown*: When the No. 2 Recovery Boiler is being shut down for outages, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Opacity in excess of 35% during shutdowns 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 four hours per shutdown.

(iii) *ESP Malfunction*: During periods of maintenance to address precipitator malfunctions, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Excess opacity during malfunction repairs 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 four hours in any 24-hour period. This provision applies when it is necessary to shut down a chamber to effect the ESP repair.

[Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-212.400(BACT) and 62-210.700(1), F.A.C.]

D.9.b. Visible Emissions. Visible Emissions shall not exceed 45% opacity except visible emissions of up to 60% opacity shall be allowed for one six-minute period during any hour

[Rule 62-296.404(1), F.A.C.; Permit No. AO62-191214; Construction Permit 1230001-017-AC]

D.10. Carbon Monoxide (CO). As determined by data collected from the required continuous emissions monitoring system (CEMS), CO emissions shall not exceed 400.0 ppmvd corrected to 8% oxygen and 214.1 lb/hour based on a 30-day rolling average excluding periods of startup and shutdown.

If a 30-day CEMS average shows an exceedance of the CO standards, the permittee may exclude the following amounts of CEMS data to determine compliance: no more than eight hours per startup resulting in high CO emissions; and no more than eight hours per shutdown resulting in high CO emissions. Data collected during periods of malfunctions must be included within each compliance average.

[Rules 62-212.400(BACT) and 62-210.700(5), F.A.C.]

D.11. <u>Oxides of Nitrogen (NO_x)</u>. As determined by data collected from the required CEMS, NO_X emissions shall not exceed 80.0 ppmvd corrected to 8% oxygen and 70.4 lb/hour based on a 30-day rolling average excluding periods of startup and shutdown.

If a 30-day CEMS average shows an exceedance of the NO_X standards, the permittee may exclude the following amounts of CEMS data to determine compliance: no more than eight hours per startup resulting in high NO_X emissions; and no more than eight hours per shutdown resulting in high NO_X emissions. Data collected during periods of malfunctions must be included within each compliance average.

[Rules 62-212.400(BACT) and 62-210.700(5), F.A.C.]

D.12. <u>Tall Oil As A Fuel Firing Limitation</u>. The quantity of Tall Oil fired as a fuel, including a Tall Oil/No. 6 Fuel Oil blend, shall be included in the fuel oil firing limitations established in any other previously issued air construction permit.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

<u>Test Methods and Procedures</u>

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.13. <u>Particulate Matter.</u>

a. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be performed annually, once each federal fiscal year.

b. EPA Reference Methods 1 through 4 for Determining Traverse Points, Velocity, Flow Rates, Gas Analysis, and Moisture Content shall be performed as necessary to support other methods. See condition No. D.14.

c. *Test Fuel and Conditions*: Separate tests shall be conducted while operating with all fields in service and with one field removed from service. Compliance tests shall be conducted when firing BLS at permitted capacity.

d. *Operational Data for Tests*: For each test run, the permittee shall monitor and record the fuel feed rate (lb of BLS/hour), the secondary power input (kW) to the ESP, and the number of active fields for the ESP.

[40 CFR 63.865(b)(1), 40 CFR 60, Appendix A; Rules 62-296.404(4)(a)2., 62-297.401(5), 62-204.800, 62-4.070(3), 62-212.400 (BACT), F.A.C.; Permit No. AO62-191214, Construction Permit No. 1230001-017-AC, Construction Permit No. 1230001-023-AC/PSD-FL-397]

D.14. <u>PM Concentration Correction</u>. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (1 - X) / (1 - Y)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (8 percent).
Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2)]

D.15. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3A or 3B in Appendix A of 40 CFR Part 60. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3)]

D.16. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B; and

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

D.17. Visible Emissions. To demonstrate compliance with the opacity standard for the No. 2 Recovery Boiler, the permittee shall calibrate, operate and maintain the existing COMS to measure and record opacity in terms of the applicable standard. Each COMS shall be certified, calibrated and maintained to meet Performance Specification 1 in Appendix B of 40 CFR 60. The permittee shall report emissions in excess of a standard within one day of discovery.

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

D.18. Total Reduced Sulfur (TRS). The test method for total reduced sulfur emissions shall be EPA Method 16, 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted prior to operation permit renewal. EPA Method 16, 16A, or 16C pursuant to Rule 62-297.401(16), F.A.C., shall be required for instrument certification and compliance testing.

[Rule 62-296.404(4)(a)3., F.A.C.; Rule 62-297.401(7)(a)3.,F.A.C.]

Continuous Monitoring Requirements

D.19. Total Reduced Sulfur (TRS). The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. The continuous emissions monitoring system shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

c. The continuous emissions monitoring system shall be located downstream of the control device such that representative measurements of process parameters can be obtained.

d. The continuous emissions monitoring system shall be certified pursuant to the provisions of 40 C.F.R. Part 60, Appendix B, Performance Specification 2 and Performance Specification 3, and 40 C.F.R. Part 60, Appendix B, Performance Specification 5, which are adopted by reference in Rule 62-204.800(7), F.A.C. The exception is that the phrase "or other approved alternative" in s. 3.2 of Performance Specification 5 is not adopted. For the purposes of compliance testing and certification of continuous emissions monitoring systems, 40 C.F.R. Part 60, Appendix A, Reference Method 16 and Method 16A, adopted by reference in Rule 62-204.800(7), F.A.C., are to be used.

e. The continuous emissions monitoring system shall be in continuous operation, except when the emissions unit is not operating, or during system breakdowns, repairs, calibration checks, and zero and span adjustments.

f. During any times as there is reason to believe the system does not conform to the performance specifications under this rule (for example, equipment repairs, replacements, excessive drift and such), the owner or operator of any affected emissions unit shall conduct continuous monitoring system performance evaluations and furnish the Department, within sixty days thereof, two copies of a written report of the results of such tests. These continuous emissions monitoring systems performance evaluations shall be conducted in accordance with the requirements and procedures contained in paragraph d. of this condition.

g. The continuous emissions monitoring system shall have a maximum span value not to exceed:

   (i) N/A

(ii) A total reduced sulfur concentration of 50 ppm for the total reduced sulfur continuous emissions monitoring system on any old design Kraft recovery furnace.

(iii) 20 percent oxygen for the continuous oxygen monitoring system.

(h) The continuous emissions monitoring system shall be checked by the owner or operator in accordance with a written procedure at least once daily and after any maintenance to the system. The owner or operator shall check the zero (or low level value between 0 and 20 percent of span value) and span (90 to 100 percent of span value) calibration drifts. The zero and span shall be adjusted, as a minimum, whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications referenced in Rule 62-296.404(5)(b)1.d., F.A.C. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.

[Rule 62-296.404(5)(b)(1); Permit No. AO62-191214; Construction Permit 1230001-017-AC]

D.20. Total Reduced Sulfur (TRS) – CEM Data. The permittee shall:

a. Reduce all data to one-hour averages for each 60-minute period beginning on the hour. One-hour averages shall be computed from a minimum of four data points equally spaced over each one-hour period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computation. Either an arithmetic or integrated average shall be used. The data output of the continuous emissions monitoring system may, at the owner's or operator's option, include a numerical format showing individual numerical readings and averages in addition to the required strip chart format with legible ink tracings and calibration information. All data output shall be clearly and properly identified by the operator. All system breakdowns, repairs, calibration checks, span adjustments and periods of excess emissions shall legibly appear on all data output.

b. Calculate and record on a daily basis the 12-hour average total reduced sulfur concentrations for two consecutive 12-hour periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average total reduced sulfur concentrations provided by the continuous emissions monitoring system.

c. Calculate and record on a daily basis 12-hour average oxygen concentrations for two consecutive 12-hour periods of each operating day. These 12-hour averages shall correspond to the 12-hour average total reduced sulfur concentrations from Rule 62-296.404(5)(b)2.b., F.A.C., and shall be determined as an arithmetic mean of the appropriate 12 contiguous one-hour average oxygen concentrations provided by each continuous emissions monitoring system.

d. Correct all 12-hour average total reduced sulfur (TRS) concentrations using the following equation:

$$Ccorr = Cmeas\ (21 - X)/(21 - Y)$$

where:

Ccorr = the TRS concentration corrected for oxygen.
Cmeas = the TRS concentration unconnected for oxygen.

X = the volumetric oxygen concentration in percentage that the measured TRS concentration is to be corrected to 8 percent.
Y = the measured 12-hour average volumetric oxygen concentration.

e. The data shall be rounded to the same number of significant digits as the standard.

[Rules 62-296.404(5)(b)2., F.A.C.]

D.~~.~~21. Continuous Opacity Monitoring System (COMS). The Permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition.

(1) [Reserved]
(2) [Reserved]
(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
(4) The COMS data must be reduced as specified in 40 CFR 63.8(g)(2).

[40 CFR 63.864(d)]

D.22. Continuous Opacity Monitoring System (COMS). See Condition No. D.17.

[Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.

D.23. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition D.34. if the following monitoring exceedance occurs:

- When the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.

[40 CFR 63.864(k)(1)(i)]

D.24. PM Emissions – Violations. It shall be considered a violation of the standards of Condition D.7.b. if the following monitoring exceedance occurs:

- when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period.

[40 CFR 63.864(k)(2)(i)]

D.25. Sulfur Content and Density of Tall Oil. The Permittee shall follow procedures (1)–(10) below[1] to determine the density and sulfur content of tall oil:

As-Fired Sulfur Content in Tall Oil/No. 6 fuel oil blended fuel:

(1) A representative sample of the tall oil/No. 6 fuel oil blended fuel shall be collected at the outlet of the No. 6 fuel oil tank once a month, if any tall oil was placed in the No. 6 fuel oil tank during the month.
(2) The collected sample of the tall oil/No. 6 fuel oil blended fuel shall be submitted to an independent laboratory for analysis of the sulfur content of the blended fuel within 2 working days of collection.
(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(4) The Permittee shall obtain the results of the testing stated in Condition D.22.(2) to verify the blended fuel meets the as-fired fuel sulfur content stated in Condition D.1.5.
(5) If the analysis result indicates compliance with the as-fired sulfur content stated in Condition D.1.5., the result shall be reported to the Department in the Quarterly Report (as required by Condition ~~D.25~~D.29.).
(6) If the analysis result indicates noncompliance with the as-fired sulfur content stated in Condition D.1.5., the facility shall provide the Department immediate written notification, including a copy of the analysis results.

Sulfur Content in Tall Oil directly from Tall Oil Storage Tank:

(7) A representative sample of the tall oil intended to be fired as fuel shall be collected at the outlet of the Tall Oil Storage Tank on a monthly basis.
(8) The collected sample of the tall oil shall be submitted to an independent laboratory for analysis of the sulfur content within 2 working days of collection.
(9) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(10) The Permittee shall obtain the results of the testing stated in Condition D.25(8) and report the results to the Department in the Quarterly Report (as required by Condition D.25.)

[1]Testing required only if Tall Oil is fired as a fuel during any calendar month.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

D.26. Tall Oil Generated Offsite Analysis. The permittee shall conduct the following additional analysis using approved methods or obtain a vendor certified analysis of the tall oil for the stated constituents:

Constituent	**Concentration**
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

Once an initial test is completed for a given supplier located within the United States, tall oil shall be sampled and analyzed for the constituents stated in the table above once a calendar month (with at least 21 days elapsed time between sample collection), during any month in which such tall oil is burned as an authorized fuel.

For a supplier located outside the United States, the tall oil shall be sampled and analyzed for the constituents stated in the table above on a per delivery basis.

The same requirements for suitability as a fuel, ceasing deliveries from a given supplier, and reporting of analysis results to the Department shall apply as is specified for a suppler located within the United States.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

D.27. Fuel Monitoring. The permittee shall install, operate, and maintain equipment to continuously monitor and record the flow/firing rate of each authorized fuel stated in Condition No. D.1. including the fuel firing restrictions stated in Condition No. D.6. For virgin, ULSD, the permittee shall install flow totalizers prior to blending it with the Black Liquor. The totalized flow shall be recorded at the Recovery boiler at least once per operating day (24 hour period). All monitoring and recording equipment shall be installed and properly functioning prior to the firing of any such fuels. Existing equipment may satisfy this requirement.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; Construction Permit No. 1230001-023-AC/PSD-FL-397, Construction Permit No. 1230001-028-AC]

D.28.a. Carbon Monoxide (CO) Continuous Emission Monitor. The permittee shall calibrate, operate and maintain CEMS to measure and record emissions in terms of the applicable standards to demonstrate compliance with the CO standard for the No. 2 Recovery Boiler. The permittee shall comply with the conditions of Appendix F (Standard Continuous Emissions Monitoring Requirements) of this permit for each CEMS installed as the compliance method for a SIP-based emission standard.

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

D.28b. Oxides of Nitrogen (NO_x) Continuous Emission Monitor. The permittee shall calibrate, operate and maintain CEMS to measure and record emissions in terms of the applicable standards to demonstrate compliance with the NO_x standard for the No. 2 Recovery Boiler. The permittee shall comply with the conditions of Appendix F (Standard Continuous Emissions Monitoring Requirements) of this permit for each CEMS installed as the compliance method for a SIP-based emission standard.

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

D.28.c. Alternative Flue Gas Flow Monitoring: As an alternative to a continuous flue gas flow monitor, the permittee may develop a site specific F-factor for BLS in accordance with the following procedure.

a. Submit a test protocol for approval to the Bureau of Air Regulation (copy Northeast

District Office) for developing a site specific F-factor for BLS.

b. Upon written approval from the Bureau of Air Regulation, conduct the testing program in accordance with the protocol.

c. Develop a site-specific F-factor for BLS based on the testing program and operational data.

d. Submit a report on the testing program to the Bureau of Air Regulation (copy Northeast District Office) summarizing: the tests conducted, explanations of any deviations from the test protocol, the data collected, the proposed site-specific F-factor for BLS, and an evaluation of the estimated flow rates compared to the actual measured flow rates.

e. Submit a request for approval to the Bureau of Air Regulation (copy Northeast District Office) to use the proposed site-specific F-factor for BLS.

f. Upon written approval by the Bureau of Air Regulation, the permittee may begin using the site-specific F-factor for BLS to determine the exhaust flow rate. If the Bureau of Air Regulation does not approve the site-specific F-factor for BLS, the permittee shall install a continuous flow monitor.

[Rules 62-4.070(3) and 62-212.400(PSD), F.A.C.; Permit No. 1230001-023-AC/PSD-FL-397]

Recordkeeping and Reporting Requirements

D.29. Recordkeeping -Tall Oil Fired. The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition.

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

D.30. Recordkeeping -Virgin ULSD. For each delivery of ULSD, the permittee shall retain at least the following records:

a. ULSD vendor certification;
b. The analysis identifying the sulfur content of the oil by percent weight;
c. Statement that the ULSD is virgin fuel;
d. Quantity of oil supplied.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-028-AC]

D.31.a. Semiannual Monitoring Reports (ULSD). The permittee shall submit a written report to the Northeast District Office (Compliance Authority) summarizing the following identified by each Recovery Boiler for each calendar month in which ULSD is fired:

- Gallons of virgin ULSD fired;
- Gallons of Black Liquor fired (including percent solids, estimated density);
- Total Hours of operation;
- Demonstration that the fuel firing limitations of Condition Nos. D.1., D.2., and D.6. have been met;
- A copy of a ULSD vendor certification that represents the ULSD fuel delivered during the month as required in Condition No. D.30.

The reports shall identify any exceedance of an emissions or performance limitation. The reports shall be submitted no later than 30 days following the second and fourth calendar quarters and shall include a certification statement from a Responsible Official that the ULSD fired by the mill meets the requirements specified in Condition Nos. D.30. and D.31.a. All records shall be maintained on file by the facility and available for Department inspection upon request.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1230001-023-AC; Construction Permit No. 1230001-028-AC; Rule 62-213.440(1)(b)3.c., F.A.C.]

D.31.b. Semiannual Monitoring Reports (Compliance Report). The permittee shall submit a written report to the Compliance Authority for the following semiannual reporting periods: January 1st – June 30th; and July 1st – December 31st. For each reporting period, the permittee shall summarize the following: quantity of each authorized fuel fired; total oil fired; sulfur content of each oil fired; CO and NO_X emissions; stack opacity; and CEMS and COMS monitor availability. The reports shall identify any exceedance of an emissions standard or performance limitation. Each report is due within 30 days following the reporting period.

[Rules 62-4.070(3), 62-210.370 and 62-212.400(PSD), F.A.C., Permit No. 1230001-023-AC]

D.31.c. Stack Test Reports. For all required stack tests, the permittee shall prepare and submit reports to the Compliance Authority in accordance with the requirements specified in Appendix TR (Facility Wide Testing Requirements) of this permit. For each test run, the report shall also report: the fuel feed rate (lb of BLS/hour); the power input (kW) to the ESP; the number of active fields for the ESP; the flue gas oxygen content; CO, NO_X and TRS CEMS data; and opacity COMS data.

[Rule 62-297.310(8), F.A.C., Permit No. 1230001-023-AC]

D.32. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An

explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

(c) Evaluation of Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the Kraft recovery furnace occurred and only the actual 12-hour periods when the Kraft recovery furnace was not operating), and

2. N/A

3. N/A

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

   a. Operation of all equipment within permit limits for loading rates and other process parameters,

b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

c. Training of personnel in the operation and maintenance of equipment,

d. Visual and instrument inspections of equipment on a regular basis, and

e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

(d) The owner or operator of any Kraft pulp mill or tall oil plant shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Rule 62-296.404(6)(c)1. through 3., F.A.C.

[Rules 62-296.404(6)(a), (b), (c)(1), (c)(4), and (d), F.A.C.; Permit No. AO62-191214; Construction Permit 1230001-017-AC]

D.33. <u>CEMS for Reporting Annual Emissions</u>. The permittee shall use data from each required CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rules 62-210.370(3) and 62-212.300(1)(e), F.A.C. The permittee shall follow the procedures in Appendix TV (Title V General Conditions) and Appendix F (Standard Continuous Monitoring Requirements) of this permit for calculating annual emissions.
[Permit No. 1230001-023-AC]

D.34. <u>Startup Shutdown Malfunction Plan</u>. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(a) and (b) of this Condition:

(a) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer’s instructions and recommendations for routine and long-term maintenance; and

(b) An inspection schedule for the continuous monitoring system required under Condition D.21. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

D.35. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition D.23.

[40 CFR 63.866(b)]

D.36. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition D.24.

[40 CFR 63.866(b)]

Notifications

D.37. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.

[40 CFR 63.867(a)(1)]

Excess Emissions

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

D.38. Excess Emissions – Startup and Shutdown. When this emissions unit is being started up from an outage or shut down for an outage, visible emissions in either case shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Opacity in excess of 35% during startups or shut downs 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 four hours per startup or shut down.

[Rule 62-210.700(1), F.A.C., Application No. 1230001-019-AV, Construction Permit No. 1230001-023-AC]

D.39. Excess Emissions – Malfunction.

a. Excess emissions resulting from malfunction of any emission unit 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 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration.

b. *ESP Malfunction*: During periods of maintenance to address precipitator malfunctions, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Excess opacity during malfunction repairs 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 four hours in any 24-hour period. This provision applies when it is necessary to shut down a chamber to effect the ESP repair.

[Rule 62-210.700(1), F.A.C.; Construction Permit No. 1230001-023-AC]

D.40. Excess Emissions. Excess emissions 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.]

D.41. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d

(2) N/A

(3) Records of parameter monitoring data required under 40 CFR 63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions D.13. through D.16.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

D.42. Excess Emissions Report - PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition D.23. or D.24. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition D.23. and the number and duration of occurrences when the source met or exceeded the conditions in Condition D.24. Reporting excess emissions below the violation thresholds of Conditions D.23. and D.24. does not constitute a violation of the applicable standard.

(1) When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

(2) The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

D.43. Excess Emissions – Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department 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.

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

D.44. ESP. The permittee shall operate and maintain the ESP to control particulate matter emissions and minimize opacity from the boiler to achieve the emissions standards specified by this permit. Except for infrequent periods of maintenance, all fields of each ESP shall be functioning when the boiler is in operation. Based on satisfactory tests demonstrating compliance with the PM and opacity standards of this permit, the ESP may operate with a single field removed from service to facilitate maintenance on that field. Such periods of maintenance shall be corrected as soon as practicable. The excess emission requirements of Conditions D.38. and D.39. are applicable.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-023-AC]

D.45. Reserved

Startup, Shutdown, Malfunction Plan

D.46. This emissions unit is also subject to the SSM plan requirements of Condition II.6.

Common Conditions

D.47. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
R	Used oil
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection E. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
007	Originally the No. 3 Recovery Boiler was constructed as a direct contact evaporator design recovery boiler manufactured by Combustion Engineering. The furnace was constructed in 1964 and is not of membrane wall construction to minimize air in-leakage (Old Design Kraft Recovery Furnace – 62-210.200(219), F.A.C.). Project 1230001-023-AC authorized conversion of the boiler to a low-odor, non-direct contact evaporator unit. The maximum firing rate is 82,350 lb/hour of BLS to facilitate the recovery of the cooking liquor. The total maximum operation heat input of this emissions unit is 527 MMBtu/hr based on a fuel heating value of 6400 Btu/lb of BLS. At the maximum firing rate, the boiler will produce approximately 325,000 lb/hour of steam. Residual fuel oil and/or natural gas is fired during startup, shutdown and occasionally to supplement BLS. The following pollutants and parameters will be continuously monitored and recorded: CO, NO_X, TRS, oxygen and opacity. At permitted capacity, the exhaust gas flow rate is 119,300 dcfm at 8% oxygen with an exit temperature of 350° F. Exhaust gases exit a stack that is 9.5 feet in diameter and 225 feet tall. The ESP was manufactured by Environmental Elements Corporation and ~~originally~~ installed in 1996 with the following specifications: dry-bottom; rigid electrodes; two chambers; three fields per chamber; a design inlet flow rate of 235,000 acfm at 375° F; an inlet dust loading of 3 grains per acf; and a specific collection area 273.4 $feet^2$/1,000 acfm. The collection efficiency is guaranteed to be 99.14 percent. Opacity emissions are continuously monitored with a COMS manufactured by Land Instruments International, Model Number (M/N) 4500 MKII+. TRS emissions are continuously monitored with a Thermo Environmental M/N 43C continuous emission monitor. Fuel flow of ultra low sulfur distillate (ULSD) fuel is continuously monitored with a Badger Meter, Inc. M/N 25 continuous flow monitor. Oxygen is continuously monitored with a Thermo Environmental M/N 25595003 continuous emission monitor. Carbon Monoxide emissions are continuously monitored with a Thermo Scientific M/N 48c continuous emission monitor. Oxides of Nitrogen emissions are continuously monitored with a Thermo Scientific M/N 42i continuous emission monitor. This emissions unit has a CEMS required for compliance purposes, therefore, it is exempt from CAM for TRS monitoring.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills; 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

E.1. Methods of Operation. This boiler may be fired with:

1. Black liquor solids (BLS). [Black Liquor at approximately 72% BLS content and 11.4 lb/gallon density];

2. No. 6 Fuel Oil with a maximum sulfur content not to exceed 2.5% by weight (with or without any prior blending with facility-generated on-specification used oil). This fuel shall be fired as a startup, shutdown, and supplemental fuel (e.g. maintain the flame stability of the boiler);

3. No. 2 distillate oil with a maximum sulfur content of 0.5% by weight. This fuel may be used as a pilot fuel during startup, shutdown, malfunction, supplemental fuel (e.g. maintain the flame stability of the boiler), and for drying equipment after a water wash;

4. Natural Gas as a pilot fuel during startup, shutdown, malfunction, supplemental fuel (e.g. maintain the flame stability of the boiler), and for drying equipment after a water wash;

5. Facility-generated Tall Oil[1] and Tall Oil manufactured offsite. The Tall Oil may or may not be blended with No. 6 fuel oil. The sulfur content of No. 6 fuel is limited to 2.5 % by weight regardless of whether it is blended with the tall oil. The sulfur content of the as-fired blended No. 6/ Tall Oil fuel shall not exceed 2.5% by weight. The sulfur content of Tall Oil manufactured offsite shall not exceed 2.5% by weight;

6. Virgin, Ultra Low Sulfur Diesel with a maximum sulfur content not to exceed 15 ppm (0.0015 percent by weight) prior to injection into the black liquor feed line, i.e. a USLD/BLS blend.

[1]The sulfur content of the facility-generated Tall Oil based on composite sampling submitted by the applicant on August 11, 2003, is typically 0.065 - 0.08 percent by weight.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Permit No. AO62-187788; Construction permit No. 1230001-017-AC; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC; Construction Permit No. 1230001-028-AC]

E.2. Permitted Capacity.

a. Black Liquor Solids: The maximum operating capacity is 82,350 lb/hour of BLS based on a 1-hour average, which is equivalent to a heat input rate of 527 MMBtu

per hour based on a fuel heating value of 6,400 Btu/lb of BLS. This is also equivalent to approximately 11,113 gallons per hour of black liquor fired.[1]

b. Fuel Oil and/or Tall Oil[2]: The total maximum oil firing rate shall not exceed 603 gallons of oil per hour, which is equivalent to a heat input rate of ~~80~~88 MMBtu per hour (overfire rate) based on a fuel heating value of 146 MMBtu per 1,000 gallons of oil. The oil firing system consists of four oil burners. Each oil burner has a capacity of 22 (overfire rate) MMBtu per hour . No more than 2,000,000 gallons of oil shall be fired in the No. 3 Recovery Boiler during any consecutive 12 month period, rolling total. *Note: The 603 gallons per hour firing rate at 146,000 Btu per gallon is equivalent to a heat input of 88 MMBtu per hour. This is based upon an over fire rate of 10%.*

c. Virgin ULSD: The maximum total addition rate of virgin ULSD into the black liquor feed line shall not exceed 2.0 gallons per minute [based on a 24-hour average].

d. Virgin ULSD/BLS Blend: For each 1.0 gallon of virgin ULSD added into the black liquor feed line, 3.1 gallons of black liquor solids shall be reduced from the maximum permitted input to the boiler.[3]

e. On-spec Used Oil. The on-specification used oil shall be blended with authorized oil prior to firing in this emissions unit.

f. Natural Gas. The maximum firing rate shall be limited to 84 MMBtu/hr (4 dual fuel burners @ 21 MMBtu/hr each). No more than 286.27 million cubic feet of gas (at 1020 Btu per cubic foot) shall be fired in the No. 3 Recovery Boiler during any consecutive 12 month period, rolling total. It is noted that this amount is equivalent in Btu content to 2,000, 000 gallons of fuel oil at 146,000 Btu per gallon. Natural gas use is a substitute for fuel oil use and is not in addition to fuel oil use.

g. NG and fuel oil may be used alone or in combination as a supplemental fuel to black liquor fuel in the Recovery Boiler No. 3 during periods other than startup, shutdown, or malfunction. During periods of SSM good air pollution control practices shall be used to minimize air pollutant emissions. This may include the use of NG and fuel oil (individually or in combination). The purpose of the use of the supplemental fuel is to provide flame stability and provide for a more consistent stable operation of the Recovery Boiler No. 3 while combusting black liquor fuel. This permit does not authorize the combustion of fossil fuel in such a manner, duration, or quantity such that the boiler would be subject to additional regulation under New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and/or Rule 62-296.405, F.A.C. and/or Rule 62-296.406, F.A.C. for Fossil Fuel Steam Generating Units. Combustion of fossil fuel in such a manner, duration, or quantity such that the boiler would be subject to additional regulation under New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and/or Rule 62-296.405, F.A.C. and/or Rule 62-296.406, F.A.C. for Fossil Fuel Steam Generating Units requires the submittal of an application and issuance of a separate air construction permit to authorize such a use.

[1] Assumes a density of 11.4 lb/gallon of BLS, 72% solids content.

[2] Tall Oil may be facility-generated or manufactured offsite as specified in Construction Permit Nos. 1230001-025-AC and 1230001-027-AC.
[3] Assumes a heating value of 136,000 Btu/gallon and a density of 7.13 lb/gallon for ULSD.

[Rules 62-4.160(2), 62-4.070(3), and 62-210.200(PTE), F.A.C.; Permit No. AO62-187788; Construction Permit 1230001-017-AC, Construction Permit No. 1230001-023-AC/PSD-FL-397, Construction Permit No. 1230001-028-AC, Construction Permit No. 1230001-030-AC, and Construction Permit No. 1230001-038-AC]

E.3. Hours of Operation. The hours of operation are not limited (i.e., 8760 hours per year).

[Rules 62-4.160(2), 62-4.070(3), and 62-210.200(PTE), F.A.C. ; Construction Permit 1230001-017-AC]

E.4. Methods of Operation –Tall Oil**.** Tall oil shall be added to the No. 6 fuel oil tank where it shall be fired alone as a fuel or after it is blended with No. 6 fuel oil.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

E.5. Methods of Operation –Tall Oil Generated Offsite**.** Prior to burning tall oil that is generated offsite, the permittee shall conduct analysis pursuant to Condition E.26.

If the analysis results indicate constituent concentrations equal to or less than those stated in Condition E.26., along with a sulfur content equal to or less than the sulfur content limitation stated in Condition E.1.5., the tall oil shall be deemed suitable for combustion. The analysis results shall be reported to the Department in the Quarterly Report.

If the analysis results indicate constituent concentrations above those stated in Condition E.26., the tall oil shall be deemed not suitable for combustion. The permittee shall not fire the tall oil as a fuel and immediately cease deliveries of tall oil from the given supplier. In addition, the permittee shall provide the Department immediate written notification, including a copy of the analysis results, the quantity of tall fired if any, and the proposed means of its disposal.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

E.6. Methods of Operation – Fuel Firing Restrictions. No more than 2,000,000 gallons of oil shall be fired in the No. 3Recovery Boiler during any consecutive 12-month period, rolling total.[1] The term oil, for the purposes of this permit condition, shall include all amounts of residual oil, distillate oil, ULSD, Tall Oil[2], and on-specification used oil as authorized by this permit for this emissions unit. No more than 286.27 million cubic feet of gas (at 1020 Btu per cubic foot) shall be fired in the No. 3 Recovery Boiler during any consecutive 12 month period, rolling total. It is noted that this amount is equivalent in Btu content to 2,000, 000 gallons of fuel oil at 146,000 Btu per gallon. Natural gas use is a substitute for fuel oil use and is not in addition to fuel oil use.

[1] As stated in Technical Evaluation and Preliminary Determination for Permit No. 1230001-023-AC, the oil firing restriction maintains an annual capacity factor of less than 10% for fossil fuel firing at the emissions unit.

[2] In Construction Permit No. 1230001-027-AC, the applicant self-restricted the amount of Tall Oil (not considered a fossil fuel) fired to within previously established fuel oil firing limitations for fuel firing emissions units. Refer to Condition E.12.

[Rules 62-4.070(3), 62-4.160, 62-210.200(Definitions - PTE); 62-212.400(12)(c), F.A.C., Construction Permit No. 1230001-023-AC/PSD-FL-397; Construction Permit No. 1230001-028-AC, Construction Permit No. 1230001-038-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

E.7.a. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.030 grain per dry standard cubic foot (gr/dscf) (0.069 gram per dry standard cubic meter (g/dscm)) corrected to 8 percent oxygen and 30.7 lb/hour based upon the average of three stack test runs.

[Construction Permit No. 1230001-023-AC/PSD-FL-397, including BACT Determination]

E.7.b. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen.

[40 CFR 63.862(a)(1)(i)(A)]

E.7.c. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 3 lbs/3000 lbs BLS; 82.35 lbs/hr and 360.69 TPY. The amount of BLS fired in this recovery boiler shall be continuously monitored and recorded.

[Rule 62-296.404(2), F.A.C.; Permit No. AO62-187788; Construction Permit 1230001-017-AC]

E.8. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) emissions shall not exceed 17.5 ppmvd @ 8% O2 as a 12-hr avg; 11.05 lbs/hr and 48.28 TPY.

[Rule 62-296.404(3)(c)1.a., F.A.C.; Permit No. AO62-187788; Construction Permit 1230001-017-AC]

E.9.a. Visible Emissions. As determined by the existing continuous opacity monitoring system (COMS) and/or EPA Method 9, the opacity from each recovery boiler shall not exceed 20% opacity based on 6-minute averages except for the following periods of startup, shutdown and malfunction.

(iv) *Startup*: When the No. 3 Recovery Boiler is being started up from outages, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Opacity in excess of 35% during startups 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 four hours per startup.

(v) *Shutdown*: When the No. 3 Recovery Boiler is being shut down for outages, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Opacity in excess of 35% during shutdowns 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 four hours per shutdown.

(vi) *ESP Malfunction*: During periods of maintenance to address precipitator malfunctions, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Excess opacity during malfunction repairs 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 four hours in any 24-hour period. This provision applies when it is necessary to shut down a chamber to effect the ESP repair.

[Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-212.400(BACT) and 62-210.700(1), F.A.C.]

E.9.b. Visible Emissions. Visible Emissions shall not exceed 45% opacity except visible emissions of up to 60% opacity shall be allowed for one six-minute period during any hour.

[Rule 62-296.404(1), F.A.C.; Permit No. AO62-187788; Construction Permit 1230001-017-AC]

E.10. Carbon Monoxide (CO). As determined by data collected from the required continuous emissions monitoring system (CEMS), CO emissions shall not exceed 400.0 ppmvd corrected to 8% oxygen and 208.0 lb/hour based on a 30-day rolling average excluding periods of startup and shutdown.

If a 30-day CEMS average shows an exceedance of the CO standards, the permittee may exclude the following amounts of CEMS data to determine compliance: no more than eight hours per startup resulting in high CO emissions; and no more than eight hours per shutdown resulting in high CO emissions. Data collected during periods of malfunctions must be included within each compliance average.

[Rules 62-212.400(BACT) and 62-210.700(5), F.A.C.]

E.11. Oxides of Nitrogen (NO_x). As determined by data collected from the required CEMS, NO_X emissions shall not exceed 80.0 ppmvd corrected to 8% oxygen and 68.3 lb/hour based on a 30-day rolling average excluding periods of startup and shutdown.

If a 30-day CEMS average shows an exceedance of the NO_X standards, the permittee may exclude the following amounts of CEMS data to determine compliance: no more than eight hours per startup resulting in high NO_X emissions; and no more than eight hours per shutdown resulting in high NO_X emissions. Data collected during periods of malfunctions must be included within each compliance average.

[Rules 62-212.400(BACT) and 62-210.700(5), F.A.C.]

E.12. Tall Oil As A Fuel Firing Limitation. The quantity of Tall Oil fired as a fuel, including a Tall Oil/No. 6 Fuel Oil blend, shall be included in the fuel oil firing limitations established in any other issued air construction permit.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.13. Particulate Matter.

a. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be performed annually, once each federal fiscal year.

b. EPA Reference Methods 1 through 4 for Determining Traverse Points, Velocity, Flow Rates, Gas Analysis, and Moisture Content shall be performed as necessary to support other methods. See condition No. E.16.

c. *Test Fuel and Conditions*: Separate tests shall be conducted while operating with all fields in service and with one field removed from service. Compliance tests shall be conducted when firing BLS at permitted capacity.

d. *Operational Data for Tests*: For each test run, the permittee shall monitor and record the fuel feed rate (lb of BLS/hour), the secondary power input (kW) to the ESP, and the number of active fields for the ESP.

[40 CFR 63.865(b)(1), 40 CFR 60, Appendix A; Rules 62-296.404(4)(a)2., 62-297.401(5), 62-204.800, 62-4.070(3), 62-212.400 (BACT), F.A.C.; Permit No. AO62-191214, Construction Permit No. 1230001-017-AC, Construction Permit No. 1230001-023-AC/PSD-FL-397]

E.14. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (1 - X) / (1 - Y)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (8 percent).
Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2)]

E.15. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3A or 3B in Appendix A of 40 CFR Part 60. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3)]

E.16. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B; and

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

E.17. Visible Emissions. To demonstrate compliance with the opacity standard for the No. 3 Recovery Boiler, the permittee shall calibrate, operate and maintain the existing COMS to measure and record opacity in terms of the applicable standard. Each COMS shall be certified, calibrated and maintained to meet Performance Specification 1 in Appendix B of 40 CFR 60. The permittee shall report emissions in excess of a standard within one day of discovery.

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

E.18. Total Reduced Sulfur (TRS). The test method for total reduced sulfur emissions shall be EPA Method 16, ~~or~~ 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted prior to operation permit renewal. EPA Method 16, 16A, or 16C pursuant to Rule 62-297.401(16), F.A.C., shall be required for instrument certification and compliance testing.

[Rule 62-296.404(4)(a)3., F.A.C.; Rule 62-297.401(7)(a)3.,F.A.C.]

Continuous Monitoring Requirements

E.19. Total Reduced Sulfur (TRS). The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. The continuous emissions monitoring system shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

c. The continuous emissions monitoring system shall be located downstream of the control device such that representative measurements of process parameters can be obtained.

d. The continuous emissions monitoring system shall be certified pursuant to the provisions of 40 C.F.R. Part 60, Appendix B, Performance Specification 2 and Performance Specification 3, and 40 C.F.R. Part 60, Appendix B, Performance Specification 5, which are adopted by reference in Rule 62-204.800(7), F.A.C. The exception is that the phrase "or other approved alternative" in s. 3.2 of Performance Specification 5 is not adopted. For the purposes of compliance testing and certification of continuous emissions monitoring systems, 40 C.F.R. Part 60, Appendix A, Reference Method 16 and Method 16A, adopted by reference in Rule 62-204.800(7), F.A.C., are to be used.

e. The continuous emissions monitoring system shall be in continuous operation, except when the emissions unit is not operating, or during system breakdowns, repairs, calibration checks, and zero and span adjustments.

f. During any times as there is reason to believe the system does not conform to the performance specifications under this rule (for example, equipment repairs, replacements, excessive drift and such), the owner or operator of any affected emissions unit shall conduct continuous monitoring system performance evaluations and furnish the Department, within sixty days thereof, two copies of a written report of the results of such tests. These continuous emissions monitoring systems performance evaluations shall be conducted in accordance with the requirements and procedures contained in paragraph d. of this condition.

g. The continuous emissions monitoring system shall have a maximum span value not to exceed:

   (i) N/A

   (ii) A total reduced sulfur concentration of 50 ppm for the total reduced sulfur continuous emissions monitoring system on any old design Kraft recovery furnace.

   (iii) 20 percent oxygen for the continuous oxygen monitoring system.

h. The continuous emissions monitoring system shall be checked by the owner or operator in accordance with a written procedure at least once daily and after any maintenance to the

system. The owner or operator shall check the zero (or low level value between 0 and 20 percent of span value) and span (90 to 100 percent of span value) calibration drifts. The zero and span shall be adjusted, as a minimum, whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications referenced in Rule 62-296.404(5)(b)1.d., F.A.C. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.

[Rule 62-296.404(5)(b)(1); Permit No. AO62-187788; Construction Permit 1230001-017-AC]

E.20. Total Reduced Sulfur (TRS) – CEM Data. The permittee shall:

a. Reduce all data to one-hour averages for each 60-minute period beginning on the hour. One-hour averages shall be computed from a minimum of four data points equally spaced over each one-hour period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computation. Either an arithmetic or integrated average shall be used. The data output of the continuous emissions monitoring system may, at the owner's or operator's option, include a numerical format showing individual numerical readings and averages in addition to the required strip chart format with legible ink tracings and calibration information. All data output shall be clearly and properly identified by the operator. All system breakdowns, repairs, calibration checks, span adjustments and periods of excess emissions shall legibly appear on all data output.

b. Calculate and record on a daily basis the 12-hour average total reduced sulfur concentrations for two consecutive 12-hour periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average total reduced sulfur concentrations provided by the continuous emissions monitoring system.

c. Calculate and record on a daily basis 12-hour average oxygen concentrations for two consecutive 12-hour periods of each operating day. These 12-hour averages shall correspond to the 12-hour average total reduced sulfur concentrations from Rule 62-296.404(5)(b)2.b., F.A.C., and shall be determined as an arithmetic mean of the appropriate 12 contiguous one-hour average oxygen concentrations provided by each continuous emissions monitoring system.

d. Correct all 12-hour average total reduced sulfur (TRS) concentrations using the following equation:

$$Ccorr = Cmeas\ (21 - X)/(21 - Y)$$

where:

Ccorr = the TRS concentration corrected for oxygen.
Cmeas = the TRS concentration unconnected for oxygen.
X = the volumetric oxygen concentration in percentage that the measured TRS concentration is to be corrected to 8 percent.
Y = the measured 12-hour average volumetric oxygen concentration.

e. The data shall be rounded to the same number of significant digits as the standard.

[Rules 62-296.404(5)(b)2., F.A.C.]

E.21. Continuous Opacity Monitoring System (COMS). The Permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition.

(1) [Reserved]

(2) [Reserved]

(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in 40 CFR 63.8(g)(2).

[40 CFR 63.864(d)]

E.22. Continuous Opacity Monitoring System (COMS). See Condition No. E.17. [Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.

E.23. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition E.34. if the following monitoring exceedance occurs:

- When the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.

[40 CFR 63.864(k)(1)(i)]

E.24. PM Emissions – Violations. It shall be considered a violation of the standards of Condition E.7.b. if the following monitoring exceedance occurs:

- when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period.

[40 CFR 63.864(k)(2)(i)]

E.25. **Sulfur Content and Density of Tall Oil.** The Permittee shall follow procedures (1)–(10) below[1] to determine the density and sulfur content of tall oil:

As-Fired Sulfur Content in Tall Oil/No. 6 fuel oil blended fuel:

(1) A representative sample of the tall oil/No. 6 fuel oil blended fuel shall be collected at the outlet of the No. 6 fuel oil tank once a month, if any tall oil was placed in the No. 6 fuel oil tank during the month.

(2) The collected sample of the tall oil/No. 6 fuel oil blended fuel shall be submitted to an independent laboratory for analysis of the sulfur content of the blended fuel within 2 working days of collection.
(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(4) The Permittee shall obtain the results of the testing stated in Condition E.25.(2) to verify the blended fuel meets the as-fired fuel sulfur content stated in Condition E.1.5.
(5) If the analysis result indicates compliance with the as-fired sulfur content stated in Condition E.1.5., the result shall be reported to the Department in the Quarterly Report (as required by Condition E.29.).
(6) If the analysis result indicates noncompliance with the as-fired sulfur content stated in Condition E.1.5., the facility shall provide the Department immediate written notification, including a copy of the analysis results.

Sulfur Content in Tall Oil directly from Tall Oil Storage Tank:

(7) A representative sample of the tall oil intended to be fired as fuel shall be collected at the outlet of the Tall Oil Storage Tank on a monthly basis.
(8) The collected sample of the tall oil shall be submitted to an independent laboratory for analysis of the sulfur content within 2 working days of collection.
(9) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(10) The Permittee shall obtain the results of the testing stated in Condition E.25.(8) and report the results to the Department in the Quarterly Report (as required by Condition E.29.).

[1]Testing required only if Tall Oil is fired as a fuel during any calendar month.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

E.26. Tall Oil Generated Offsite Analysis. The permittee shall conduct the following additional analysis using approved methods or obtain a vendor certified analysis of the tall oil for the stated constituents:

Constituent	**Concentration**
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

Once an initial test is completed for a given supplier located within the United States, tall oil shall be sampled and analyzed for the constituents stated in the table above once a calendar

month (with at least 21 days elapsed time between sample collection), during any month in which such tall oil is burned as an authorized fuel.

For a supplier located outside the United States, the tall oil shall be sampled and analyzed for the constituents stated in the table above on a per delivery basis.

The same requirements for suitability as a fuel, ceasing deliveries from a given supplier, and reporting of analysis results to the Department shall apply as is specified for a suppler located within the United States.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

E.27. Fuel Monitoring. The permittee shall install, operate, and maintain equipment to continuously monitor and record the flow/firing rate of each authorized fuel stated in Condition No. E.1. including the fuel firing restrictions stated in Condition No. E.6. For virgin, ULSD, the permittee shall install flow totalizers prior to blending it with the Black Liquor. The totalized flow shall be recorded at the Recovery boiler at least once per operating day (24 hour period). All monitoring and recording equipment shall be installed and properly functioning prior to the firing of any such fuels. Existing equipment may satisfy this requirement. These records shall be correlated with periods of start-up, shutdown, malfunction, and normal operation.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; Construction Permit Nos. 1230001-023-AC/PSD-FL-397 and 1230001-038-AC; Construction Permit No. 1230001-028-AC]

E.28.a. Carbon Monoxide (CO) Continuous Emission Monitor. The permittee shall calibrate, operate and maintain CEMS to measure and record emissions in terms of the applicable standards to demonstrate compliance with the CO standard for the No. 3 Recovery Boiler. The permittee shall comply with the conditions of Appendix F (Standard Continuous Emissions Monitoring Requirements) of this permit for each CEMS installed as the compliance method for a SIP-based emission standard.

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

E.28.b. Oxides of Nitrogen (NO_x) Continuous Emission Monitor. The permittee shall calibrate, operate and maintain CEMS to measure and record emissions in terms of the applicable standards to demonstrate compliance with the NO_x standard for the No. 3 Recovery Boiler. The permittee shall comply with the conditions of Appendix F (Standard Continuous Emissions Monitoring Requirements) of this permit for each CEMS installed as the compliance method for a SIP-based emission standard.
[Rules 62-4.070(3) and 62-212.400(PSD), F.A.C.]

E.28.c. Alternative Flue Gas Flow Monitoring: As an alternative to a continuous flue gas flow monitor, the permittee may develop a site specific F-factor for BLS in accordance with the following procedure.

g. Submit a test protocol for approval to the Bureau of Air Regulation (copy Northeast District Office) for developing a site specific F-factor for BLS.

h. Upon written approval from the Bureau of Air Regulation, conduct the testing program in accordance with the protocol.

i. Develop a site-specific F-factor for BLS based on the testing program and operational

data.

j. Submit a report on the testing program to the Bureau of Air Regulation (copy Northeast District Office) summarizing: the tests conducted, explanations of any deviations from the test protocol, the data collected, the proposed site-specific F-factor for BLS, and an evaluation of the estimated flow rates compared to the actual measured flow rates.

k. Submit a request for approval to the Bureau of Air Regulation (copy Northeast District Office) to use the proposed site-specific F-factor for BLS.

l. Upon written approval by the Bureau of Air Regulation, the permittee may begin using the site-specific F-factor for BLS to determine the exhaust flow rate. If the Bureau of Air Regulation does not approve the site-specific F-factor for BLS, the permittee shall install a continuous flow monitor.

[Rules 62-4.070(3) and 62-212.400(PSD), F.A.C.; Permit No. 1230001-023-AC/PSD-FL-397]

Recordkeeping and Reporting Requirements

E.29. Recordkeeping -Tall Oil Fired**.** The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition.

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

E.30. Recordkeeping -Virgin ULSD. For each delivery of ULSD, the permittee shall retain at least the following records:

a. ULSD vendor certification;
b. The analysis identifying the sulfur content of the oil by percent weight;
c. Statement that the ULSD is virgin fuel;
d. Quantity of oil supplied.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-028-AC]

E.31.a. Semiannual Monitoring Reports (ULSD). The permittee shall submit a written report to the Northeast District Office (Compliance Authority) summarizing the following identified by Recovery Boiler for each calendar month in which ULSD is fired:

- Gallons of virgin ULSD fired;
- Gallons of Black Liquor fired (including percent solids, estimated density);
- Total Hours of operation;

- Demonstration that the fuel firing limitations of Condition Nos. E.1., E.2., and E.6. have been met;
- A copy of a ULSD vendor certification that represents the ULSD fuel delivered during the month as required in Condition No. E.30.

The reports shall identify any exceedance of an emissions or performance limitation. The reports shall be submitted no later than 30 days following the second and fourth calendar quarters and shall include a certification statement from a Responsible Official that the ULSD fired by the mill meets the requirements specified in Condition Nos. E.**30.** and E.**31.a.** All records shall be maintained on file by the facility and available for Department inspection upon request.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1230001-023-AC; Construction Permit No. 1230001-028-AC; Rule 62-213.440(1)(b)3.c., F.A.C.]

E.31.b. Semiannual Monitoring Reports (Compliance Report). The permittee shall submit a written report to the Compliance Authority for the following semiannual reporting periods: January 1st – June 30th; and July 1st – December 31st. For each reporting period, the permittee shall summarize the following: quantity of each authorized fuel fired; total oil fired; sulfur content of each oil fired; CO and NO_X emissions; stack opacity; and CEMS and COMS monitor availability. The reports shall identify any exceedance of an emissions standard or performance limitation. Each report is due within 30 days following the reporting period.

[Rules 62-4.070(3), 62-210.370 and 62-212.400(PSD), F.A.C., Permit No. 1230001-023-AC]

E.31.c. Stack Test Reports. For all required stack tests, the permittee shall prepare and submit reports to the Compliance Authority in accordance with the requirements specified in Appendix TR (Facility Wide Testing Requirements) of this permit. For each test run, the report shall also report: the fuel feed rate (lb of BLS/hour); the power input (kW) to the ESP; the number of active fields for the ESP; the flue gas oxygen content; CO, NO_X and TRS CEMS data; and opacity COMS data.
[Rule 62-297.310(8), F.A.C., Permit No. 1230001-023-AC]

E.32. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

(c) Evaluation of Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the Kraft recovery furnace occurred and only the actual 12-hour periods when the Kraft recovery furnace was not operating), and

2. N/A

3. N/A

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

a. Operation of all equipment within permit limits for loading rates and other process parameters,

b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

c. Training of personnel in the operation and maintenance of equipment,

d. Visual and instrument inspections of equipment on a regular basis, and

e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

(d) The owner or operator of any Kraft pulp mill or tall oil plant shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Rule 62-296.404(6)(c)1. through 3., F.A.C.

[Rules 62-296.404(6)(a), (b), (c)(1), (c)(4), and (d), F.A.C.; Permit No. AO62-187788; Construction Permit 1230001-017-AC]

E.33. <u>CEMS for Reporting Annual Emissions</u>. The permittee shall use data from each required CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rules 62-210.370(3) and 62-212.300(1)(e), F.A.C. The permittee shall follow the procedures in Appendix TV (Title V General Conditions) and Appendix F (Standard Continuous Monitoring Requirements) of this permit for calculating annual emissions.
[Permit No. 1230001-023-AC]

E.34. <u>Startup Shutdown Malfunction Plan</u>. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(a) and (b) of this Condition:

(a) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(b) An inspection schedule for the continuous monitoring system required under Condition E.21. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

E.35. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition ~~E.20.~~E.23.

[40 CFR 63.866(b)]

E.36. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition E.24.

[40 CFR 63.866(b)]

Notifications

E.37. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.

[40 CFR 63.867(a)(1)]

Excess Emissions

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

E.38. Excess Emissions – Startup and Shutdown. When this emissions unit is being started up from an outage or shut down for an outage, visible emissions in either case shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Opacity in excess of 35% during startups or shut downs 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 four hours per startup or shut down.

[Rule 62-210.700(1), F.A.C., Application No. 1230001-019-AV, Construction Permit No. 1230001-023-AC]

E.39. Excess Emissions – Malfunction.

- **a.** Excess emissions resulting from malfunction of any emission unit 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 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration.

- **b.** *ESP Malfunction*: during periods of maintenance to address precipitator malfunctions, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Excess opacity during malfunction repairs 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 four hours in any 24-hour period. This provision applies when it is necessary to shut down a chamber to effect the ESP repair.

[Rule 62-210.700(1), F.A.C.; Construction Permit No. 1230001-023-AC]

E.40. Excess Emissions. Excess emissions 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.]

E.41. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d

(2) N/A

(3) Records of parameter monitoring data required under 40 CFR 63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions E.13. through E.16.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

E.42. Excess Emissions Report - PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition E.23. or E.24. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition E.23. and the number and duration of occurrences when the source met or exceeded the conditions in Condition E.24. Reporting excess emissions below the violation thresholds of Conditions E.23. and E.24. does not constitute a violation of the applicable standard.

(1) When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

(2) The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

E.43. Excess Emissions – Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department 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.

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

E.44. ESP. The permittee shall operate and maintain the ESP to control particulate matter emissions and minimize opacity from the boiler to achieve the emissions standards specified by this permit. Except for infrequent periods of maintenance, all fields of each ESP shall be functioning when the boiler is in operation. Based on satisfactory tests demonstrating compliance with the PM and opacity standards of this permit, the ESP may operate with a single field removed from service to facilitate maintenance on that field. Such periods of maintenance shall be corrected as soon as practicable. The excess emission requirements of Conditions E.38. and E.39. are applicable.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-023-AC]

Compliance Assurance Monitoring (CAM) Requirements

E.45. Reserved

Startup, Shutdown, Malfunction Plan

E.46. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions, Condition No. 6.

Common Conditions

E.47. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
R	Used oil
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection F. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
011	No. 4 Recovery Boiler, a low odor design, non-direct contact evaporator design recovery boiler manufactured by Babcock & Wilcox. The furnace was constructed in 1973 and is of membrane wall construction to minimize air in-leakage (New Design Kraft Recovery Furnace – 62-210.200(212), F.A.C.). Strong black liquor (~55% solids) is sent through a steam concentrator where the solids content is raised. The particulate matter collected by the ESP, primarily composed of Na_2SO4 (Saltcake) is removed by mechanical conveyance and added into the black liquor increasing the solids content of the black liquor to ~68% before being burned in the furnace. Particulate matter emissions are controlled by a two-chamber, six fields per chamber, rigid electrode, dry-bottom electrostatic precipitator manufactured by Research Cottrell. Control efficiency is estimated at 99.5%. Total Reduced Sulfur emissions are reduced by the low odor design. The total maximum operational rate of this emissions unit is 133,825 lbs Black Liquor Solids/hr. The maximum heat input rate is 803.0 MMBTU/hr.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills; 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

F.1. Methods of Operation. This boiler is fired with:

1. Black liquor solids (BLS). [Black Liquor at approximately 68% BLS content and 11.4 lb/gallon density];

2. No. 6 Fuel Oil with a maximum sulfur content not to exceed 2.5% by weight (with or without any prior blending with facility-generated on-specification used oil). This fuel shall be fired as a startup, shutdown, and supplemental fuel (e.g. maintain the flame stability of the boiler);

Condition No. F.1. Continued:

3. No. 2 distillate oil with a maximum sulfur content of 0.5% by weight as a pilot fuel during startup, shutdown, and for drying equipment after a water wash. The usage is limited to 50,000 gallons per year, unless otherwise requested;

4. Natural Gas for start-up, shutdown, malfunction, boiler curing, flame stability, supplement to black liquor solids, fuel oil, or tall oil firing, and other needs as required.

5. Facility-generated Tall Oil[1] and Tall Oil manufactured offsite. The Tall Oil may or may not be blended with No. 6 fuel oil. The sulfur content of No. 6 fuel is limited to 2.5 % by weight regardless of whether it is blended with the tall oil. The sulfur content of the as-fired blended No. 6/ Tall Oil fuel shall not exceed 2.5% by weight. The sulfur content of Tall Oil manufactured offsite shall not exceed 2.5% by weight;

6. Virgin, Ultra Low Sulfur Diesel (ULSD) with a maximum sulfur content not to exceed 15 ppm (0.0015 percent by weight) prior to injection into the black liquor feed line, i.e. a USLD/BLS blend.

[1]The sulfur content of the facility-generated Tall Oil based on composite sampling submitted by the applicant on August 11, 2003, is typically 0.065 - 0.08 percent by weight.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Permit No. AO62-208309; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC; Construction Permit No. 1230001-028-AC]

F.2. Permitted Capacity.

a. Black Liquor Solids: The maximum operating capacity is 133,825 lb/hour of BLS based on a 1-hour average, which is equivalent to a heat input rate of 803.0 MMBtu per hour based on a fuel heating value of 6,000 Btu/lb of BLS. This is also equivalent to approximately 17,263 gallons per hour of black liquor fired.[1]

b. Fuel Oil and/or Tall Oil[2]: The total maximum oil firing rate shall not exceed 2,568 gallons of oil per hour, which is equivalent to a heat input rate of 375 MMBtu per hour based on a fuel heating value of 146 MMBtu per 1,000 gallons of oil. The oil firing system consists of five oil burners four of which are capable of firing natural gas. Each burner has a capacity of 75 MMBtu per hour.

c. Natural Gas: Original air operation permits which listed the natural gas capability of the No. 4 Recovery Boiler indicated a maximum natural gas firing rate of 300,000 cubic feet per hour which equates to 306 MMBtu per hour heat input at 1020 Btu per cubic foot. The permittee is authorized to combust up to 300,000 cubic feet per hour of natural gas in the No. 4 Recovery Boiler.

d. Virgin ULSD: The maximum total addition rate of virgin ULSD into the black liquor feed line shall not exceed 2.0 gallons per minute [based on a 24-hour average].

Condition No. F.2. Continued:

e. Virgin ULSD/BLS Blend: For each 1.0 gallon of virgin ULSD added into the black liquor feed line, 3.0 gallons of black liquor solids shall be reduced from the maximum permitted input to the boiler.[3]

f. On-spec Used Oil: The on-specification used oil shall be blended with authorized oil prior to firing in this emissions unit.

[1] Assumes a density of 11.4 lb/gallon of BLS, 68% solids content.
[2] Tall Oil may be facility-generated or manufactured offsite as specified in Construction Permit Nos. 1230001-025-AC and 1230001-027-AC.
[3] Assumes a heating value of 136,000 Btu/gallon and a density of 7.13 lb/gallon for ULSD.

[Rules 62-4.160(2), 62-4.070(3), and 62-210.200(PTE), F.A.C.; Permit No. AO62-208309; Construction Permit 1230001-017-AC; Construction permit No. 1230001-014-AC; Construction Permit No. 1230001-028-AC, Construction Permit No. 1230001-030-AC]

F.3. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1230001-017-AC; Construction permit No. 1230001-014-AC]

F.4. Methods of Operation –Tall Oil**.** Tall oil shall be added to the No. 6 fuel oil tank where it shall be fired alone as a fuel or after it is blended with No. 6 fuel oil.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

F.5. Methods of Operation –Tall Oil Generated Offsite**.** Prior to burning tall oil that is generated offsite, the permittee shall conduct analysis pursuant to Condition F.22.

If the analysis results indicate constituent concentrations equal to or less than those stated in Condition F.22., along with a sulfur content equal to or less than the sulfur content limitation stated in Condition F.1.5., the tall oil shall be deemed suitable for combustion. The analysis results shall be reported to the Department in the Quarterly Report.

If the analysis results indicate constituent concentrations above those stated in Condition F.22., the tall oil shall be deemed not suitable for combustion. The permittee shall not fire the tall oil as a fuel and immediately cease deliveries of tall oil from the given supplier. In addition, the permittee shall provide the Department immediate written notification, including a copy of the analysis results, the quantity of tall fired if any, and the proposed means of its disposal.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

F.6.a. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen.

[40 CFR 63.862(a)(1)(i)(A)]

F.6.b. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 3 lbs/3000 lbs BLS; 113.40 lbs/hr and 496.69 TPY. The amount of BLS fired in this recovery boiler shall be continuously monitored and recorded.

[Rule 62-296.404(2), F.A.C.; Permit No. AO62-208309; Construction Permit 1230001-017-AC; Construction Permit No. 1230001-014-AC]

F.7. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) emissions shall not exceed 5.0 ppmvd @ 8% O2 as a 12-hr avg; 4.73 lbs/hr and 20.71 TPY.

[Rule 62-296.404(3)(c)1.b., F.A.C.; Permit No. AO62-208309; Construction Permit 1230001-017-AC; Construction Permit 1230001-014-AC]

F.8. Visible Emissions. Visible Emissions shall not exceed 45% opacity except visible emissions of up to 60% opacity shall be allowed for one six-minute period during any hour.

[Rule 62-296.404(1), F.A.C.; Permit No. AO62-208309; Construction Permit 1230001-017-AC; Construction Permit 1230001-014-AC]

F.9. Tall Oil As A Fuel Firing Limitation. The quantity of Tall Oil fired as a fuel, including a Tall Oil/No. 6 Fuel Oil blend, shall be included in the fuel oil firing limitations established in any other issued air construction permit.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

F.10. Particulate Matter. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8

dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be performed annually, once each federal fiscal year.

[40 CFR 63.865(b)(1); Rule 62-296.404(4)(a)2., F.A.C.; Rule 62-297.401(5), F.A.C.;.; Permit No. AO62-208309; Construction Permit 1230001-017-AC]

F.11. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (21 - X) / (21 - Y)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (8 percent).
Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2)]

F.12. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3A or 3B in Appendix A of 40 CFR Part 60. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3)]

F.13. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B; and

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

F.14. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-296.404(4)(a)1., F.A.C.; Rule 62-297.401(9), F.A.C.; Permit No. AO62-208309; Construction Permit 1230001-017-AC]

F.15. Total Reduced Sulfur (TRS). The test method for total reduced sulfur emissions shall be EPA Method 16, ~~or~~ 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted prior to operation permit renewal. EPA Method 16, 16A, or 16C pursuant to Rule 62-297.401(16), F.A.C., shall be required for instrument certification and compliance testing.

[Rule 62-296.404(4)(a)3., F.A.C.; Rule 62-297.401(7)(a)3.,F.A.C.]

Continuous Monitoring Requirements

F.16. Total Reduced Sulfur (TRS). The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. The continuous emissions monitoring system shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

c. The continuous emissions monitoring system shall be located downstream of the control device such that representative measurements of process parameters can be obtained.

d. The continuous emissions monitoring system shall be certified pursuant to the provisions of 40 C.F.R. Part 60, Appendix B, Performance Specification 2 and Performance Specification 3, and 40 C.F.R. Part 60, Appendix B, Performance Specification 5, which are adopted by reference in Rule 62-204.800(7), F.A.C. The exception is that the phrase "or other approved alternative" in s. 3.2 of Performance Specification 5 is not adopted. For the purposes of compliance testing and certification of continuous emissions monitoring systems, 40 C.F.R. Part 60, Appendix A, Reference Method 16 and Method 16A, adopted by reference in Rule 62-204.800(7), F.A.C., are to be used.

e. The continuous emissions monitoring system shall be in continuous operation, except when the emissions unit is not operating, or during system breakdowns, repairs, calibration checks, and zero and span adjustments.

f. During any times as there is reason to believe the system does not conform to the performance specifications under this rule (for example, equipment repairs, replacements, excessive drift and such), the owner or operator of any affected emissions unit shall conduct continuous monitoring system performance evaluations and furnish the Department, within sixty days thereof, two copies of a written report of the results of such tests. These continuous emissions monitoring systems performance evaluations shall be

conducted in accordance with the requirements and procedures contained in paragraph d. of this condition.

g. The continuous emissions monitoring system shall have a maximum span value not to exceed:

(i) N/A

(ii) A total reduced sulfur concentration of 50 ppm for the total reduced sulfur continuous emissions monitoring system on any new design Kraft recovery furnace.;

(iii) 20 percent oxygen for the continuous oxygen monitoring system.

h. The continuous emissions monitoring system shall be checked by the owner or operator in accordance with a written procedure at least once daily and after any maintenance to the system. The owner or operator shall check the zero (or low level value between 0 and 20 percent of span value) and span (90 to 100 percent of span value) calibration drifts. The zero and span shall be adjusted, as a minimum, whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications referenced in Rule 62-296.404(5)(b)1.d., F.A.C. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.

[Rule 62-296.404(5)(b)(1); Permit No. AO62-208309; Construction Permit 1230001-017-AC]

F.17. Total Reduced Sulfur (TRS) – CEM Data. The permittee shall:

a. Reduce all data to one-hour averages for each 60-minute period beginning on the hour. One-hour averages shall be computed from a minimum of four data points equally spaced over each one-hour period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computation. Either an arithmetic or integrated average shall be used. The data output of the continuous emissions monitoring system may, at the owner's or operator's option, include a numerical format showing individual numerical readings and averages in addition to the required strip chart format with legible ink tracings and calibration information. All data output shall be clearly and properly identified by the operator. All system breakdowns, repairs, calibration checks, span adjustments and periods of excess emissions shall legibly appear on all data output.

b. Calculate and record on a daily basis the 12-hour average total reduced sulfur concentrations for two consecutive 12-hour periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average total reduced sulfur concentrations provided by the continuous emissions monitoring system.

c. Calculate and record on a daily basis 12-hour average oxygen concentrations for two consecutive 12-hour periods of each operating day. These 12-hour averages shall correspond to the 12-hour average total reduced sulfur concentrations from Rule 62-296.404(5)(b)2.b., F.A.C., and shall be determined as an arithmetic mean of the appropriate 12 contiguous one-hour average oxygen concentrations provided by each continuous emissions monitoring system.

d. Correct all 12-hour average total reduced sulfur (TRS) concentrations using the following equation:

Ccorr = Cmeas (21 - X)/(21 - Y)

where:

Ccorr = the TRS concentration corrected for oxygen.
Cmeas = the TRS concentration unconnected for oxygen.
X = the volumetric oxygen concentration in percentage that the measured TRS concentration is to be corrected to 8 percent.
Y = the measured 12-hour average volumetric oxygen concentration.

e. The data shall be rounded to the same number of significant digits as the standard.

[Rules 62-296.404(5)(b)2., F.A.C.]

F.18. Continuous Opacity Monitoring System (COMS). The Permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition.

(1) [Reserved]

(2) [Reserved]

(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in 40 CFR 63.8(g)(2).

[40 CFR 63.864(d)]

F.19. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition ~~F.25.~~F.29. if the following monitoring exceedance occurs:

- When the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.

[40 CFR 63.864(k)(1)(i)]

F.20. PM Emissions – Violations. It shall be considered a violation of the standards of Condition F.6.a. if the following monitoring exceedance occurs:

- when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period.

[40 CFR 63.864(k)(2)(i)]

F.21. <u>Sulfur Content and Density of Tall Oil.</u> The Permittee shall follow procedures (1)–(10) below[1] to determine the density and sulfur content of tall oil:

As-Fired Sulfur Content in Tall Oil/No. 6 fuel oil blended fuel:

(1) A representative sample of the tall oil/No. 6 fuel oil blended fuel shall be collected at the outlet of the No. 6 fuel oil tank once a month, if any tall oil was placed in the No. 6 fuel oil tank during the month.
(2) The collected sample of the tall oil/No. 6 fuel oil blended fuel shall be submitted to an independent laboratory for analysis of the sulfur content of the blended fuel within 2 working days of collection.
(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(4) The Permittee shall obtain the results of the testing stated in Condition F.21.(2) to verify the blended fuel meets the as-fired fuel sulfur content stated in Condition F.1.5.
(5) If the analysis result indicates compliance with the as-fired sulfur content stated in Condition F.1.5., the result shall be reported to the Department in the Quarterly Report (as required by Condition F.23).
(6) If the analysis result indicates noncompliance with the as-fired sulfur content stated in Condition F.1.5., the facility shall provide the Department immediate written notification, including a copy of the analysis results.

Sulfur Content in Tall Oil directly from Tall Oil Storage Tank:

(7) A representative sample of the tall oil intended to be fired as fuel shall be collected at the outlet of the Tall Oil Storage Tank on a monthly basis.
(8) The collected sample of the tall oil shall be submitted to an independent laboratory for analysis of the sulfur content within 2 working days of collection.
(9) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(10) The Permittee shall obtain the results of the testing stated in Condition F.21.(8) and report the results to the Department in the Quarterly Report (as required by Condition F.23.

[1]Testing required only if Tall Oil is fired as a fuel during any calendar month.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

F.22. Tall Oil Generated Offsite Analysis. The permittee shall conduct the following additional analysis using approved methods or obtain a vendor certified analysis of the tall oil for the stated constituents:

Constituent	Concentration
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

Once an initial test is completed for a given supplier located within the United States, tall oil shall be sampled and analyzed for the constituents stated in the table above once a calendar month (with at least 21 days elapsed time between sample collection), during any month in which such tall oil is burned as an authorized fuel.

For a supplier located outside the United States, the tall oil shall be sampled and analyzed for the constituents stated in the table above on a per delivery basis.

The same requirements for suitability as a fuel, ceasing deliveries from a given supplier, and reporting of analysis results to the Department shall apply as is specified for a suppler located within the United States.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Recordkeeping and Reporting Requirements

F.23. Tall Oil Fired. The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition.

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

F.24. Fuel Monitoring. The permittee shall install, operate, and maintain equipment to continuously monitor and record the flow/firing rate of each authorized fuel stated in Condition No. F.1. For virgin, ULSD, the permittee shall install flow totalizers prior to blending it with the

Black Liquor. The totalized flow shall be recorded at the Recovery boiler at least once per operating day (24 hour period). All monitoring and recording equipment shall be installed and properly functioning prior to the firing of any such fuels. Existing equipment may satisfy this requirement.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; Construction Permit No. 1230001-028-AC]

F.25. Recordkeeping -Tall Oil Fired. The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition.

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

F.26. Recordkeeping -Virgin ULSD. For each delivery of ULSD, the permittee shall retain at least the following records:

a. ULSD vendor certification;
b. The analysis identifying the sulfur content of the oil by percent weight;
c. Statement that the ULSD is virgin fuel;
d. Quantity of oil supplied.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-028-AC]

F.27. Semiannual Monitoring Reports. The permittee shall submit a written report to the Northeast District Office (Compliance Authority) summarizing the following identified by Recovery Boiler for each calendar month in which ULSD is fired:

- Gallons of virgin ULSD fired;
- Gallons of Black Liquor fired (including percent solids, estimated density);
- Total Hours of operation;
- Demonstration that the fuel firing limitations of Condition Nos. F.1., and F.2. have been met;
- A copy of a ULSD vendor certification that represents the ULSD fuel delivered during the month as required in Condition No. F.26.

The reports shall identify any exceedance of an emissions or performance limitation. The reports shall be submitted no later than 30 days following the second and fourth calendar quarters and shall include a certification statement from a Responsible Official that the ULSD fired by the mill meets the requirements specified in Condition Nos.

F.26. and F.27. All records shall be maintained on file by the facility and available for Department inspection upon request.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1230001-023-AC; Construction Permit No. 1230001-028-AC; Rule 62-213.440(1)(b)3.c., F.A.C.]

F.28. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

(c) Evaluation of Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods

during which a startup, shutdown or malfunction of the Kraft recovery furnace occurred and only the actual 12-hour periods when the Kraft recovery furnace was not operating), and

2. N/A

3. N/A

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

   a. Operation of all equipment within permit limits for loading rates and other process parameters,

   b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

   c. Training of personnel in the operation and maintenance of equipment,

   d. Visual and instrument inspections of equipment on a regular basis, and

   e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

(d) The owner or operator of any Kraft pulp mill or tall oil plant shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Rule 62-296.404(6)(c)1. through 3., F.A.C.

[Rules 62-296.404(6)(a), (b), (c)(1), (c)(4), and (d), F.A.C.; Permit No. AO62-208309; Construction Permit 1230001-017-AC]

F.29. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition F.18. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

F.30. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition F.19.

[40 CFR 63.866(b)]

F.31. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition F.20.

[40 CFR 63.866(b)]

Notifications

F.32. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.

[40 CFR 63.867(a)(1)]

Excess Emissions

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

F.33. Excess Emissions – Startup and Shutdown. When this emissions unit is being started up from an outage or shut down for an outage, visible emissions in either case shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Opacity in excess of 35% during startups or shut downs 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 four hours per startup or shut down.

[Rule 62-210.700(1), F.A.C., Application No. 1230001-019-AV, Construction Permit No. 1230001-023-AC]

F.34. Excess Emissions – Malfunction.

a. Excess emissions resulting from malfunction of any emission unit 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 2 hours in

any 24-hour period unless specifically authorized by the Department for longer duration.

b. *ESP Malfunction*: during periods of maintenance to address precipitator malfunctions, visible emissions shall not exceed 35% opacity based on 6-minute averages as determined by the existing COMS and/or EPA Method 9. Excess opacity during malfunction repairs 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 four hours in any 24-hour period. This provision applies when it is necessary to shut down a chamber to effect the ESP repair.

[Rule 62-210.700(1), F.A.C.; Construction Permit No. 1230001-023-AC]

F.35. Excess Emissions. Excess emissions 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.]

F.36. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d
(2) N/A
(3) Records of parameter monitoring data required under 40 CFR 63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;
(4) Records and documentation of supporting calculations for compliance determinations made under Conditions F.10. through F.13.;
(5) Records of monitoring parameter ranges established for each affected source or process unit;
(6) N/A
(7) N/A

[40 CFR 63.866(c)]

F.37. Excess Emissions Report - PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition F.19 or F.20. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition F.19. and the number and duration of occurrences when the source met or exceeded the conditions in Condition F20. Reporting excess emissions below the violation thresholds of Conditions F.19. and F.20. does not constitute a violation of the applicable standard.

(1) When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

(2) The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

F.38. Excess Emissions – Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department 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.

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

F.39. ESP. The permittee shall operate and maintain the ESP to control particulate matter emissions and minimize opacity from the boiler to achieve the emissions standards specified by this permit. Except for infrequent periods of maintenance, all fields of each ESP shall be functioning when the boiler is in operation. Based on satisfactory tests demonstrating compliance with the PM and opacity standards of this permit, the ESP may operate with a single field removed from service to facilitate maintenance on that field. Such periods of maintenance shall be corrected as soon as practicable. The excess emission requirements of Conditions F.33. and F.34. are applicable.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-023-AC]

Compliance Assurance Monitoring (CAM) Requirements

F.40. Reserved

Startup, Shutdown, Malfunction Plan

F.41. This emissions unit is also subject to the SSM plan requirements of Condition II.6.

Common Conditions

F.42. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
R	Used oil
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection G. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
019	No. 2 Bark Boiler and associated bark dryer system. A portion of flue gases are used to dry wet bark prior to being fired in this boiler and the No. 1 Bark Boiler. Particulate matter emissions from the dryer are controlled by a wet, Venturi scrubber manufactured by AirPoly Systems. Particulate matter emissions from the boiler are controlled by a cyclone collector followed by a wet, Venturi scrubber manufactured by AirPoly Systems. Collected particulate is re-injected into the boiler. The scrubber utilizes water as the scrubbing media. At permitted capacity, the exhaust gas flow rate from the boiler is 210,000 acfm with an exit temperature of 150° F. Exhaust gases from the boiler and the dryer exit through a common stack with E.U. 002, 003, 004, 019 that is 13 feet in diameter and 225 feet tall. This emissions unit is subject to CAM for Particulate Matter emissions.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.410, F.A.C. – Carbonaceous Fuel Burning Equipment; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C., and 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable. [Rule 62-213.440, F.A.C.]

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

G.1. Permitted Capacity. The maximum allowed heat input rate is 601 MMBtu/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AO62-202123; Construction Permit 1230001-017-AC]

G.2. Methods of Operation. This boiler may be fired with:

1. Carbonaceous Fuel consisting of wood materials such as bark, chips, sawdust and other such wood fiber material.

2. No. 6 fuel oil with a sulfur content that shall not exceed 2.5% by weight (which may contain facility generated used oil) fired as 100%fuel oil only during startups, shutdowns, malfunctions or temporary loss of bark. A record of (rate and hours) shall be maintained when firing No. 6 fuel oil. The utilization rate shall not exceed 1233 gallons per hour (180 MMBtu/hr).

3. No. 2 fuel oil fired typically as a pilot fuel during startups, shutdowns, malfunctions and for dry out fires after a water wash. Sulfur content that shall not exceed 0.5% by weight. Except for SSM, this emissions unit is not permitted to fire 100% fuel oil.

4. Natural gas fired typically as a pilot fuel during startups, shutdowns, malfunctions and for dry out fires after a water wash.

5. Facility-generated Tall Oil[1] and Tall Oil manufactured offsite. The Tall Oil may or may not be blended with No. 6 fuel oil. The sulfur content of No. 6 fuel is limited to 2.5 % by weight regardless of whether it is blended with the tall oil. The sulfur content of the as-fired blended No. 6/ Tall Oil fuel shall not exceed 2.5% by weight. The sulfur content of Tall Oil manufactured offsite shall not exceed 2.5% by weight.

[1]The sulfur content of the facility-generated Tall Oil based on composite sampling submitted by the applicant on August 11, 2003, is typically 0.065 - 0.08 percent by weight.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Permit No. AO62-202123; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

G.3. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. ; Construction Permit 1230001-017-AC]

G.4. Methods of Operation –Tall Oil**.** Tall oil shall be added to the No. 6 fuel oil tank where it shall be fired alone as a fuel or after it is blended with No. 6 fuel oil.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

G.5. Methods of Operation –Tall Oil Generated Offsite**.** Prior to burning tall oil that is generated offsite, the permittee shall conduct analysis pursuant to Condition G.14.

If the analysis results indicate constituent concentrations equal to or less than those stated in Condition G.14., along with a sulfur content equal to or less than the sulfur content limitation stated in Condition G.2.6., the tall oil shall be deemed suitable for combustion. The analysis results shall be reported to the Department in the Quarterly Report.

If the analysis results indicate constituent concentrations above those stated in Condition G.14., the tall oil shall be deemed not suitable for combustion. The permittee shall not fire the tall oil as a fuel and immediately cease deliveries of tall oil from the given supplier. In addition, the permittee shall provide the Department immediate written notification, including a copy of the analysis results, the quantity of tall fired if any, and the proposed means of its disposal.
[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

G.6. Particulate Matter Emissions. Particulate matter emissions shall not exceed 0.178 lb per MMBtu heat input and 467.48 TPY when firing only carbonaceous fuel or 0.1 lb per MMBtu heat input or 18.0 lb per hour when firing only fuel oil.

[Requested by applicant; Rule 62-296.410(2)(b)2., F.A.C.; Permit No. AO62-202123; Construction Permit 1230001-017-AC]

G.7. Sulfur Dioxide Emissions. Sulfur Dioxide Emissions shall be limited to 2.5 % sulfur content in No. 6 fuel oil and 498.96 lbs/hr.

[Permit No. AC62-30466; Construction Permit 1230001-017-AC]

G.8. Visible Emissions. Visible Emissions shall not exceed 30% opacity, except that up to 40% opacity is permissible for not more than 2 minutes in any one hour.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. The Department may require a special compliance test in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.410(2)(b)1., F.A.C.; Rule 62-296.404(2)(b), F.A.C.; Permit No. AO62-202123; Permit No. AO62-202123 June 30, 1992 Amendment; Construction Permit 1230001-017-AC]

G.9. Tall Oil As A Fuel Firing Limitation. The quantity of Tall Oil fired as a fuel, including a Tall Oil/No. 6 Fuel Oil blend, shall be included in the fuel oil firing limitations established in any other issued air construction permit.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

G.10. Particulate Matter Emissions. The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. This compliance test shall be performed once each federal fiscal year

[Rule 62-296.410(3), F.A.C.; Rules 62-297.401(5), F.A.C.; Permit No. AO62-202123; Construction Permit 1230001-017-AC]

G.11.i Sulfur Dioxide Emissions. In lieu of stack testing a record shall be maintained of acceptable fuel oil analyses of all fuel oil received for at least five years and reported annually each federal fiscal year.

When fuel oil, Tall Oil, or a Tall Oil/No. 6 fuel oil blend is fired in this power boiler, compliance with the permit limits (in lbs/hr) shall be determined by using the fuel oil/Tall Oil usage rate [the average for each contiguous 3-hour period (i.e., 0000-0300; 0300-0600; etc.)], fuel oil sulfur content and EPA emissions factors to the calculate particulate matter emissions and SO_2 emissions since the particulate matter and SO_2 are a function of fuel oil sulfur content. The equations are:

1. [[9.19 (S) + 3.22]/1000] x Fuel Oil/Tall Oil Usage [gallons per hr (3-hr avg)] = lbs PM per hour

2. [[157 (S)]/1000] x Fuel Oil/Tall Oil Usage [gallons per hr (3-hr avg)] = lbs SO_2 per hour

where S = weight percent sulfur (i.e., if 1.9%, insert 1.9)

Permitting Note: The 3-hour averaging period is consistent with the manual stack test methods (when applicable), which are normally conducted as three separate 1-hour runs and averaged to determine compliance.}

[Rule 62-297.440(1)(b), F.A.C.; Permit No. AO62-202123; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-025-AC; Construction Permit No. 1230001-027-AC]

G.11.ii. Fuel Sulfur Content. The permittee shall monitor the fuel sulfur content according to the following conditions:

a. For each delivery of No. 6 residual fuel oil, the permittee shall retain records of the quantity of oil delivered and the certified vendor analysis identifying the sulfur content of the oil delivered. For each day deliveries are made, the permitittee shall recalculate the fuel oil sulfur content of the common tank based on the previous tank conditions and the amounts and sulfur contents of the deliveries made during the day. For incidental amounts of facility-generated on-specification used oil added to the residual oil tank, the amount of used oil added shall be tracked and sulfur content shall be assumed equivalent to that of the oil in the common tank prior to adding the used oil. At least once during each calendar month, the permittee shall take a sample from the common tank and have it analyzed for the sulfur content and heating value. The

analytical results shall be maintained on site and a summary report provided with the Annual Operating Report (AOR).

b. For each delivery of distillate oil, the permittee ~~shsall~~shall retain records of the quantity of oil delivered and the certified vendor analysis identifying the sulfur content of the oil delivered. The actual fuel sulfur content may be calculated or a sample shall be taken and analyzed for the sulfur content. ~~Thisi~~This shall be the fuel sulfur content used for emissions calculations until a subsequent delivery.

c. The following approved analytical methods shall be used for oil: ASTM Method D-129, ASTM D-1552, ASTM D-2622, and ASTM D-4294. Other more recent or equivalent ASTM methods or Department approved methods are also acceptable.

d. The provisions for facility generated on-specification used oil are specified in Subsection R, Common Conditions - Used Oil of this permit.

e. The permittee shall use vendor information to determine the sulfur content of natural gas.

The actual fuel sulfur content shall be used to determine the sulfuric acid mist (SAM) and sulfur dioxide (SO_2) emissions for Bark Boiler No. 2.

[Permit Nos. 1230001-023-AC/PSD-FL-397, Rules 62-4.070(3) and 62-212.400 (PSD), F.A.C.]

G.12. Visible Emissions. Visible Emissions shall be tested using EPA Method 9 incorporated and adopted by reference in Chapter 62-297 and be performed once each federal fiscal year.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.410(3), F.A.C.; Rule 62-297.401(9), F.A.C.; Permit No. AO62-202123; Permit No. AO62-202123 June 30, 1992 Amendment; Construction Permit 1230001-017-AC]

G.13. Sulfur Content and Density of Tall Oil. The Permittee shall follow procedures (1)–(10) below[1] to determine the density and sulfur content of tall oil:

As-Fired Sulfur Content in Tall Oil/No. 6 fuel oil blended fuel:

(1) A representative sample of the tall oil/No. 6 fuel oil blended fuel shall be collected at the outlet of the No. 6 fuel oil tank once a month, if any tall oil was placed in the No. 6 fuel oil tank during the month.
(2) The collected sample of the tall oil/No. 6 fuel oil blended fuel shall be submitted to an independent laboratory for analysis of the sulfur content of the blended fuel within 2 working days of collection.
(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)

(4) The Permittee shall obtain the results of the testing stated in Condition G.13.(2) to verify the blended fuel meets the as-fired fuel sulfur content stated in Condition G.2.5.
(5) If the analysis result indicates compliance with the as-fired sulfur content stated in Condition G.2.5., the result shall be reported to the Department in the Quarterly Report (as required by Condition G.17.i.).
(6) If the analysis result indicates noncompliance with the as-fired sulfur content stated in Condition G.2.5., the facility shall provide the Department immediate written notification, including a copy of the analysis results.

Sulfur Content in Tall Oil directly from Tall Oil Storage Tank:

(7) A representative sample of the tall oil intended to be fired as fuel shall be collected at the outlet of the Tall Oil Storage Tank on a monthly basis.
(8) The collected sample of the tall oil shall be submitted to an independent laboratory for analysis of the sulfur content within 2 working days of collection.
(9) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(10) The Permittee shall obtain the results of the testing stated in Condition G.13.(8) and report the results to the Department in the Quarterly Report as required by Condition G.17.i.

[1]Testing required only if Tall Oil is fired as a fuel during any calendar month.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

G.14. Tall Oil Generated Offsite Analysis. The permittee shall conduct the following additional analysis using approved methods or obtain a vendor certified analysis of the tall oil for the stated constituents:

Constituent	**Concentration**
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

Once an initial test is completed for a given supplier located within the United States, tall oil shall be sampled and analyzed for the constituents stated in the table above once a calendar month (with at least 21 days elapsed time between sample collection), during any month in which such tall oil is burned as an authorized fuel.

For a supplier located outside the United States, the tall oil shall be sampled and analyzed for the constituents stated in the table above on a per delivery basis.

The same requirements for suitability as a fuel, ceasing deliveries from a given supplier, and reporting of analysis results to the Department shall apply as is specified for a suppler located within the United States.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Compliance Assurance Monitoring (CAM) Requirements

G.15. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Continuous Monitoring

G.16. Fuel Monitors. The permittee shall operate and maintain equipment to continuously monitor and record the flow rates of each authorized liquid and gaseous fuel (e.g. flow meters with integrators) fired in the No. 2 Bark Boiler.

The firing rates of bark/wood shall be determined from actual monitored steam production rates, known boiler efficiencies, the bark/wood heating value, and the contributions from other fuels fired.
[Construction Permit No. 1230001-023-AC/PSD-FL-397; Rules 62-4.070(3) and 62-210.370, F.A.C.]

Recordkeeping and Reporting Requirements

G.17.i. Tall Oil Fired. The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition.

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

G.17.ii. Fuel Oil Fired. The permittee shall keep records on a monthly basis to record the type and quantity of fuel oil fired by the Bark Boiler No. 2. Within seven days following each month, the permittee shall record the gallons of fuel oil fired for each month and each consecutive

twelve month period. The fuel firing rates shall be used to determine the SAM and SO_2 emissions.
[Construction Permit No. 1230001-023-AC; Rules 62-4.070(3) and 62-212.400 (PSD), 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 or NESHAP provision.}

G.18.i. Excess Emissions- All Methods of Operation– Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department 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.

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

G.18.ii. Excess Emissions – Startup, Shutdown, and Malfunction. Excess emissions resulting from startup or shutdown, of any emission unit 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 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration.

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

G.18.iii. Excess Emissions. Excess emissions 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.]

Startup, Shutdown, Malfunction Plan

G.19. Reserved

Common Conditions

G.20. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
R	Used oil
Appendix 40 CFR 63	General Provisions of 40 CFR 63

New Applicable Requirements

G.21. This emission unit is also subject to 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The applicable requirements contained in 40 CFR 63, Subpart A General Provision: Table 10 of 40 CFR 63 Subpart DDDDD, which shows the parts of the General Provisions in §§63.1 through 63.15 are applicable.

[Rule 62-213.440, F.A.C.]

G.22. Compliance Date: The owner or operator shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart DDDDD no later than January 31, 2016.

[40 CFR 40 CFR 63.7495(b)]

Subsection H. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
021	No. 2 Smelt Dissolving Tank (SDT).

The black liquor that is burned in the No. 2 Recovery boiler produces a char or smelt bed. The resulting smelt then feeds by gravity into the No. 2 Smelt Dissolving Tank where it is mixed into an aqueous solution (weak wash from the lime mud washing process) to form "green" liquor.

An impingement scrubber, manufactured by Ducon (Model 22-4-0298), followed by a cyclonic demister controls particulate matter, and PM-HAPs emissions. Weak wash from the lime mud washing process is primarily used as the scrubbing media. Water may be used instead. The weak wash or water is sprayed directly onto the fan and into the ductwork via two spray nozzles.

The minimum scrubber flow rate is 71 gallons per minute.

The cyclonic demister is an entrainment separator that drains back into the dissolving tank.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills; and 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

H.1. Permitted Capacity. The maximum allowed operation rate is 97,600 lbs Black Liquor Solids (BLS)/hr[1]. This rate is equivalent to 41,187 lbs/hr of green liquor solids and 9,773 lbs/hr of weak wash solids.

[1]Based on the maximum Black Liquor Solids fired in the No.2 Recovery Boiler.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141924]

H.2. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141924]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

H.3.a. Particulate Matter Emissions.
The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired.

[40 CFR 63.862(a)(1)(i)(B)]

H.3.b. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 25.9 lbs/hr, and 113.6 TPY.

The Process Weight Table input rate is 41,187 lbs (smelt)/hr plus 9,773 lbs/hr of weak wash solids, which is derived from engineering calculations and the maximum Black Liquor Solids fired in the No.2 Recovery Boiler.

[Rule 62-296.320(4)(a)2., F.A.C.; Construction Permit No. AC62-141924]

H.4. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) emissions shall not exceed 0.048 lb TRS/3000 lbs BLS as H2S; 1.56 lbs/hr and 6.83 TPY.

The amount of black liquor solids fired in the recovery boiler associated with each SDT shall be continuously monitored and recorded.

[Rule 62-296.404(3)(d)1., F.A.C.; Construction Permit No. AC62-141924]

H.5. Visible Emissions. Visible emissions from this emissions unit shall not be equal to or greater than 20% Opacity.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.404(2)(b), F.A.C.; Rule 62-296.320(4)(b)1., F.A.C.; Construction Permit No. AC62-141924]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

H.6. Particulate Matter Emissions. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be conducted annually, once each federal fiscal year.

[Rule 62-296.404(4)(c)1., F.A.C.; Rule 62-297.401, F.A.C.; 40 CFR 63.865(b)(1); Construction Permit No. AC62-141924]

H.7. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B;

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used; and.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

H.8. Visible Emissions. Visible Emissions shall be tested using EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed once each federal fiscal year.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.404(2)(b), F.A.C.; Rule 62-297.401(9), F.A.C.; Construction Permit No. AC62-141924]

H.9. Total Reduced Sulfur Emissions. Total Reduced Sulfur (TRS) emissions testing shall be conducted by using EPA Method 16, 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. EPA Method 16, 16A, or 16C shall be required for instrument certification and compliance testing. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.

[Rule 62-296.404(4)(c)3.; F.A.C.; Rule 62-297.310(7)(a)3., (7)(a)4.b. F.A.C., and 62-297.401(16), F.A.C.; Construction Permit No. AC62-141924]

Continuous Monitoring Requirements

H.10. Total Reduced Sulfur (TRS) -Surrogate Parameters. The owner or operator shall maintain and operate a continuous monitoring device that will be used to determine and record scrubbing medium (weak wash) flow rate to the scrubber. The minimum flow rate shall be 71 gpm per each 12-hr averaging period.

[Rule 62-296.404(5)(d), F.A.C.; Construction Permit No. AC62-141924; Operation Permit No. AO62-116703]

H.11. Continuous Parameter Monitoring System (CPMS)- PM. The owner or operator shall calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop across the scrubber[1] and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c), as well as the procedures in paragraphs (i) and (ii) of this condition:

(i) The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber[1] must be certified by the manufacturer to be accurate to within a gage pressure of +/-500 pascals (+/-2 inches of water gage pressure); and

(ii) The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within +/-5 percent of the design scrubbing liquid flow rate.

[1] On April 14, 2003, EPA Region 4 granted approval of the alternative monitoring parameter of scrubber fan data. The mill has elected to monitor the "on/off" status of the scrubber fan as the specific fan data.

The minimum scrubbing liquid flow rate shall be 71 gallons per minute. The averaging time for this parameter and the "on/off" status of the scrubber fan shall be 3 hours.

{Permitting Note: The CPMS is continuous parameter monitoring for PM emissions limit of Condition H.3.a.

[40 CFR 63.864(e)(10), Initial Performance Test conducted 09/08-09/04]

H.12. CPMS – Meter Reading Reestablishment. The owner or operator may establish expand or replace operating ranges for the minimum scrubbing liquid recirculation flow rate and the minimum pressure drop[1] values during subsequent performance tests using the test methods stated in Conditions H.6. and H.7.

The owner or operator shall continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values.

[1] On April 14, 2003, EPA Region 4 granted approval of the alternative monitoring parameter of scrubber fan data. The mill has elected to monitor the "on/off" status of the scrubber fan as the specific fan data.

[40 CFR 63.864(j)(3) and (4)]

H.13. PM Emissions – Corrective Action. The owner or operator shall implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under Condition H.18. if the following monitoring exceedance occurs:

- when any 3-hour average parameter value is outside the range of values established in Condition H.11. and H.12.

[63.864(k)(1)(ii)]

H.14. PM Emissions – Violations**.** It shall be considered a violation of the standards of Condition H.3.a. if the following monitoring exceedance occurs:

- when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in Condition H.11. and H.12.

For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.

[63.864(k)(2)(iii) and (k)(3)]

Recordkeeping and Reporting Requirements

H.15. TRS Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

Condition No. H.15. Continued:

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

[Rule 62-296.404(6)(a), F.A.C. Construction Permit No. AC62-141924]

H.16. TRS Surrogate Parameters- Files. The owner or operator shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(b), F.A.C.].

H.17. TRS Surrogate Parameter -Excess Emissions Notification. The owner or operator shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition H.26.1.

[Rule 62-296.404(6)(d), F.A.C.]

H.18. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under Condition H.11. and H.12. including the procedures in paragraphs (1)(i) and (ii) of this Condition:

(i) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(ii) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition H.11. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

H.19. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition H.13.

[40 CFR 63.866(b)]

H.20. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition H.14.

[40 CFR 63.866(b)]

H.21. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces

(2) N/A

(3) Records of parameter monitoring data required under Condition H.11., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions H.6. through H.7.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

H.22. Excess Emissions Report - 40 CFR 63.867(c). The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition H.13. or H.14. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition H.13. and the number and duration of occurrences when the source met or exceeded the conditions in Condition H.14. Reporting excess emissions below the violation thresholds of Condition H.14. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

2. The owner or operator of an affected source or process unit subject to the requirements of this subpart and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

Notifications

H.23. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Part 63 Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.

[40 CFR 63.867(a)(1)]

Excess Emissions

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

H.24. Excess Emissions – Startup, Shutdown, Malfunction. Excess Emissions due to startup, shutdown or malfunction are conditionally allowed for up to 2 in any 24-hour period unless specifically authorized by the Department for longer duration. The permittee shall follow best operational practices to minimize emissions.

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

H.25. Excess Emissions 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.]

H.26. TRS Surrogate Parameter -Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions as indicated by the appropriate surrogate parameters occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the emissions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

2. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

Condition No. H.26. Continued:

a. Operation of all equipment within permit limits for loading rates and other process parameters,

b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

c. Training of personnel in the operation and maintenance of equipment,

d. Visual and instrument inspections of equipment on a regular basis, and

e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

[Rules 62-296.404(6)(c)(3) and (4), F.A.C.]

Compliance Assurance Monitoring (CAM) Requirements

H.27. Reserved

Startup, Shutdown, Malfunction Plan

H.28. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions~~.~~, Condition No. 6.

Common Conditions

H.29. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection I. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
022	No. 3 Smelt Dissolving Tank (SDT). The black liquor that is burned in the No. 3 Recovery boiler produces a char or smelt bed. The resulting smelt then feeds by gravity into the No. 3 Smelt Dissolving Tank where it is mixed into an aqueous solution (weak wash from the lime mud washing process) to form "green" liquor. An impingement scrubber, manufactured by Ducon (Model 22-4-0298), followed by a cyclonic demister controls particulate matter, and PM-HAPs emissions. The scrubber utilizes weak wash primarily from the lime mud washing process as the scrubbing media. Water may be used instead. The weak wash or water is sprayed directly onto the fan and into the ductwork via two spray nozzles. The minimum scrubber flow rate is 51 gallons per minute. The cyclonic demister is an entrainment separator that drains back into the dissolving tank.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills; and 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

I.1. Permitted Capacity. The maximum allowed operation rate is 82,350 lbs Black Liquor Solids (BLS)/hr[1]. This rate is equivalent to 34,752 lbs/hr green liquor solids and 8,246 lb/hr weak wash solids.

[1]Based on the maximum Black Liquor Solids fired in the No. 3 Recovery Boiler.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No.AC62-141925]

I.2. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No.AC62-141925]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

I.3.a. Particulate Matter Emissions. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired.

[40 CFR 63.862(a)(1)(i)(B)]

I.3.b. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 24.05 lbs/hr, and 105.34 TPY.

The Process Weight Table input rate is 34,752 lbs (smelt)/hr plus 8,246 lbs/hr of weak wash solids, which is derived from engineering calculations and the maximum Black Liquor Solids fired in the No. 3 Recovery Boiler.

[Rule 62-296.320(4)(a)2., F.A.C.; Construction Permit No.AC62-141925]

I.4. Total Reduced Sulfur (TRS). Total Reduced Sulfur (TRS) emissions shall not exceed 0.048 lb TRS/3000 lbs BLS as H2S; 1.32 lbs/hr and 5.78 TPY.

The amount of black liquor solids fired in the recovery boiler associated with each SDT shall be continuously monitored and recorded.

[Rule 62-296.404(3)(d)1., F.A.C.; Construction Permit No.AC62-141925]

I.5. Visible Emissions. Visible emissions from this emissions unit shall not be equal to or greater than 20% Opacity.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.404(2)(b), F.A.C.; Construction Permit No. AC62-141925]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

I.6. Particulate Matter Emissions. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be conducted annually, once each federal fiscal year.

[Rule 62-296.404(4)(c)1., F.A.C.; Rule 62-297.401, F.A.C.; 40 CFR 63.865(b)(1); Construction Permit No. AC62-141925]

I.7. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B;

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used; and.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

I.8. Visible Emissions. Visible Emissions shall be tested using EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed once each federal fiscal year.

[Rule 62-296.404(2)(b), F.A.C.; Rule 62-297.401(9), F.A.C.; Permit No.AC62-141925]

I.9. Total Reduced Sulfur (TRS). Total Reduced Sulfur (TRS) emissions testing shall be conducted by using EPA Method 16, 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. EPA Method 16, 16A, or 16C shall be required for instrument certification and compliance testing. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.

[Rule 62-296.404(4)(c)3.; F.A.C.; Rule 62-297.310(7)(a)3., (7)(a)4.b. F.A.C., and 62-297.401(16), F.A.C.; Construction Permit No.AC62-141925]

Continuous Monitoring Requirements

I.10. Total Reduced Sulfur (TRS). Surrogate Parameters. The owner or operator shall maintain and operate a continuous monitoring device that will be used to determine and record scrubbing medium (weak wash) flow rate to the scrubber. The minimum flow rate shall be 51 gpm per each 12-hr averaging period.

[Rule 62-296.404(5)(d), F.A.C.; Construction Permit No. AC62-141925; Operation Permit No. AC62-187788]

I.11. Continuous Parameter Monitoring System (CPMS)- PM. The owner or operator shall calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop across the scrubber[1] and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c), as well as the procedures in paragraphs (i) and (ii) of this condition:

(i) The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber[1] must be certified by the manufacturer to be accurate to within a gage pressure of +/-500 pascals (+/-2 inches of water gage pressure); and

(ii) The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within +/-5 percent of the design scrubbing liquid flow rate.

[1] On April 14, 2003, EPA Region 4 granted approval of the alternative monitoring parameter of scrubber fan data. The mill has elected to monitor the "on/off" status of the scrubber fan as the specific fan data.

The minimum scrubbing liquid flow rate shall be 51 gallons per minute. The averaging time for this parameter and the "on/off" status of the scrubber fan shall be 3 hours.

{Permitting Note: The CPMS is continuous parameter monitoring for PM emissions limit of Condition I.3.a.

[40 CFR 63.864(e)(10), Initial Performance Test conducted 09/08-09/04]

I.12. CPMS – Meter Reading Reestablishment. The owner or operator may establish expand or replace operating ranges for the minimum scrubbing liquid recirculation flow rate and the minimum pressure drop[1] values during subsequent performance tests using the test methods stated in Conditions I.6. and I.7.

The owner or operator shall continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values.

[1] On April 14, 2003, EPA Region 4 granted approval of the alternative monitoring parameter of scrubber fan data. The mill has elected to monitor the "on/off" status of the scrubber fan as the specific fan data.

[40 CFR 63.864(j)(3) and (4)]

I.13. PM Emissions – Corrective Action. The owner or operator shall implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under Condition I.18. if the following monitoring exceedance occurs:

- when any 3-hour average parameter value is outside the range of values established in Condition I.11. and I.12.

[63.864(k)(1)(ii)]

I.14. PM Emissions – Violations. It shall be considered a violation of the standards of Condition I.3.a. if the following monitoring exceedance occurs:

- when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in Condition I.11. and I.12.

For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.

[63.864(k)(2)(iii) and (k)(3)]

Recordkeeping and Reporting Requirements

I.15. TRS Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

Condition No. I.15. Continued:

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

[Rule 62-296.404(6)(a), F.A.C. Construction Permit No.AC62-141924]

I.16. TRS Surrogate Parameters- Files. The owner or operator shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(b), F.A.C.].

I.17. TRS Surrogate Parameter -Excess Emissions Notification. The owner or operator shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition I.26.1.

[Rule 62-296.404(6)(d), F.A.C.]

I.18. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

Condition No. I.18. Continued:

(1) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under Condition I.11. and I.12. including the procedures in paragraphs (1)(i) and (ii) of this Condition:

(i) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(ii) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition I.11. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

I.19. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition I.13.

[40 CFR 63.866(b)]

I.20. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition I.14.

[40 CFR 63.866(b)]

I.21. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces

(2) N/A

Condition No. I.21. Continued:

(3) Records of parameter monitoring data required under Condition H.11., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions H.6. through H.7.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

I.22. Excess Emissions Report - 40 CFR 63.867(c). The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition I.13. or I.14. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition I.13. and the number and duration of occurrences when the source met or exceeded the conditions in Condition I.14. Reporting excess emissions below the violation thresholds of Condition I.14. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

2. The owner or operator of an affected source or process unit subject to the requirements of this subpart and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

Notifications

I.23. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Part 63 Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.

[40 CFR 63.867(a)(1)]

Excess Emissions

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

I.24. Excess Emissions – Startup, Shutdown, Malfunction. Excess Emissions due to startup, shutdown or malfunction are conditionally allowed for up to 2 in any 24-hour period unless specifically authorized by the Department for longer duration. The permittee shall follow best operational practices to minimize emissions.

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

I.25. Excess Emissions 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.]

I.26. TRS Surrogate Parameter -Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions as indicated by the appropriate surrogate parameters occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the emissions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

2. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

    a. Operation of all equipment within permit limits for loading rates and other process parameters,

    b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

Condition No. I.26. Continued:

c. Training of personnel in the operation and maintenance of equipment,

d. Visual and instrument inspections of equipment on a regular basis, and

e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

[Rules 62-296.404(6)(c)(3) and (4), F.A.C.]

Compliance Assurance Monitoring (CAM) Requirements

I.27. Reserved

Startup, Shutdown, Malfunction Plan

I.28. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions, Condition No. 6.

Common Conditions

I.29. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection J. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
023	No. 4 Smelt Dissolving Tank (SDT).

The black liquor that is burned in the No. 4 Recovery boiler produces a char or smelt bed. The resulting smelt then feeds by gravity into the No. 4 Smelt Dissolving Tank where it is mixed into an aqueous solution (weak wash from the lime mud washing process) to form "green" liquor.

An impingement scrubber, manufactured by Ducon (Model 22-4-0298), followed by a cyclonic demister controls particulate matter, and PM-HAPs emissions. The scrubber utilizes weak wash primarily from the lime mud washing process as the scrubbing media. Water may be used instead. The weak wash or water is sprayed directly onto the fan and into the ductwork via two spray nozzles.

The minimum scrubber flow rate is 68 gallons per minute, approximately 29,000 acfm gas flow rate.

The cyclonic demister is an entrainment separator that drains back into the dissolving tank.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills; and 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

J.1. Permitted-Capacity. The maximum allowed operation rate is 133,825 lbs Black Liquor Solids (BLS)/hr[1]. This rate is equivalent to 56,474 lbs/hr smelt and 11,964 lbs/hr weak wash solids.

[1]Based on the maximum Black Liquor Solids fired in the No. 4 Recovery Boiler.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141926; Construction Permit No. 1230001-014-AC]

J.2. Hours of Operation. The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-141926; Construction Permit No. 1230001-014-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

J.3.a. Particulate Matter Emissions. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired.

[40 CFR 63.862(a)(1)(i)(B)]

J.3.b. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 30.19 lbs/hr, and 132.22 TPY.

The Process Weight Table with input rate of previous maximum BLS fired in the No. 4 Recovery Boiler.

[Rule 62-296.320(4)(a)2., F.A.C.; Construction Permit No.AC62-141926; Construction Permit No. 1230001-014-AC]

J.4. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) emissions shall not exceed 0.048 lb TRS/3000 lbs BLS as H2S; 2.14 lbs/hr and 9.4 TPY.

The amount of black liquor solids fired in the recovery boiler associated with each SDT shall be continuously monitored and recorded.

[Rule 62-296.404(3)(d)1., F.A.C.; Permit No.AC62-141926; Construction permit No. 1230001-014-AC]

J.5. Visible Emissions. Visible emissions from this emissions unit shall not be equal to or greater than 20% Opacity.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.404(2)(b), F.A.C.; Construction Permit No. AC62-141926; Construction permit no. 1230001-014-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

J.6. Particulate Matter Emissions. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be conducted annually, once each federal fiscal year.

[Rule 62-296.404(4)(c)1., F.A.C.; Rule 62-297.401, F.A.C.; 40 CFR 63.865(b)(1); Construction Permit No. AC62-141926; Construction permit No. 1230001-014-AC]

J.7. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B;

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used; and.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

J.8. Visible Emissions. Visible Emissions shall be tested using EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed once each federal fiscal year.

[Rule 62-296.404(2)(b), F.A.C.; Rule 62-297.401(9), F.A.C.; Construction Permit No. AC62-141926; Construction Permit No. 1230001-014-AC]

J.9. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) emissions testing shall be conducted by using EPA Method 16, 16A, 16B, or 16C incorporated and adopted by reference in Chapter 62-297, F.A.C. EPA Method 16, 16A, or 16C shall be required for instrument certification and compliance testing. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.

[Rule 62-296.404(4)(c)3. ; F.A.C.; Rule 62-297.310(7)(a)3., (7)(a)4.b. F.A.C., and 62-297.401(16), F.A.C.; Construction Permit No. AC62-141926; Construction Permit No. 1230001-014-AC]

Continuous Monitoring Requirements

J.10. Total Reduced Sulfur (TRS) -Surrogate Parameters. The owner or operator shall maintain and operate a continuous monitoring device that will be used to determine and record scrubbing medium (weak wash) flow rate to the scrubber. The minimum flow rate shall be 68 gpm per each 12-hr averaging period.

[Rule 62-296.404(5)(d), F.A.C.; Construction Permit No AC62-141926, Operation Permit No. AC62-130573]

J.11. The owner or operator shall calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop[1] across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c), as well as the procedures in paragraphs (i) and (ii) of this condition:

(i) The monitoring device used for the continuous measurement of the pressure drop[1] of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of +/-500 pascals (+/-2 inches of water gage pressure); and

(ii) The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within +/-5 percent of the design scrubbing liquid flow rate.

The minimum scrubbing liquid flow rate shall be 68 gpm per each 12-hr averaging period. . The averaging time for this parameter and the "on/off" status of the scrubber fan shall be 3 hours.

{Permitting Note: The CPMS is continuous parameter monitoring for PM emissions limit of Condition J.3.a.

[1] On April 14, 2003, EPA Region 4 granted approval of the alternative monitoring parameter of scrubber fan data. The mill has elected to monitor the "on/off" status of the scrubber fan as the specific fan data.

[40 CFR 63.864(e)(10), Initial Performance Test conducted 09/08-09/04]

J.12. CPMS – Meter Reading Reestablishment. The owner or operator may establish expand or replace operating ranges for the minimum scrubbing liquid recirculation flow rate and the minimum pressure drop[1] values during subsequent performance tests using the test methods stated in Conditions J.6. and J.7.

The owner or operator shall continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values.

[1] On April 14, 2003, EPA Region 4 granted approval of the alternative monitoring parameter of scrubber fan data. The mill has elected to monitor the "on/off" status of the scrubber fan as the specific fan data.

[40 CFR 63.864(j)(3) and (4)]

J.13. PM Emissions – Corrective Action. The owner or operator shall implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under Condition J.18. if the following monitoring exceedance occurs:

- when any 3-hour average parameter value is outside the range of values established in Condition J.11. and J.12.

[63.864(k)(1)(ii)]

J.14. PM Emissions – Violations**.** It shall be considered a violation of the standards of Condition J.3.a. if the following monitoring exceedance occurs:

- when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in Condition J.11. and J.12.

For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.

[63.864(k)(2)(iii) and (k)(3)]

Recordkeeping and Reporting Requirements

J.15. TRS Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

[Rule 62-296.404(6)(a), F.A.C. Construction Permit No. AC62-141926]

J.16. TRS Surrogate Parameters- Files. The owner or operator shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(b), F.A.C.].

J.17. TRS Surrogate Parameter -Excess Emissions Notification. The owner or operator shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition J.26.1.

[Rule 62-296.404(6)(d), F.A.C.]

J.18. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under Condition J.11. and J.12. including the procedures in paragraphs (1)(i) and (ii) of this Condition:

(i) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(ii) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition J.11. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

J.19. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition J.13.

[40 CFR 63.866(b)]

J.20. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition J.14.

[40 CFR 63.866(b)]

J.21. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces

(2) N/A

(3) Records of parameter monitoring data required under Condition J.11., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions J.6. through J.7.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

J.22. Excess Emissions Report - 40 CFR 63.867(c). The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition J.13. or J.14. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition J.13. and the number and duration of occurrences when the source met or exceeded the conditions in Condition J.14. Reporting excess emissions below the violation thresholds of Condition J.14. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

Condition No. J.22. Continued:

2. The owner or operator of an affected source or process unit subject to the requirements of this subpart and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

Notifications

J.23. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Part 63 Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.

[40 CFR 63.867(a)(1)]

Excess Emissions

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

J.24. Excess Emissions – Startup, Shutdown, Malfunction. Excess Emissions due to startup, shutdown or malfunction are conditionally allowed for up to 2 in any 24-hour period unless specifically authorized by the Department for longer duration. The permittee shall follow best operational practices to minimize emissions.

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

J.25. Excess Emissions 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.]

J.26. TRS Surrogate Parameter -Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions as indicated by the appropriate surrogate parameters occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the emissions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

Condition No. J.26. Continued:

2. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

   a. Operation of all equipment within permit limits for loading rates and other process parameters,
   b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

c. Training of personnel in the operation and maintenance of equip

Startup, Shutdown, Malfunction Plan

J.27. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions, Condition No. 6.

Common Conditions

J.28. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection K. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
024	No. 4 Lime Kiln converts lime mud ($CaCO_3$) from the mud filters to lime (CaO). The No. 4 Lime Kiln has a maximum heat input rate of 210 MMBtu/hr. Particulate matter emissions are controlled with a weighted wire electrode, electrostatic precipitator (EP2) manufactured by F.L. Smidth. The ESP was originally installed in 1986 and consists of three electric fields. The particles collected by the ESP are recycled back to the feed-end of the lime kiln and re-processed in the kiln. Purchased lime and the lime product produced in the Lime Kiln are stored in one of the two Water Treatment Lime Storage Bins. Particulate matter emissions are controlled with a baghouse manufactured by Micro-Pulsaire 100s – 10TR. The baghouse was originally installed in 1986 and consists of 100 bags with a collecting area of 1,178 sq-ft. Reverse jet is used for bag cleaning (EP13). Control efficiency is estimated to be 99.0%. The Lime Kiln is subject to CAM for Particulate Matter emissions.

{Permitting note(s): The Lime Kiln is regulated by NSPS - 40 CFR 60, Subpart BB - Standards of Performance for Kraft Pulp Mills adopted and incorporated by reference in Rule 62-204.800, F.A.C. 40 CFR 63- Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-296.404, F.A.C. – Kraft Pulp Mills; and Rule 62-212.400, F.A.C. – Prevention of Significant Deterioration; BACT Determination dated 8/21/96; 40 CFR 64 Compliance Assurance Monitoring (CAM).}

The Lime Storage Bins are regulated by Rule 62-212.400, F.A.C. – Prevention of Significant Deterioration; BACT Determination dated 8/21/96; and Rule 62-296.404, F.A.C. – Kraft Pulp Mills.

The following conditions apply to the emissions unit(s) listed above:

Operating Parameters

K.1. Authorized Fuels - This emissions unit is permitted to fire either:

1. Natural gas;

2. No. 6 Fuel Oil with a maximum sulfur content not to exceed 2.5% by weight (with or without any prior blending with facility-generated on-specification used oil);

Condition No. K.1. Continued:

3. Facility-generated Tall Oil[1] and Tall Oil manufactured offsite. The Tall Oil may or may not be blended with No. 6 fuel oil. The sulfur content of No. 6 fuel is limited to 2.5 % by weight regardless of whether it is blended with the tall oil. The sulfur content of the as-fired blended No. 6/ Tall Oil fuel shall not exceed 2.5% by weight. The sulfur content of Tall Oil manufactured offsite shall not exceed 2.5% by weight;

4. Virgin, Ultra Low Sulfur Diesel (ULSD) with a maximum sulfur content not to exceed 15 ppm (0.0015 percent by weight) prior to injection into the suction side of the tall oil burner pumps. To fire ULSD, it shall be blended with Tall Oil.

[1]The sulfur content of the facility-generated Tall Oil based on composite sampling submitted by the applicant on August 11, 2003, is typically 0.065 - 0.08 percent by weight.

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Construction Permit No. 1230001-004-AC/PSD-FL-232; Construction Permit No. 1230001-017-AC; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC; Construction Permit No. 1230001-029-AC]

K.2. Permitted Capacity.

a. Natural Gas: The total maximum natural gas firing rate shall not exceed 0.202 million cubic feet per hour, which is equivalent to a heat input rate of 202 MMBtu per hour based on a fuel heating value of 1,000 MMBtu per million cubic feet of natural gas.

b. No. 6 Fuel Oil: The total maximum oil firing rate shall not exceed 1,400 gallons of oil per hour, which is equivalent to a heat input rate of 204 MMBtu per hour based on a fuel heating value of 146 MMBtu per 1,000 gallons of oil.

c. Facility-Generated Tall Oil and Tall Oil Manufactured Offsite. The total maximum tall oil firing rate shall not exceed 1,400 gallons of tall oil per hour, which is equivalent to a heat input rate of 199 MMBtu per hour based on a fuel heating value of 142 MMBtu per 1,000 gallons of tall oil.

d. Virgin, Ultra Low Sulfur Diesel (ULSD): In order to form a blended ULSD/Tall oil fuel:

    a. The addition rate of virgin, ULSD shall not exceed a maximum of 60.0 gallons per hour (equivalent is 1.0 gallons per minute which is ≈ 4.28% by volume of the tall oil). The averaging time shall be based on a 24-hour average.

Condition No. K.2. Continued:

b. The tall oil firing rate shall be reduced by the same addition rate of ULSD on gallon for gallon basis (i.e., when injecting the maximum quantity of 60.0 gallons per hour of virgin ULSD, the maximum quantity of tall oil blended shall not exceed 1,340.0 gallons per hour.)

e. Lime. The maximum lime production (CaO) from the No. 4 Lime Kiln is 62,500 pounds per hour of lime;

f. Nos. 1 & 2 Lime Storage Bins. The maximum input of purchased lime and/or the lime product produced in the No. 4 Lime Kiln is 150,500 pounds per hour each.

[Construction Permit No. 1230001-004-AC, Rules 62-4.070(3), 62-4.160(2), and 62-210.200(PTE), F.A.C.; Construction Permit 1230001-004-AC/PSD-FL-232; Construction Permit No. AC62-107857; Construction Permit 1230001-017-AC; Construction Permit No. 1230001-027-AC, Construction Permit No. 1230001-028-AC; Construction Permit No. 1230001-029-AC]

K.3. Hours of Operation. The hours of operation for the No. 4 Lime Kiln, and the (2) Lime Storage Bins are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. ; Construction Permit No. 1230001-004-AC/PSD-FL-232; Construction Permit No. AC62-107857; Construction Permit 1230001-017-AC]

K.4. Methods of Operation –Tall Oil**.** Tall oil shall be added to the No. 6 fuel oil tank where it shall be fired alone as a fuel or after it is blended with No. 6 fuel oil.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

K.5. Methods of Operation –Tall Oil Generated Offsite**.** Prior to burning tall oil that is generated offsite, the permittee shall conduct analysis pursuant to Condition K.32.

If the analysis results indicate constituent concentrations equal to or less than those stated in Condition K.32., along with a sulfur content equal to or less than the sulfur content limitation stated in Condition K.1.3., the tall oil shall be deemed suitable for combustion. The analysis results shall be reported to the Department in the Quarterly Report.

If the analysis results indicate constituent concentrations above those stated in Condition K.32., the tall oil shall be deemed not suitable for combustion. The permittee shall not fire the tall oil as a fuel and immediately cease deliveries of tall oil from the given supplier. In addition, the permittee shall provide the Department immediate written notification, including a copy of the analysis results, the quantity of tall fired if any, and the proposed means of its disposal.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

From lime kiln stack:

K.6.a. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.0451 gr/dscf corrected to 10 percent oxygen.; 20.0 lbs/hr , and 87.6 TPY.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 8/21/96; Construction Permit 1230001-004-AC/PSD-FL-232; Construction Permit 1230001-017-AC]

K.6.b. Particulate Matter. The owner or operator of each existing Kraft or soda lime kiln shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen.

[40 CFR 63.862(a)(1)(i)(C)]

K.6.c. Particulate Matter. Particulate matter emissions from the lime kiln shall not exceed 0.15 g/dscm (0.067 gr/dscf), corrected to 10 percent oxygen when gaseous fossil fuel if burned and 0.30 g/dscm (0.13 gr/dscf), corrected to 10 percent oxygen when liquid fossil fuel is burned.

[40 CFR 60.282(a)(3)(i) and (ii)]

K.7. Sulfur Dioxide Emissions**.** Sulfur Dioxide (SO_2) Emissions shall not exceed 1.0 lb/ton CaO; 31.25 lbs/hr, and 136.9 TPY.

When fuel oil is fired in the LK, lime production and fuel oil usage shall be recorded daily and used in calculating the SO_2 emissions using the initial compliance testing emission factor.

Condition No. K.7. Continued:

EU ID	Test Date	Run	Process Rate	Oil[1] GPH	Predicted[2] Emissions	Actual Emissions	Comment
Kiln (024)	5/22/87	1	27.1 TPH CaO	918	27.1 lb/hr	1.10 lb/hr	
Kiln (024)	5/22/87	2	27.1 TPH CaO	918	27.1 lb/hr	0.19 lb/hr	Sample/Below Detection Limit; calculated at detection limit
Kiln (024)	5/22/87	3	27.1 TPH CaO	918	27.1 lb/hr	0.19 lb/hr	Sample/Below Detection Limit; calculated at detection limit
Avg			27.1 TPH CaO	918	27.1 lb/hr	0.49 lb/hr	

[1] Nominal Fuel Oil Rate for test period; No. 6 fuel oil analysis indicated 2.33% sulfur by weight
[2] Emissions Factor 1.0 lb/Ton CaO; NCASI Technical Bulletin 646; Average SO2 emissions for lime kilns.

Source: Initial Post-Construction Compliance Test Reports/submitted to FDEP NED Office 7/1/87.

[Rule 62-210.200(42), F.A.C.; Permit 1230001-004-AC/PSD-FL-232; Construction Permit 1230001-017-AC]

K.8. Nitrogen Oxide Emissions. Nitrogen Oxide Emissions shall not exceed 2.19 lbs/ton CaO; 68.44 lbs/hr and 299.8 TPY.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 8/21/96; Permit 1230001-04-AC; Construction Permit 1230001-017-AC]

K.9.a. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) Emissions shall not exceed 7 ppmvd @ 10% O_2; 2.64 lbs/hr and 11.58 TPY.

[Construction Permit No. 1230001-004-AC/PSD-FL-232; Construction Permit 1230001-017-AC]

K.9.b. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) Emissions shall not exceed 8 ppmvd @ 10% O_2.

[40 CFR 60.283(a)(5)]

K.10. Visible Emissions. Visible emissions from the lime stack shall not be equal to or greater than 20% Opacity.

[Construction Permit 1230001-004-AC; PSD-FL-232; Construction Permit 1230001-017-AC; Rule 62-296.320(4)(b)1., F.A.C.]

From Two Lime Storage Bins vent:

K.11. Particulate Matter Emissions. The maximum PM/PM_{10} emissions from the two causticizing lime bins shall not exceed:.

Pollutant	Emission Standard	Lbs/hr	TPY
PM	0.02 gr/scf	0.343	1.5
PM_{10}	0.02 gr/scf	0.343	1.5

[Construction Permit 1230001-004-AC/PSD-FL-232; Construction Permit No. AC62-107857]

K.12. Visible Emissions**.** Visible Emissions from the two lime bins shall not be equal to or greater than 20% Opacity. Visible Emissions of 5% opacity or less shall waive the particulate matter emissions testing requirements of Condition K.24. in accordance with Rule 62-297.620(4), F.A.C..

[Construction Permit 1230001-004-AC/PSD-FL-232; Construction Permit No. AC62-107857; Rule 62-296.320(4)(b)1., F.A.C.; Rule 62-297.620(4), F.A.C.]

K.13. Tall Oil As A Fuel Firing Limitation. The quantity of Tall Oil fired as a fuel, including a Tall Oil/No. 6 Fuel Oil blend, shall be included in the fuel oil firing limitations established in any other issued air construction permit.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

From lime kiln stack:

K.14. Particulate Matter Emissions**.** For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used, except that Method 17 in Appendix A of 40 CFR Part 60 may be used in lieu of Method 5 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205 °C (400 °F). For Methods 5, and 17, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. The particulate concentration shall be corrected to the appropriate oxygen concentration according to Condition K.15. A compliance test shall be conducted annually, once each federal fiscal year.

[Rule 62-296.404(4)(b)2., F.A.C.; Rule 62-297.401(5), F.A.C; 40 CFR 60.285(b)(1), 40 CFR 60.285(f); 40 CFR 63.865(b)(1);Permit 1230001-004-AC; Construction Permit 1230001-017-AC]

K.15. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (21 - X) / (21 - Y)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (10 percent).
Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2); 40 CFR 60.285(b)(1); 40 CFR 60.284(c)(3)]

K.16. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3B in Appendix A of 40 CFR Part 60. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3); 40 CFR 60.285(b)(2)]

K.17. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3B in Appendix A of 40 CFR Part 60 shall be used; and

Condition No. K.17. Continued:

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the CaO production rate.

[40 CFR 63.865(b)(5) and (6); 40 CFR 60.285(b)(2)]

K.18. Sulfur Dioxide Emissions. Sulfur Dioxide (SO_2) emissions compliance shall be determined by tracking the daily lime production and calculating the emissions rate using the emission factor.

[Construction Permit 1230001-017-AC**]**

K.19. Nitrogen Oxide Emissions. Nitrogen Oxide emissions testing shall be by using EPA Method 7 or 7E, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed once every five years prior to permit renewal.

[Rule 62-297.401(7), F.A.C.; Construction Permit 1230001-004-AC/PSD-FL-232(test method and frequency); Construction Permit 1230001-017-AC]

K.20. Total Reduced Sulfur (TRS) Emissions. EPA Method 16 shall be used to determine the TRS concentration. The TRS concentration shall be corrected to the appropriate oxygen concentration using the procedure in Condition K.16. A compliance test shall be conducted, once every five years (prior to permit renewal). As an alternative to Method 16, Method 16A, 16B, or 16C may be used. Method 16, 16A, or 16C pursuant to Rule 62-297.401(16), F.A.C., shall be required for instrument certification and compliance testing.

[Rule 62-296.404(4)(b)3., F.A.C.; Rule 62-297.401(16), F.A.C.; 40 CFR 60.285(d)(1); 40 CFR 60.285(f)(2); Construction Permit 1230001-004-AC/PSD-FL-232; Construction Permit 1230001-017-AC]

K.21. Total Reduced Sulfur (TRS) Emissions -Oxygen Concentration. The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the oxygen concentration. The sample shall be taken over the same time period as the TRS samples.

[40 CFR 60.285(d)(2)]

K.22. Visible Emissions. Visible Emissions testing shall be by using EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C, and the procedures in 40 CFR 60.11. A compliance test shall be conducted annually, once each federal fiscal year.

[Rule 62-297.401(9), F.A.C.; 40 CFR 60.285(3); Construction Permit 1230001-004-AC/PSD-FL-232; Construction Permit 1230001-017-AC]

From the Two Lime Storage Bins vent:

K.23. Visible Emissions. Visible Emissions testing shall be by using EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted annually, once each federal fiscal year.

[Rule 62-297.401(9), F.A.C.; Construction Permit 1230001-004-AC/PSD-FL-232]

K.24. Particulate Matter. Compliance shall be demonstrated by compliance with the 5% opacity visible emissions standards specified in Condition K.12. Failure to comply with this standard shall necessitate the requirement to conduct a mass emissions compliance test for particulate matter emissions using EPA Methods 1, 2, 3, and 5 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A.

[Construction Permit No. 1230001-004-AC/PSD-FL-232; Construction Permit No. AC62-107857]

Fuel Monitor Installation (Lime Kiln)

K.25. Fuel Flow Gauge. The permittee shall install, operate, and maintain equipment to continuously monitor and record the flow/firing rate of each authorized fuel stated in Condition 3 for each of the No. 4 Lime Kiln. All monitoring and recording equipment shall be installed and properly functioning prior to the firing of any such fuels. Existing equipment may satisfy this requirement.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; Construction Permit No. AC62-107858; Construction Permit No. 1230001-029-AC]

Continuous Monitoring Requirements (Lime Kiln)

K.26. Continuous Opacity Monitoring System (COMS). The permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition.

(1) [Reserved]

(2) [Reserved]

(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in Sec. 63.8(g)(2).

[Rule 62-204.800(8)(b)35; 40 CFR 63.864(d)]

K.27. Total Reduced Sulfur (TRS) and O_2. The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. These systems shall be located downstream of the control device(s) and the spans of these continuous monitoring system(s) shall be set:

(i) At a TRS concentration of 30 ppm for the TRS continuous monitoring system.

(ii) At 20 percent oxygen for the continuous oxygen monitoring system.

c. The continuous emissions monitoring systems shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

d. The continuous emissions monitoring system shall be located, installed and certified pursuant to the provisions of 40 C.F.R. Part 60, Appendix B, Performance Specification 2 and Performance Specification 3, and 40 C.F.R. Part 60, Appendix B, Performance Specification 5, which are adopted by reference in subsection 62-204.800(7), F.A.C. The exception is that the phrase "or other approved alternative" in Section 3.2 of performance Specification 5 is not adopted. For the purposes of compliance testing and certification of continuous emissions monitoring systems, 40 C.F.R. Part 60, Appendix A, Reference Method 16, 16A, or 16C adopted by reference in subsection 62-204.800(7), F.A.C., are to be used.

e. The continuous emissions monitoring system shall be in continuous operation, except when the emissions unit is not operating, or during system breakdowns, repairs, calibration checks, and zero and span adjustments.

f. During any initial compliance tests conducted pursuant to Rule 62-296.404, F.A.C., or within 30 days thereafter, and at such times as there is reason to believe the system does not conform to the performance specifications under this rule (for example, equipment repairs, replacements, excessive drift and such), the owner or operator of any affected emissions unit shall conduct continuous monitoring system performance evaluations and furnish the Department, within sixty days thereof, two copies of a written report of the results of such tests. These continuous emissions monitoring systems performance evaluations shall be conducted in accordance with the requirements and procedures contained in paragraph d of this condition.

g. The continuous emissions monitoring system shall be checked by the owner or operator in accordance with a written procedure at least once daily and after any maintenance to the system. The owner or operator shall check the zero (or low level value between 0 and 20 percent of span value) and span (90 to 100 percent of span value) calibration drifts. The zero and span shall be adjusted, as a minimum, whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications referenced in paragraph d. of this condition. The system must allow the amount of excess

zero and span drift measured at the 24-hour interval checks to be recorded and quantified.

[Rule 62-296.404(5)(a), (b)1.a., b., c., d. e., f., g.(ii), g.(iii), h., F.A.C.; 40 CFR 60.284(a)(2); Construction Permit No. 1230001-004-AC/PSD-FL-232; Construction Permit 1230001-004-AC; Construction Permit 1230001-017-AC]

K.28. Total Reduced Sulfur (TRS). – CEM Data. The permittee shall:

(1) Reduce all data to one-hour averages for each 60-minute period beginning on the hour. One-hour averages shall be computed from a minimum of four data points equally spaced over each one-hour period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computation. Either an arithmetic or integrated average shall be used. The data output of the continuous emissions monitoring system may, at the owner's or operator's option, include a numerical format showing individual numerical readings and averages in addition to the required strip chart format with legible ink tracings and calibration information. All data output shall be clearly and properly identified by the operator. All system breakdowns, repairs, calibration checks, span adjustments and periods of excess emissions shall legibly appear on all data output.

(2) Calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed pursuant to Condition K.27.

(3) Calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under Condition K.28.(2) and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed pursuant to Condition K.27.

(4) Correct all 12-hour average TRS concentrations to 10 volume percent oxygen using the following equation:

$$Ccorr = Cmeas*(21-X/21-Y)$$

where:

Ccorr = the concentration corrected for oxygen.
Cmeas = the concentration uncorrected for oxygen.
X = the volumetric oxygen concentration in percentage to be corrected to (10 percent for lime kilns).
Y = the measured 12-hour average volumetric oxygen concentration.

(5) The data shall be rounded to the same number of significant digits as the standard.

[40 CFR 60.284(c)(1),(2), and (3); Rule 62-296.404(5)(b)2., F.A.C.]

K.29. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition K.35. if the following monitoring exceedance occurs:

- When the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.

[40 CFR 63.864(k)(1)(i)]

K.30. PM Emissions – Violations**.** It shall be considered a violation of the standards of Condition K.6.b. if the following monitoring exceedance occurs:

- when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period;

[40 CFR 63.864(k)(2)(ii)]

K.31. Sulfur Content and Density of Tall Oil. The Permittee shall follow procedures (1)–(10) below[1] to determine the density and sulfur content of tall oil:

As-Fired Sulfur Content in Tall Oil/No. 6 fuel oil blended fuel:

(1) A representative sample of the tall oil/No. 6 fuel oil blended fuel shall be collected at the outlet of the No. 6 fuel oil tank once a month, if any tall oil was placed in the No. 6 fuel oil tank during the month.
(2) The collected sample of the tall oil/No. 6 fuel oil blended fuel shall be submitted to an independent laboratory for analysis of the sulfur content of the blended fuel within 2 working days of collection.
(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)
(4) The Permittee shall obtain the results of the testing stated in Condition K.31.(2) to verify the blended fuel meets the as-fired fuel sulfur content stated in Condition K.1.3.
(5) If the analysis result indicates compliance with the as-fired sulfur content stated in Condition K.1.3., the result shall be reported to the Department in the Quarterly Report (as required by Condition K.42.).
(6) If the analysis result indicates noncompliance with the as-fired sulfur content stated in Condition K.1.3., the facility shall provide the Department immediate written notification, including a copy of the analysis results.

Sulfur Content in Tall Oil directly from Tall Oil Storage Tank:

(7) A representative sample of the tall oil intended to be fired as fuel shall be collected at the outlet of the Tall Oil Storage Tank on a monthly basis.
(8) The collected sample of the tall oil shall be submitted to an independent laboratory for analysis of the sulfur content within 2 working days of collection.

(9) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM, or EPA methods (such as ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 & ASTM D129-91, ASTM D1298-80)

(10) The Permittee shall obtain the results of the testing stated in Condition K.31.(8) and report the results to the Department in the Quarterly Report (as required by Condition K.42.

[1]Testing required only if Tall Oil is fired as a fuel during any calendar month.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

K.32. Tall Oil Generated Offsite Analysis. The permittee shall conduct the following additional analysis using approved methods or obtain a vendor certified analysis of the tall oil for the stated constituents:

Constituent	**Concentration**
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

Once an initial test is completed for a given supplier located within the United States, tall oil shall be sampled and analyzed for the constituents stated in the table above once a calendar month (with at least 21 days elapsed time between sample collection), during any month in which such tall oil is burned as an authorized fuel.

For a supplier located outside the United States, the tall oil shall be sampled and analyzed for the constituents stated in the table above on a per delivery basis.

The same requirements for suitability as a fuel, ceasing deliveries from a given supplier, and reporting of analysis results to the Department shall apply as is specified for a suppler located within the United States.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-027-AC]

Compliance Assurance Monitoring (CAM) Requirements

K.33. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Recordkeeping and Reporting Requirements

Lime Kiln Stack

K.34. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(a) and (b), F.A.C.; Construction Permit 1230001-004-AC/PSD-FL-232; Construction Permit 1230001-017-AC]

K.35. Startup, Shutdown, Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and

control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition K.26. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

K.36. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition K.29.

[40 CFR 63.866(b)]

K.37. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition K.30.

[40 CFR 63.866(b)]

K.38. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) N/A

(2) Records of CaO production rates in units of Mg/d or ton/d

(3) Records of parameter monitoring data required under Condition K.26., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions K.14. through K.17;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

K.39. Excess Emissions Report – PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition K.29. or K.30. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition K.29. and the number and duration of occurrences when the source met or exceeded the conditions in Condition K.30. Reporting excess emissions below the violation thresholds of Condition K.30. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

2. The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

K.40. TRS Excess Emissions Reports. The owner or operator shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition K.48.

[Rule 62-296.404(6)(d), F.A.C.]

K.41. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program 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.

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

K.42. Tall Oil Fired. The Permittee shall obtain, make, and keep records related to the use of Tall oil as a fuel in a form suitable for inspection at the facility by the Department.

The Permittee shall submit this information to the Department in a report postmarked by the 30th day following the end of each calendar quarter in which tall oil was added to the No. 6 fuel tank and fired in this emissions unit. The records should include, but are not limited to the following:

(1) The gallons of tall oil added to the No. 6 fuel oil storage tank and fired in this emissions unit.
(2) Results of analyses of tall oil as required by permit Condition.

The Permittee shall maintain on-site records of all sampling documentation, laboratory analysis, and recordkeeping information related to the firing of tall oil for a period of up to 5 years.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-025-AC, Construction Permit No. 1230001-027-AC]

K.43. Recordkeeping -Virgin ULSD. For each delivery of ULSD, the permittee shall retain at least the following records:

a. ULSD vendor certification;
b. The analysis identifying the sulfur content of the oil by percent weight;
c. Statement that the ULSD is virgin fuel;
d. Quantity of oil supplied.

[Rule 62-4.070, F.A.C.; Construction Permit No. 1230001-029-AC]

K.44. Semiannual Monitoring Reports. The permittee shall submit a written report to the Northeast District Office (Compliance Authority) summarizing the following identified by No. 4 Lime Kiln for each calendar month in which ULSD is fired:

- Gallons of virgin ULSD fired;
- Gallons of Black Liquor fired (including percent solids, estimated density);
- Total Hours of operation;
- Demonstration that the fuel firing limitations of Condition Nos. K.1., and K.2. have been met;
- A copy of a ULSD vendor certification that represents the ULSD fuel delivered during the month as required in Condition No. K.43.

The reports shall identify any exceedance of an emissions or performance limitation. The reports shall be submitted no later than 30 days following the second and fourth calendar quarters and shall include a certification statement from a Responsible Official that the ULSD fired by the mill meets the requirements specified in Condition Nos. K.43. and K.44. All records shall be maintained on file by the facility and available for Department inspection upon request.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1230001-023-AC; Construction Permit No. 1230001-029-AC; Rule 62-213.440(1)(b)3.c., F.A.C.]

Notifications

K.45. The owner or operator of any affected source or process unit must submit the applicable notifications from Part 63, as specified in Table 1 of this subpart.

[40 CFR 63.867(a)(1)]

Excess Emissions

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

No. 1 Lime Bin Vent and No. 2 Lime Bin Vent

K.46. Excess Emissions – Startup, Shutdown, and Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (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 2 hours in any 24 hour period unless specifically authorized by the Department for longer duration.

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

K.47. Excess Emissions. 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.]

Lime Kiln Stack

K.48. Excess Emissions - TRS. Periods of excess emissions from this emissions unit are all 12-hour average TRS concentration above 7 ppm by volume.

[Construction Permit 1230001-004-AC/PSD-FL-232; 40 CFR 60.284(d)(2)]

K.49. Excess Emissions – TRS - Violation. The Department will not consider periods of excess emissions reported under 40 CFR 60.7(c) and Condition K.48. to be indicative of a violation of 40 CFR 60.11(d) provided the Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

Note: 40 CFR 60.284(d) requires reporting on a semiannual basis periods of excess emissions for the purpose of reports required under §60.7(c). The State regulations require quarterly reporting.

[Construction Permit 1230001-004-AC/PSD-FL-232; 40 CFR 60.284(e)(2)]

K.50. Excess Emissions – TRS – Improper O & M. The Department shall consider periods of excess emissions from the lime kiln to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. N/A,

2. For lime kilns and calciners subject to the emissions limits of paragraph 62-296.404(3)(e), F.A.C., the excess emissions occur during more than two percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the lime kiln, calciner, or their control equipment occurred and only the actual 12-hour periods when the lime kiln or calciner was not operating),

3. N/A

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

    a. Operation of all equipment within permit limits for loading rates and other process parameters,

    b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

    c. Training of personnel in the operation and maintenance of equipment,

    d. Visual and instrument inspections of equipment on a regular basis, and

    e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

[Rule 62-296.404(6)(c), F.A.C.]

K.51. Excess Emissions – Startup, Shutdown, Malfunction. Excess emissions resulting from startup, shutdown or malfunction of any emission unit 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 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration.

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

K.52. Excess Emissions. Excess emissions 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.]

K.53. ESP. The permittee shall operate and maintain the ESP to control particulate matter emissions and minimize opacity from the lime kiln to achieve the emissions standards specified by this permit. A minimum of two fields of the ESP shall be functioning when the lime kiln is in operation.

[Rule 62-4.070, F.A.C.]

Startup, Shutdown, Malfunction Plan

K.54. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions, Condition No. 6.

Common Conditions

K.55. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
R	Used oil
Appendix 40 CFR 63	General Provisions of 40 CFR 63
Appendix 40 CFR 60	General Provisions of 40 CFR 60

Subsection L. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
025	No.1 & 2 Lime Slakers. Particulate matter emissions are controlled by a single, wet, cyclonic, scrubber manufactured by Ekono. The scrubber utilizes water as the scrubbing media. The nominal gas flow rate is approximately 1,700 acfm.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills.

The following conditions apply to the emissions unit(s) listed above:

Operating Parameters

L.1. Permitted Capacity. The maximum allowed operation rate is 243,000 lbs/hr of lime solids plus green liquor solids (60,886 and 182,114 lb/hr, respectively).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-143536; Construction Permit No. 1230001-014-AC]

L.2. Hours of Operation The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC62-143536]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

L.3. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 2.08 lbs/hr and 9.13 TPY.

[Construction Permit No. AC62-107857; Construction Permit AC62-143536; Construction Permit No. 1230001-014-AC]

L.4. Visible Emissions**.** Visible Emissions from this emissions unit shall not be equal to or greater than 20% Opacity.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.404(2)(b), F.A.C.; Permit AC62-143536]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

L.5. Particulate Matter Emissions. The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.

[Permit AC62-143536; Permit AO62-219151]

L.6. Visible Emissions. Visible Emissions testing shall be by using EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted annually, once each federal fiscal year.

Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-297.401(9), F.A.C.; Construction Permit AC62-143536; Permit AO62-219151]

Continuous Monitoring Requirements

L.7. Particulate Matter Emissions Surrogate Parameter. A pressure gauge shall be operated and maintained to measure the scrubbing liquid supply pressure. The sensor or tap shall be located close to the scrubber liquid discharge point. The device shall be certified by the manufacturer as being accurate within ±15 percent. The scrubber water pressure shall be maintained at a minimum of 20 psig.

[Construction Permit No. AC62-107857; Construction Permit No. AC62-143536; Operation Permit No. AO62-219151]

Recordkeeping and Reporting Requirements

L.8. Particulate Matter Emissions Surrogate Parameter. Monitoring data shall be reported with all visible emissions compliance tests.

[Construction Permit AC62-143536; Operation Permit AO62-219151]

L.9. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program 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.

[Rule 62-210.700(6), 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 or NESHAP provision.}

L.10. Excess Emissions – Startup, Shutdown, Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (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 2 hours in any 24 hour period unless specifically authorized by the Department for longer duration.

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

L.11. 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.]

Subsection M. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
040	Tall Oil Processing Unit. Gases from the vents of the centrifugal feed tank, weir tank, degasifier tank, basket strainer, (2) decanters, and degassifier condenser are sent to a two-stage, packed-tower, wet scrubber manufactured by Andersen 2000, Inc. for control. The scrubber uses spent caustic from the demineralization system (part of the water treatment system), and a 50% fresh caustic solution as the scrubbing medium. After passing through the scrubber, the caustic is returned to the liquor system. The scrubber media flow rate is continuously monitored.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

M.1. Permitted Capacity. The maximum production rate shall not exceed 10 tons/hr[1] as a 12-hr avg.

[1] Dry basis. Based on a total process input rate of 36,800 lbs/hr soap and black liquor and 12,345 lbs/hr sulfuric acid.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AC62-168453; Permit No. AC62-141922]

M.2. Hours of Operation The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AC62-168453; Permit No. AC62-141922]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

M.3. Total Reduced Sulfur (TRS) Emissions. TRS emissions from the Tall Oil Plant shall not exceed 0.05 lb /ton of crude tall oil produced as a 12-hr average, 0.50 lb/hr and 2.2 TPY.

[Rule 62-296.404(3)(b)1., F.A.C.; Permit No. AC62-168453; Permit No. AC62-141922]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

M.4. Total Reduced Sulfur (TRS) Emissions. The test method for total reduced sulfur emissions shall be either EPA Method 16, 16A, or 16C as incorporated and adopted by reference in Chapter 62-297, F.A.C. EPA Method 16, 16A, or 16C pursuant to Rule 62-297.401(16), F.A.C., shall be required for instrument certification and compliance testing. A compliance test shall be conducted every 5 years, prior to operation permit renewal during the federal fiscal year.

[Rule 62-297.404(4)(b)3., F.A.C.; Rule 62-297.401(16), F.A.C; Permit No. AC62-168453; Permit No. AC62-141922]

Continuous Monitoring Requirements

M.5. Total Reduced Sulfur (TRS) Emissions– Surrogate Parameters. The permittee shall maintain and operate a continuous monitor of the equivalent 100% NaOH aqueous solution flow. The minimum flow rate shall be 0.5 gpm per each 12-hr averaging period. Excess emissions shall be deemed to have occurred if these minimum parameter values are not met.

[Rule 62-296.404(5)(d), F.A.C.; Permit No. AC62-168453; Permit No. AC62-141922]

Recordkeeping and Reporting Requirements

M.6. Total Reduced Sulfur (TRS) Emissions Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures

Condition No. M.6. Continued:

adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

(c) Evaluation of Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. N/A

2. N/A

3. The excess emissions occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the emissions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall

Condition No. M.6. Continued:

be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

a. Operation of all equipment within permit limits for loading rates and other process parameters,

b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

c. Training of personnel in the operation and maintenance of equipment,

d. Visual and instrument inspections of equipment on a regular basis, and

e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

(d) The owner or operator of any Kraft pulp mill or tall oil plant shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition G.6.(c)1. through 3.

[Rules 62-296.404(6)(a),(b),(c),(d), F.A.C.; Construction Permit No. AC62-168453; Permit No. AC62-141922]

Excess Emissions

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

M.7. Excess Emissions – Startup, Shutdown, and Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (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 2 hours in any 24 hour period unless specifically authorized by the Department for longer duration.

Permitting Note: Applicant states in October 6, 2005 Response that this emissions unit takes one hour to bring it online at steady-state operation and 15 minutes to shut it down.

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

M.8. Excess Emissions. Excess emissions 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.]

Subsection N. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
041	No. 2 Purification Plant. Chlorine dioxide emissions are controlled using chilled, water scrubbers (2) followed by a wet, packed tower scrubber manufactured by Caldwell-MacKay. (Paper-grade) White liquor is utilized as the scrubbing media in the wet scrubber. The minimum scrubbing media pH is 8.0 s.u. and approximately 7,000 acfm inlet gas flow rate. The control efficiency is estimated at 99% for chlorinated HAPs except chloroform.

{Permitting note(s): This emissions unit is regulated by 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The following specific conditions apply to the emissions unit(s) listed above:

Operating Parameters

N.1. Permitted Capacity. The maximum allowed operation rate for both the Nos. 1 and 2 Purification Plants combined is 1681 tons per day (TPD) of bone-dry unbleached pulp (BDUP) feed. The maximum is based on a nominal operation rate of 700 TPD BDUP for the No. 1 Purification Plant and 981 TPD BDUP for the No. 2 Purification Plant. (Ton =2000 pounds)

[Permit No. AC62-172092; Amendment to Permit No. AC62-172092 dated 11/12/96; Permit No. 1230001-005-AC; Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC; Construction Permit No. 1230001-013-AC]

N.2. Hours of Operation The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

N.3. Bleaching Stage Equipment. The equipment at each bleaching stage of the No. 2 Purification Plant, where chlorinated compounds are introduced, shall be enclosed and vented into a closed-vent system and routed to the gas scrubber. The enclosures and closed-vent system shall meet the requirements specified in Condition N.5.

[40 CFR 63.445(b); Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

N.4. Chloroform air emissions. To reduce chloroform air emissions to the atmosphere from the No. 2 Purification Plant, the Permittee shall meet the applicable effluent limitation guidelines and standards specified in 40 CFR Part 430, and shall not use hypochlorite or chlorine for bleaching in the bleaching system or line.

[40 CFR 63.445(d)(2), Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

N.5. Enclosures and Closed-Vent Systems. The enclosure and closed-vent system specified in Condition N.3 for capturing and transporting vent streams that contain HAP shall meet the following requirements:

(a) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in Condition N.9. Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(b) Each component of the closed-vent system used to comply with Condition N.3. that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in Condition N.8.

(c)Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.445 shall comply with either of the following requirements:

(1) On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

Condition No. N.5. Continued:

(2) For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

Note: Buckeye demonstrates compliance with Condition N.5.(c) by complying with requirements in paragraph (2).

[40 CFR 63.450; Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

N.6. Total Chlorinated HAPs. The concentration of total chlorinated HAPs (not including chloroform) at the outlet of the control device shall not exceed 10 parts per million by volume.

[40 CFR 63.445(c)(2); Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

N.7. Vent sampling port locations and gas stream properties. For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in Condition N.6. the owner or operator shall comply with the applicable procedures in paragraphs (1) through (6) of this Condition. A compliance test shall be conducted annually, once each federal fiscal year.

(1) Method 1 or 1A of Part 60, Appendix A, as appropriate, shall be used for selection of the sampling site as follows:

(i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere;

(ii) For determining compliance with percent reduction requirements, sampling sites shall be located prior to the inlet of the control device and at the outlet of the control device; measurements shall be performed simultaneously at the two sampling sites; and

(iii) For determining compliance with concentration limits or mass emission rate limits, the sampling site shall be located at the outlet of the control device.

Condition No. N.7. Continued:

(2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.

(3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of part 60, appendix A, as appropriate.

(4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.

(5) To determine vent gas concentrations, the owner or operator shall collect a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

(i) Method 308 in Appendix A of this part shall be used to determine the methanol concentration.

(ii) Except for the modifications specified in paragraphs (5)(ii)(A) through (5)(ii)(K) of this Condition, Method 26A of Part 60, Appendix A shall be used to determine chlorine concentration in the vent stream.

(A) *Probe/Sampling Line*. A separate probe is not required. The sampling line shall be an appropriate length of 0.64 cm (0.25 in) OD Teflon® tubing. The sample inlet end of the sampling line shall be inserted into the stack in such a way as to not entrain liquid condensation from the vent gases. The other end shall be connected to the impingers. The length of the tubing may vary from one sampling site to another, but shall be as short as possible in each situation. If sampling is conducted in sunlight, opaque tubing shall be used. Alternatively, if transparent tubing is used, it shall be covered with opaque tape.

(B) *Impinger Train*. Three 30 milliliter (ml) capacity midget impingers shall be connected in series to the sampling line. The impingers shall have regular tapered stems. Silica gel shall be placed in the third impinger as a desiccant. All impinger train connectors shall be glass and/or Teflon®.

(C) *Critical Orifice*. The critical orifice shall have a flow rate of 200 to 250 ml/min and shall be followed by a vacuum pump capable of providing a vacuum of 640 millimeters of mercury (mm Hg). A 45 millimeter diameter in-line Teflon® 0.8 micrometer filter shall follow the impingers to project the critical orifice and vacuum pump.

Condition No. N.7. Continued:

(D) The following are necessary for the analysis apparatus:

(*1*) Wash bottle filled with deionized water;
(*2*) 25 or 50 ml graduated burette and stand;
(*3*) Magnetic stirring apparatus and stir bar;
(*4*) Calibrated pH Meter;
(*5*) 150-250 ml beaker or flask; and
(*6*) A 5 ml pipette.

(E) The procedures listed in paragraphs (5)(ii)(E)(*1*) through (5)(ii)(E)(*7*) of this Condition shall be used to prepare the reagents.

(*1*) To prepare the 1 molarity (M) potassium dihydrogen phosphate solution, dissolve 13.61 grams (g) of potassium dihydrogen phosphate in water and dilute to 100 ml.

(*2*) To prepare the 1 M sodium hydroxide solution (NaOH), dissolve 4.0 g of sodium hydroxide in water and dilute to 100 ml.

(*3*) To prepare the buffered 2 percent potassium iodide solution, dissolve 20 g of potassium iodide in 900 ml water. Add 50 ml of the 1 M potassium dihydrogen phosphate solution and 30 ml of the 1 M sodium hydroxide solution. While stirring solution, measure the pH of solution electrometrically and add the 1 M sodium hydroxide solution to bring pH to between 6.95 and 7.05.

(*4*) To prepare the 0.1 normality (N) sodium thiosulfate solution, dissolve 25 g of sodium thiosulfate, pentahydrate, in 800 ml of freshly boiled and cooled distilled water in a 1-liter volumetric flask. Dilute to volume. To prepare the 0.01 N sodium thiosulfate solution, add 10.0 ml standardized 0.1 N sodium thiosulfate solution to a 100 ml volumetric flask, and dilute to volume with water.

(*5*) To standardize the 0.1 N sodium thiosulfate solution, dissolve 3.249 g of anhydrous potassium bi-iodate, primary standard quality, or 3.567 g potassium iodate dried at 103 +/- 2 degrees Centigrade for 1 hour, in distilled water and dilute to 1000 ml to yield a 0.1000 N solution. Store in a glass-stoppered bottle. To 80 ml

Condition No. N.7. Continued:

distilled water, add, with constant stirring, 1 ml concentrated sulfuric acid, 10.00 ml 0.1000 N anhydrous potassium bi-iodate, and 1 g potassium iodide. Titrate immediately with 0.1 n sodium thiosulfate titrant until the yellow color of the liberated iodine is almost discharged. Add 1 ml starch indicator solution and continue titrating until the blue color disappears. The normality of the sodium thiosulfate solution is inversely proportional to the ml of sodium thiosulfate solution consumed:

$$\text{Normality of Sodium Thiosulfate} = \frac{1}{\text{ml Sodium Thiosulfate Consumed}}$$

(*6*) To prepare the starch indicator solution, add a small amount of cold water to 5 g starch and grind in a mortar to obtain a thin paste. Pour paste into 1 L of boiling distilled water, stir, and let settle overnight. Use clear supernate for starch indicator solution.

(*7*) To prepare the 10 percent sulfuric acid solution, add 10 ml of concentrated sulfuric acid to 80 ml water in an 100 ml volumetric flask. Dilute to volume.

(F) The procedures specified in paragraphs (b)(5)(ii)(F)(*1*) through (b)(5)(ii)(F)(*5*) of this section shall be used to perform the sampling.

(*1*) Preparation of Collection Train. Measure 20 ml buffered potassium iodide solution into each of the first two impingers and connect probe, impingers, filter, critical orifice, and pump. The sampling line and the impingers shall be shielded from sunlight.

(*2*) Leak and Flow Check Procedure. Plug sampling line inlet tip and turn on pump. If a flow of bubbles is visible in either of the liquid impingers, tighten fittings and adjust connections and impingers. A leakage rate not in excess of 2 percent of the sampling rate is acceptable. Carefully remove the plug from the end of the probe. Check the flow rate at the probe inlet with a bubble tube flow meter. The flow should be comparable or slightly less than the flow rate of the critical orifice with the impingers off-line. Record the flow and turn off the pump.

Condition No. N.7. Continued:

(*3*) Sample Collection. Insert the sampling line into the stack and secure it with the tip slightly lower than the port height. Start the pump, recording the time. End the sampling after 60 minutes, or after yellow color is observed in the second in-line impinger. Record time and remove the tubing from the vent. Recheck flow rate at sampling line inlet and turn off pump. If the flow rate has changed significantly, redo sampling with fresh capture solution. A slight variation (less than 5 percent) in flow may be averaged. With the inlet end of the line elevated above the impingers, add about 5 ml water into the inlet tip to rinse the line into the first impinger.

(*4*) Sample Analysis[1]. Fill the burette with 0.01 N sodium thiosulfate solution to the zero mark. Combine the contents of the impingers in the beaker or flask. Stir the solution and titrate with thiosulfate until the solution is colorless. Record the volume of the first endpoint (TN, ml). Add 5 ml of the 10 percent sulfuric acid solution, and continue the titration until the contents of the flask are again colorless. Record the total volume of titrant required to go through the first and to the second endpoint (TA, ml). If the volume of neutral titer is less than 0.5 ml, repeat the testing for a longer period of time. It is important that sufficient lighting be present to clearly see the endpoints, which are determined when the solution turns from pale yellow to colorless. A lighted stirring plate and a white background are useful for this purpose.

(*5*) Interferences. Known interfering agents of this method are sulfur dioxide and hydrogen peroxide. Sulfur dioxide, which is used to reduce oxidant residuals in some bleaching systems, reduces formed iodine to iodide in the capture solution. It is therefore a negative interference for chlorine, and in some cases could result in erroneous negative chlorine concentrations. Any agent capable of reducing iodine to iodide could interfere in this manner. A chromium trioxide impregnated filter will capture sulfur dioxide and pass chlorine and chlorine dioxide. Hydrogen peroxide, which is commonly used as a bleaching agent in modern bleaching systems, reacts with iodide to form iodine and thus can cause a positive

Condition No. N.7. Continued:

interference in the chlorine measurement. Due to the chemistry involved, the precision of the chlorine analysis will decrease as the ratio of chlorine dioxide to chlorine increases. Slightly negative calculated concentrations of chlorine may occur when sampling a vent gas with high concentrations of chlorine dioxide and very low concentrations of chlorine.

(6) The minimum sampling time for each of the three test runs shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the test run.

(G) The following calculation shall be performed to determine the corrected sampling flow rate:

$$S_c = \frac{S_u (BP - PW)(293)}{(760)(273 + t)}$$

where:

S_C = Corrected (dry standard) sampling flow rate, liters per minute;
S_U = Uncorrected sampling flow rate, L/min;
BP = Barometric pressure at time of sampling;
PW = Saturated partial pressure of water vapor, mm Hg at temperature; and
t = Ambient temperature, °C.

(H) The following calculation shall be performed to determine the moles of chlorine in the sample:

$$Cl_2 \text{ Moles} = 1/8000\ (5\ T_N - T_A) \times N_{Thio}$$

where:

T_N = Volume neutral titer, ml;
T_A = Volume acid titer (total), ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(I) The following calculation shall be performed to determine the concentration of chlorine in the sample:

$$ClO_2\ Moles = 1/4000(T_A - T_N) \times N_{Thio}$$

Condition No. N.7. Continued:

where:

T_A = Volume acid titer (total), ml;
T_N = Volume neutral titer, ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(J) The following calculation shall be performed to determine the concentration of chlorine dioxide in the sample:

$$ClO_2 \text{ ppmv} = \frac{6010 \left(T_A - T_N\right) \times N_{Thio}}{S_c \times t_s}$$

where:

S_C = Corrected (dry standard) sampling flow rate, liters per minute;
t_S = Time sampled, minutes;
T_A = Volume acid titer (total), ml;
T_N = Volume neutral titer, ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(iii) Any other method that measures the total HAP or methanol concentration that has been demonstrated to the Administrator's satisfaction.

(6) The minimum sampling time for each of the three runs per method shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

[1] As an alternative to the requirement in 40 CFR 63.457(b)(5)(ii)(F)(4), for additional testing over longer sampling times if the neutral titer is less than 0.5 milliliter (mL), the facility's sample will be acidified and titrated to the acid endpoint. If the acid titer is greater than 0.1 mL, the neutral titer will be assumed to be 0.1 mL, and the chlorine concentration will be reported as less than the calculated value. If the acid titer is less than 0.1 mL, the results will be calculated using 0.1 mL for both the neutral and acid titer.

[Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC; Rule 62-297.310(7)(a)4.c., F.A.C.; 40 CFR 63.457(b); EPA Approved Alternative Titration procedure for Method 26A dated 03/08/02]

N.8. Detectable leak procedures. To measure detectable leaks for closed-vent systems as specified in Condition N.5., the owner or operator shall comply with the following:

(1) Method 21, of Part 60, Appendix A; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d)]

N.9. Negative pressure procedures. To demonstrate negative pressure at process equipment enclosure openings as specified in Condition N.5(a)., the owner or operator shall use one of the following procedures:

(1) An anemometer to demonstrate flow into the enclosure opening;

(2) Measure the static pressure across the opening;

(3) Smoke tubes to demonstrate flow into the enclosure opening; or

(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

[40 CFR 63.457(e)]

N.10. Bleaching HAP concentration measurement. For purposes of complying with the bleaching system requirements in this Subsection the owner or operator shall measure the total HAP concentration as the sum of all individual chlorinated HAPs or as chlorine.

[40 CFR 63.457(h)]

Continuous Monitoring Requirements

N.11. The permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in §63.2) as specified in Condition N.12. The CMS shall include a continuous recorder.

[40 CFR 63.453(a), Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC]

N.12. A CMS shall be operated to measure the following parameters:

(1) The pH or the oxidation/reduction potential of the gas scrubber effluent;

(2) The gas scrubber liquid influent flow rate; and

(3) The on/off operation of the scrubber fan. [1]

[1] An alternative to monitoring the gas inlet flow rate. Buckeye shall also 1) provide the manufacturer scrubber fan curve date in the performance test plan and in the CMS Quality Control Program; 2) conduct outlet gas scrubber flow measurement during the initial performance test and test at maximum gas flow conditions; 3) notify FDEP-NED prior to making any changes that will affect the maximum gas flow rate (i.e., motor replacement, fan replacement); and 4) conduct performance testing after making any future changes which could increase the maximum inlet flow rate.

[40 CFR 63.453(c); EPA MACT I Rule Interpretation: Q&A's For The Pulp and Paper NESHAP, EPA Document, 9/22/99, Florida DEP Memorandum: Summary of Responses to MACT I Issues… dated August 29, 2000, Buckeye Letter dated 4/17/01, EPA Approval Letter dated July 20, 2001]

N.13. Enclosure and Closed-Vent System**.** The enclosure and closed-vent system used to comply with Condition N.5. shall comply with the following requirements:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in N.5.(a) shall be performed once during each calendar month, with at least 21 days elapsed time between inspections, to ensure the opening is maintained in the closed position and sealed.

(2) The closed-vent system shall be visually inspected once during each calendar month, with at least 21 days elapsed time between inspections, and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in Condition N.5.(b) measured initially and annually by the procedures in Condition N.8.

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in Condition N.9.

(5) The valve or closure mechanism specified in Condition N.5.(c)(2) shall be inspected once during each calendar month, with at least 21 days elapsed time between inspections, to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

Condition No. N.13. Continued:

(6) If an inspection required by paragraphs (1) through (5) of this Condition identifies visible defects in ductwork, piping, enclosures or connections to covers required by Condition N.5., or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

[40 CFR 63.453(k), EPA Alternate Approval Letter dated March 31, 2004]

N.14. Scrubber Operating Parameters. The gas scrubber shall be operated in a manner consistent with the minimum pH of the scrubbing medium effluent at 8.4. s.u (3-hr average)., the minimum scrubber medium influent flow rate of 490 gallons per minute(3-hr average), and the on/off operation of the scrubber fan. Operation of the gas scrubber below these minimum operating parameter values (unless reestablished pursuant to the procedures of Condition N.15.) or failure to perform procedures required by 40 CFR 63 Subpart S shall constitute a violation of Condition N.6. and be reported as a period of excess emissions.

[40 CFR 63.453(o), EPA Approval Letter dated July 20, 2001]

N.15. Wet Scrubber Operating Parameters – Reestablishment. To reestablish the value for each operating parameter required to be monitored under Condition N.12. and as stated in Condition N.14.., (minimum pH of scrubbing medium effluent, minimum scrubber medium influent flow rate, and on/of position of the scrubber fan), the following procedures shall be used:

(1) During subsequent performance tests, continuously record the operating parameter;

Condition No. N.15. Continued:

(2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

[40 CFR 63.453(n)]

Recordkeeping Requirements

N.16. The permittee shall comply with the recordkeeping requirements of 40 CFR 63.10, as shown in Table 1 of 40 CFR Part 63 Subpart S.

[40 CFR 63.454(a)]

N.17. Enclosure Opening, Closed-Vent System and Closed Collection System. For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;
(2) The equipment type and identification;
(3) Results of negative pressure tests for enclosures;
(4) Results of leak detection tests;
(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
(7) Repair methods applied in each attempt to repair the defect or leak;
(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
(10) The date of successful repair of the defect or leak;
(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b)]

N.18. New affected Process Equipment. The permittee shall record the CMS parameters specified in §63.453 and meet the requirements specified in Condition N.16., for any new

affected process equipment that becomes subject to the standards of 40 CFR Part 63 Subpart S due to a process change or modification.

[40 CFR 63.454(d)]

Reporting Requirements

N.19. The permittee shall comply with the reporting requirements of 40 CFR Part 63, Subpart A as specified in Table 1 of Subpart S.

[40 CFR 63.455(a)]

N.20. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program 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.

[Rule 62-210.700(6), 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 or NESHAP provision.}

N.21 Excess Emissions – Startup, Shutdown, and Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (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 2 hours in any 24 hour period unless specifically authorized by the Department for longer duration.

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

N.22. 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.]

Startup, Shutdown, Malfunction Plan

N.23. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions, Condition No. 6.

Common Conditions

N.24. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection O. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
045	No. 1 Purification Plant. Chlorine dioxide emissions are controlled using chilled, water scrubbers (2) followed by a fluidized-bed, wet scrubber manufactured by Bionomics Industries and Demister (Dissolving-Grade and specialty chemical cellulose grades) White liquor is utilized as the scrubbing media in the wet scrubber. The minimum scrubbing media pH is 8.0 s.u. and approximately 18,500 acfm inlet gas flow rate. The control efficiency is estimated at 99.5% for chlorinated HAPs except chloroform.

This emissions unit is subject to the requirements of 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The following specific conditions apply to the emissions unit(s) listed above:

O.1. The Permittee shall achieve compliance with the following conditions as expeditiously as practicable, but in no event later than 3 years after the issuance of a site-specific Clean Water Act permit, i.e. a NPDES permit.[1]

[1] FDEP File Number FL000876-001-IW1S is currently in a pending status.

[40 CFR 63.440(d)(2); August 29, 2005 Federal Register (Volume 70, page 51050-1)]

Operating Parameters

O.2. Permitted Capacity. The maximum allowed operation rate for both the Nos. 1 and 2 Purification Plants combined is 1681 tons per day (TPD) of bone-dry unbleached pulp (BDUP) feed. The maximum is based on a nominal operation rate of 700 TPD (BDUP) for the No. 1 Purification Plant and 981 TPD (BDUP) for the No. 2 Purification Plant. (Ton =2000 pounds).

[Permit No. AC62-253917; Permit No. 1230001-006-AC; Construction Permit No. 1230001-001-AC; Construction Permit No. 11230001-012-AC; Construction Permit No. 1230001-013-AC]

O.3. Hours of Operation The hours of operation are not limited.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

O.4. MACT (Maximum Achievable Control Technology) regulation shall be used to determine the maximum emissions limit, when applicable.

[Permit No.1230001-006-AC; 40 CFR 63.445]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

O.5. Testing shall be required in accordance with the MACT regulations, when applicable. This includes an initial performance test as required by 40 CFR 63.457(a) and an annual compliance test as required by Rule 62-297.310(7)(a)4.c., F.A.C.

[Permit No.1230001-006-AC; 40 CFR 63.445, 40 CFR 63.457(a); Rule 62-297.310(7)(a)4.c., F.A.C]

Continuous Monitoring Requirements

~~**O.5.**~~**O.6.** Monitoring shall be required in accordance with the MACT regulations.

[40 CFR 63.445]

Recordkeeping Requirements

O.7. The permittee shall comply with the recordkeeping requirements of 40 CFR 63.10, as shown in Table 1 of 40 CFR Part 63 Subpart S and the applicable requirements of 40 CFR 63.454 in accordance with Condition O.1.

[40 CFR 63.454]

Reporting Requirements

O.8. The permittee shall comply with the reporting requirements of 40 CFR Part 63, Subpart A as specified in Table 1 of Subpart S and the applicable requirements of 40 CFR 63.455 in accordance with Condition **O.1.**

[40 CFR 63.455]

O.9. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program 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.

[Rule 62-210.700(6), 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 or NESHAP provision.}

O.10. Excess Emissions – Startup, Shutdown, and Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (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 2 hours in any 24 hour period unless specifically authorized by the Department for longer duration.

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

O.11. Excess Emissions. Excess emissions 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.]

Startup, Shutdown, Malfunction Plan

O.12. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions, Condition No. 6.

Common Conditions

O.13. Common Conditions. This emissions unit is also subject to the following applicable requirements:

Subsection (s)	Description
Appendix 40 CFR 63	General Provisions of 40 CFR 63

Subsection P. 40 CFR Part 63, Subpart S Common Conditions.

E.U. ID No.	Brief Description
046	Pulping System MACT I includes those sources regulated under MACT I: Nos. 1 and 2 Batch Digester systems, the Turpentine Recovery system (includes the turpentine Condenser, Decanter, Weir Box, and Underflow Tank), Multiple Effect Evaporator systems (Nos. 1-4), and the Pulping Process Condensate Collection System. Condensates from the Digester blow vent condensing system, the Turpentine Recovery System, the black liquor evaporator condensates from the MEE Systems (Nos. 1-4), and the NCG system condensates are pumped through a closed piping system to the No. 1 lagoon for treatment to remove HAPs. High Volume, Low Concentration (HVLC) sources include the Nos. 1 and 2 Brown Stock Washer systems. The aeration stabilization basin of the biological treatment system (the No. 1 Lagoon) is also included in this emissions unit as part of the Clean Condensate Alternative.

{Permitting note(s): This emissions unit is regulated by 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The following conditions apply to the emissions unit(s) listed above:

P.1. The permittee shall comply with the requirements of 40 CFR Part 63, Subpart A – General Provisions as specified in 40 CFR Part 63, Subpart S, Table 1.

[40 CFR 63.440(g)]

P.2. Total HAP Emissions. Each equipment system listed below shall be enclosed and vented (as specified in Condition No. P.8.) into a closed-vent system and routed to the No. 1 Bark Boiler (primary control device) or the pre-scrubber followed by the No. 1 Power Boiler (secondary control device) for total HAP emission reduction. The HAP emission stream shall be introduced with the primary fuel or into the flame zone.

- Batch digesters
- The turpentine recovery system (condensers, decanters)
- The multiple effect evaporators
- Any other equipment serving the same function as those previously listed

Note: Non-decanting turpentine storage tanks containing saleable product are not considered part of the turpentine recovery process.

Condition P.2. Continued:

[EPA MACT I Rule Interpretation: Q&A's For The Pulp and Paper NESHAP, EPA Document, 9/22/99, Florida DEP Memorandum: Summary of Responses to MACT I Issues… dated August 29, 2000]

[40 CFR 63.443(a); 40 CFR 63.443(c), 40 CFR 63.443(d)(4)(i) and (ii); Construction Permit No. AC62-141919; Construction permit No. AC62-141920;Construction Permit No. AC62-141921; Construction Permit No. AC62-141916; Construction Permit No. AC62-141917; Construction permit No. AC62-141918]

Kraft pulping process condensates Standards

P.3. Pulping Process Condensates. The pulping process condensates from the following equipment systems[1] shall be treated to meet the requirements specified in Condition P.6.:

(1) Blow Heat Accumulator Tank Overflow
(2) No. 1 and No. 2 Evaporator Hotwell Overflow Tank;
(3) No. 1 and No. 2 Evaporators Feed Effects;
(4) No. 3 Evaporator Feed Effects and Hotwell Overflow
(5) Turpentine Decanter Underflow
(6) No. 4 Evaporator Feed Effects and Hotwell Overflow
(7) LVHC System.

[1] Pursuant to 40 CFR 63.446(b), equipment systems for the purpose of this condition shall include: each digester system, each turpentine recovery system, each evaporator system condensate from: a) the vapors from each stage where weak liquor is introduced (feed stages) and b) each evaporator vacuum system for each stage where weak liquor is introduced (feed stages); each HVLC collection system; and each LVHC collection system.

[40 CFR 63.446(b) 40 CFR 63.446(c)(1)]

P.4. Pulping Process Condensates – Collection. The pulping process condensates generated, produced, or associated with the equipment systems listed in paragraphs P.3. that in total contain a total HAP mass of 11.1 pounds or more of total HAP per ton of ODP shall be subject to the requirements of Conditions P.5.- P.6.

[40 CFR 63.446(c)(3)]

P.5. Pulping Process Condensates – Closed Collection System. The pulping process condensates from the equipment systems listed in Condition P.3., shall be conveyed in a closed collection system that is designed and operated to meet the individual drain system requirements specified in Condition Nos. Q.1., Q.2., and Q.3.(40 CFR Part 63, Subpart RR, §§63.960, 63.961, and 63.962), except the closed vent systems shall be routed to the No. 1 Bark Boiler (primary control device) or the pre-scrubber followed by the No. 1 Power Boiler (secondary control device) and the enclosures and closed-vent systems requirements specified in Condition P.8., instead of in accordance with § 63.693 as specified in §63.962 (a)(3)(ii), (b)(3)(ii)(A), and (b)(3)(ii)(A), and (b)(5)(iii).

[40 CFR 63.446(d)(1)]

P.6. Pulping Process Condensates – Treatment. Each pulping process condensate from the equipment systems listed in Condition No. P.3. shall be discharged below the liquid surface of the biological treatment system and treated to remove 10.2 pounds or more of total HAP per ton of ODP. Total HAP shall be measured as acetaldehyde, methanol, methyl ethyl ketone, and propionaldehyde. The procedures specified in Condition P.30. shall be followed.

[40 CFR 63.446(e)(2); 63.446(e)(5); 63.457(g)]

P.7. All new or modified pulping process condensates or changes in the annual bleached or non-bleached ODP shall be evaluated to determine if they meet the applicable requirements of 40 CFR 63.446.

[40 CFR 63.446(h)]

P.8. Enclosures and closed-vent systems Requirements**.** Each enclosure and closed-vent system specified in Condition No. P.2. for capturing and transporting vent streams that contain HAP shall meet the following requirements.

(a) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in Condition No. P.28. Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(b) Each component of the closed-vent system used to comply with Condition No. P.2. that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in Condition No. P.27.

(c) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.443 shall comply with either of the following requirements:

Condition P.8. Continued:

(1) On each bypass line, the permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

(2) For bypass line valves that are not computer controlled, the permittee shall maintain the bypass line valve in the closed position with a chained and locked closure mechanism in such a way that valve or closure mechanism cannot be opened without recording and reporting the valve opening.

[1] Buckeye demonstrates compliance with this condition by monitoring computer (DCS) controlled automatic valves with a continuous indication of any venting and the capability to record venting periods at least once every 15 minutes on each bypass line.

[40 CFR 63.450; Construction Permit No. 1230001-011-AC]

Continuous Monitoring Requirements

P.9. Continuous Monitoring System. The permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS) as specified in Condition Nos. P.10. through P.14. The CMS shall include a continuous recorder.

[40 CFR 63.453(a)]

P.10.a. Condensate Collection. The Permittee shall maintain all manual condensate bypass line valves in the closed position. The Permittee shall secure the valves in the closed position with a traceable lock-seal device. Subsequent lock-seal removal, valve manipulation, and replacement lock-seals shall be recorded on the appropriate Startup, Shutdown, or Malfunction (SSM) form. Condensate tank/standpipe levels shall be continuously monitored and overflow levels confirmed at a frequency of no less than during the monthly visual inspections required by Condition P.13. Recorded overflows that result from an SSM event shall be documented on the appropriate SSM form.

[40 CFR 63.453(i)]

P.10.b. Condensate Collection**.** A CMS shall be operated to measure the condensate collected pursuant to Condition P.4. The permittee shall determine the actual collection of condensate in pounds per oven-dried tons of unbleached pulp on a daily basis and averaged over a 15-day period (rolling average) using the recorded daily flow rate of the condensate header[1], the daily bleach grade pulp production, and the methanol concentration factor specified in Condition P.10.c.

[1] The mill's condensate collection system collects all pulping condensates from equipment systems listed in 40 CFR 63.446(b)(1)-(5), unnamed condensate sources are not present in this header. The flow data is available on the mill DCS system (tag name FR9028, 0-3000 GPM) for continuous monitoring and archived electronically in one-minute increments.

[40 CFR 63.453(i)]

P.10.c. Operating Parameters – Condensate Collection. The methanol concentration factor of 1300 ppm[1] shall be used to determine the daily, actual condensate collection in pounds per oven-dried tons of unbleached pulp using the procedures in Condition P.10.b.

[1] Methanol Concentration from the Initial Performance Test conducted March 19, 2007. The methanol concentration factor may be re-established according the procedures stated in Condition P.15.

[40 CFR 63.453(i); Initial Performance Test conducted March 19, 2007]

P.11. Condensate Treatment. The permittee shall perform the following daily monitoring procedures specified below:

(1) Daily monitoring of the number of aerators in operation. The minimum number of aerators shall be 32 of which a minimum of 23 shall be in Zone 1 (i.e. 32 aerators x 24 hrs = 768 hours minimum).

(2) Daily monitoring of the total horsepower of the minimum 32 aerators (each aerator is rated at 75 hp with a minimum of 1725 hp in Zone 1).

(3) Daily monitoring of the Urea Ammonium Nitrate[1] concentration at the entrance to the No. 1 Lagoon, i.e. the Flume. The minimum measurement (as ammonia-nitrogen, NH_3-N) shall be 0.6 mg/L and averaged over a 3-day period (rolling average).

1. Should the mill use an alternative nutrient, a performance test shall be conducted at the next scheduled quarterly performance test as specified in Condition P.14.

2. The owner or operator shall submit notification of the performance test to the Administrator as soon as practicable, but no later than 15 days prior to the date the performance test is scheduled to be conducted.

3. The mass removal emission limit specified in Condition P.6. remains applicable.

Condition No. P.11. Continued:

(4) Daily monitoring of the Urea Ammonium Nitrate[1] concentration detected after the No. 1 Lagoon and prior to No. 2 Lagoon. The minimum measurement (as ammonia-nitrogen, NH_3-N) shall be any measurable quantity or 0.01 mg/L averaged over a 3-day period (rolling average).

[1] Nitrogen containing nutrients added to the No. 1 Lagoon to aid micro-organisms in breaking down the organic matter present in the effluent.

[40 CFR 63.453(j)(2); Initial Performance Test conducted March 19, 2007; Applicant information received November 3, 2009]

P.12. Enclosure and Closed-Vent System –Inspections. Each enclosure and closed-vent system used to comply with Condition No. P.8. shall comply with the following requirements:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in Condition No. P.8.(a) shall be performed once during each calendar month, with at least 21 days elapsed time between inspections, to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system shall be visually inspected once during each calendar month, with at least 21 days elapsed time between inspections and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in Condition No. P.8.(b) measured annually by the procedures in Condition No. P.27.

(4) Demonstrate annually that each enclosure opening is maintained at negative pressure as specified in Condition No. P.28.

(5) The valve or closure mechanism specified in Condition No. P.8.(c)(2) shall be inspected at least once during each calendar month, with at least 21 days elapsed time between inspections, to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by Conditions Nos. P.12.(1) through P.12.(5) above, identifies visible defects in ductwork, piping, enclosures or connections to covers required in Condition No. P.8., or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown

Condition No. P.12. Continued:

(iii) or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

[40 CFR 63.453(k), EPA Alternate Approval Letter dated March 31, 2004]

P13. Pulping Process Condensate Closed Collection System- Inspections. Each pulping process condensate closed collection system used to comply with Condition P.5., shall comply with the following:

(1) Each pulping process condensate closed collection system shall be visually inspected once during each calendar month, with at least 21 days elapsed time between inspections, and shall comply with the inspection and monitoring requirements specified in Condition Q.4. (40 CFR 63.964 of Subpart RR), except:

(i) Owners or operators shall comply with the recordkeeping requirements of Conditions P.17. through P.21. instead of the requirements specified in Condition Q.4. (a)(1)(vi) and (b)(3) [40 CFR 63.964(a)(1)(vi) and (b)(3) of Subpart RR].

(ii) Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in Conditions P.9 and P.12 instead of the requirements specified in Condition Q.4.(a)(2) [40 CFR 63.964(a)(2) of Subpart RR].

(2) N/A – A condensate tank is not used in the closed collection system

(3) If an inspection required by this condition identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in Condition Q.4.(b) [40 CFR 63.964(b) of Subpart RR] shall be taken.

[40 CFR 63.453(l), EPA Alternate Approval Letter dated March 31, 2004]

P.14. Quarterly Performance Testing. The Permittee shall conduct a performance test each quarter using the procedures specified below.

Conduct a performance test as specified in Condition P.30. within 45 days after the beginning of each quarter and meet the applicable emission limit in Condition P.6.

(i) The performance test conducted in the first quarter (annually) shall be performed for total HAP as specified in 40 CFR 63.457(g) and meet the mass removal emission limit specified in Condition P.6.

(ii) The remaining quarterly performance tests shall be performed as specified in Condition P.14.(i) except owners or operators may use the applicable methanol procedure in Condition P.30.(1) or (2) and the value of r

determined during the first quarter test instead of measuring the additional HAP to determine a new value of r.

[40 CFR 63.453(j)(3)]

P.15. Operating Parameters — Reestablishment/Establishment. To establish or reestablish the value for each operating parameter required to be monitored under P.10.a.,b.,c., P.11., P.13. and P.14.., or to establish appropriate parameters for Conditions P.10.,a.,b., c. and P.11. the permittee shall use the following procedures:

(1) During subsequent performance tests, continuously record the operating parameter;

(2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

[40 CFR 63.453(n)]

P.16.a. Operating Parameters- Excursions. The control device shall be operated in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under Conditions P.9, through P.15. and established under 40 CFR 63 Subpart S. Except as provided in Condition P.16.b. operation of the control device below minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by 40 CFR 63 Subpart S shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

[40 CFR 63.453(o)]

P.16.b. Monitoring Parameter – Excursions. The procedures of this Condition apply whenever a monitoring parameter excursion occurs, and the owner or operator chooses to conduct a performance test to demonstrate compliance with the applicable emission limit. A monitoring parameter excursion occurs whenever any of the monitoring parameters specified in Condition P.11. are below minimum operating parameter values or above maximum operating parameter values established in Condition P.15.

(1) As soon as practical after the beginning of the monitoring parameter excursion, the following requirements shall be met:

(i) Before the steps in paragraph (1)(ii) or (iii) of this Condition are performed, all sampling and measurements necessary to meet the requirements in paragraph (2) of this Condition shall be conducted.

(ii) Steps shall be taken to repair or adjust the operation of the process to end the parameter excursion period.

Condition No. P.16.b. Continued:

(iii) Steps shall be taken to minimize total HAP emissions to the atmosphere during the parameter excursion period.

(2) A parameter excursion is not a violation of the applicable emission standard if the results of the performance test conducted using the procedures in this paragraph demonstrate compliance with the applicable emission limit in Condition P.6.

(i) Conduct a performance test as specified in § 63.457 using the monitoring data specified in Condition P.11. that coincides with the time of the parameter excursion. No maintenance or changes shall be made to the open biological treatment system after the beginning of a parameter excursion that would influence the results of the performance test.

(ii) If the results of the performance test specified in paragraph (2)(i) of this Condition demonstrate compliance with the applicable emission limit in Condition P.6, then the parameter excursion is not a violation of the applicable emission limit.

(iii) If the results of the performance test specified in paragraph (2)(i) of this Condition do not demonstrate compliance with the applicable emission limit in Condition P.6. because the total HAP mass entering the open biological treatment system is below the level needed to demonstrate compliance with the applicable emission limit in Condition P.6., then the owner or operator shall perform the following comparisons:

(A) If the value of f_{bio} (MeOH) determined during the performance test specified in paragraph (2)(i) of this Condition is within the range of values established during the initial and subsequent performance tests approved by the Administrator, then the parameter excursion is not a violation of the applicable standard.

(B) If the value of f_{bio} (MeOH) determined during the performance test specified in paragraph (2)(i) of this Condition is not within the range of values established during the initial and subsequent performance tests approved by the Administrator, then the parameter excursion is a violation of the applicable standard.

(iv) The results of the performance test specified in paragraph (2)(i) of this Condition shall be recorded as specified in Condition P.21.

(3) If an owner or operator determines that performing the required procedures under paragraph (2) of this Condition for a nonthoroughly mixed open biological system would expose a worker to dangerous, hazardous, or otherwise unsafe conditions, all of the following procedures shall be performed:

(i) Calculate the mass removal or percent reduction value using the procedures specified in Condition P.30. except the value for f_{bio} (MeOH) shall be determined using the procedures in Appendix E to Part 63.

Condition No. P.16.b. Continued:

(ii) Repeat the procedures in paragraph (3)(i) of this Condition for every day until the unsafe conditions have passed.

(iii) A parameter excursion is a violation of the standard if the percent reduction or mass removal determined in paragraph (3)(i) of this Condition is less than the mass removal standards specified in Condition P.6., unless the value of f_{bio} (MeOH) determined using the procedures in Appendix E of Part 63, as specified in paragraph (3)(i), is within the range of f_{bio} (MeOH) values established during the initial and subsequent performance tests previously approved by the Administrator.

(iv) The determination that there is a condition that exposes a worker to dangerous, hazardous, or otherwise unsafe conditions shall be documented according to requirements in Condition P.20. and reporting in Condition P.25.

(v) The requirements of paragraphs (1) and (2) of this Condition shall be performed and met as soon as practical but no later than 24 hours after the conditions have passed that exposed a worker to dangerous, hazardous, or otherwise unsafe conditions.

[40 CFR 63.453(p)]

Recordkeeping

P.17. The owner or operator of each affected source subject to the requirements of this subpart shall comply with the recordkeeping requirements of 40 CFR 63.10, as shown in Table 1, and the requirements specified in Conditions P.20 through P.21. for the monitoring parameters specified in 40 CFR 63.453.

[40 CFR 63.454(a)]

P.18. For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;
(2) The equipment type and identification;
(3) Results of negative pressure tests for enclosures;
(4) Results of leak detection tests;
(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
(7) Repair methods applied in each attempt to repair the defect or leak;
(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

Condition No. P.18. Continued:

(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
(10) The date of successful repair of the defect or leak;
(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b)]

P.19. The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in Condition P.17. for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.

[40 CFR 63.454(d)]

P.20. The owner or operator shall set the flow indicator on each bypass line specified in Condition P.8.(c)(1) to provide a record of the presence of gas stream flow in the bypass line at least once every 15 minutes.

[40 CFR 63.454(e)]

P.21. The owner or operator of an open biological treatment system complying with Condition P.16.b. shall prepare a written record specifying the results of the performance test specified in Condition P.16.b.(2).

[40 CFR 63.454(f)]

Reporting

P.22. The owner or operator shall comply with the reporting requirements of 40 CFR Part 63 Subpart A as specified in Table 1 and all of the requirements stated in Conditions P.23 through P.25.

[40 CFR 63.455(a)]

P.23 The owner or operator shall meet the requirements specified in Condition P.22. upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.

[40 CFR 63.455(d)]

P.24. If the owner or operator uses the results of the performance test required in Condition P.16.b.(2) to revise the approved values or ranges of the monitoring parameters specified in Condition P.11., the owner or operator shall submit an initial notification of the subsequent performance test to the Administrator as soon as practicable, but no later than 15 days, before the performance test required in Condition P.16.b(2) is scheduled to be conducted. The owner or operator shall notify the Administrator as soon as practicable, but no later than 24 hours, before the performance test is scheduled to be conducted to confirm the exact date and time of the performance test.

[40 CFR 63.455(e)]

P.25. To comply with the open biological treatment system monitoring provisions of Condition P.16.b(3), the owner or operator shall notify the Administrator as soon as practicable of the onset of the dangerous, hazardous, or otherwise unsafe conditions that did not allow a compliance determination to be conducted using the sampling and test procedures in Condition P.30. The notification shall occur no later than 24 hours after the onset of the dangerous, hazardous, or otherwise unsafe conditions and shall include the specific reason(s) that the sampling and test procedures in Condition P.30. could not be performed.

[40 CFR 63.455(f)]

Test Methods

P.26. Liquid sampling locations and properties. For purposes of selecting liquid sampling locations and for determining properties of liquid streams such as wastewaters, process waters, and condensates required by 40 CFR 63.446, and 63.447, the owner or operator shall comply with the following procedures:

(1) Samples shall be collected using the sampling procedures of the test method listed in paragraph (3) of this Condition selected to determine liquid stream HAP concentrations;

(i) Where feasible, samples shall be taken from an enclosed pipe prior to the liquid stream being exposed to the atmosphere; and

(ii) When sampling from an enclosed pipe is not feasible, samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of HAP compounds prior to sampling.

(2) The volumetric flow rate of the entering and exiting liquid streams shall be determined using the inlet and outlet flow meters or other methods demonstrated to the Administrator's satisfaction. The volumetric flow rate measurements to determine actual mass removal shall be taken at the same time as the concentration measurements.

Condition No. P.26. Continued:

(3) The owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations The minimum sampling time for each test run shall be 1 hour and the grab or composite samples shall be taken at approximately equally spaced intervals over the 1-hour test run period. The owner or operator shall use one of the following procedures to determine total HAP or methanol concentration:

(i) Method 305 in Appendix A of this part, adjusted using the following equation:

$$\overline{C} = \sum_{i=1}^{n} \frac{C_i}{fm_i}$$

where:

$\overline{C}$ = Pollutant concentration for the liquid stream, parts per million by weight.
C_i = Measured concentration of pollutant i in the liquid stream sample determined using Method 305, parts per million by weight.
fm_i = Pollutant-specific constant that adjusts concentration measured by Method 305 to actual liquid concentration; the fm for methanol is 0.85. Additional pollutant fm values can be found in table 34, subpart G of this part.
n = Number of individual pollutants, i, summed to calculate total HAP.

(ii) For determining methanol concentrations, NCASI Method DI/MEOH-94.02, Methanol in Process Liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC. This test method is incorporated by reference in Sec. 63.14(f) of subpart A of Part 63.

(ii) Any other method that measures total HAP concentration that has been demonstrated to the Administrator's satisfaction.

(4) To determine soluble BOD_5 in the effluent stream from an open biological treatment unit used to comply with §63.446(e)(2) and §63.453(j), the owner or operator shall use Method 405.1, of part 136, with the following modifications:

(i) Filter the sample through the filter paper, into Erlenmeyer flask by applying a vacuum to the flask sidearm. Minimize the time for which vacuum is applied to prevent stripping of volatile organics from the sample. Replace filter paper as often as needed in order to maintain filter times of less than approximately 30 seconds per filter paper. No rinsing of sample container or filter bowl into the Erlenmeyer flask is allowed.

(ii) Perform Method 405.1 on the filtrate obtained in paragraph (4) of this Condition. Dilution water shall be seeded with 1 milliliter of final effluent per liter of dilution water. Dilution ratios may require

Condition No. P.26. Continued:

adjustment to reflect the lower oxygen demand of the filtered sample in comparison to the total BOD_5. Three BOD bottles and different dilutions shall be used for each sample.

(5) If the test method used to determine HAP concentration indicates that a specific HAP is not detectable, the value determined as the minimum measurement level (MML) of the selected test method for the specific HAP shall be used in the compliance demonstration calculations. To determine the MML for a specific HAP using one of the test methods specified in paragraph (3) of this Condition, one of the procedures specified in paragraphs (5)(i) and (ii) of this Condition shall be performed. The MML for a particular HAP must
be determined only if the HAP is not detected in the normal working range of the method.

(i) To determine the MML for a specific HAP, the following procedures shall be performed each time the method is set up. Set up is defined as the first time the analytical apparatus is placed in operation, after any shut down of 6 months or more, or any time a major component of the analytical apparatus is replaced.

(A) Select a concentration value for the specific HAP in question to represent the MML. The value of the MML selected shall not be below the calibration standard of the selected test method.

(B) Measure the concentration of the specific HAP in a minimum of three replicate samples using the selected test method. All replicate samples shall be run through the entire analytical procedure. The samples must contain the specific HAP at the selected MML concentration and should be representative of the liquid streams to be analyzed in the compliance demonstration. Spiking of the liquid samples with a known concentration of the target HAP may be necessary to ensure that the HAP concentration in the three replicate samples is at the selected MML. The concentration of the HAP in the spiked sample must be within 50 percent of the proposed MML for the demonstration to be valid. As an alternative to spiking, a field sample above the MML may be diluted to produce a HAP concentration at the MML. To be a valid demonstration, the diluted sample must have a HAP concentration within 20 percent of the proposed MML, and the field sample must not be diluted by more than a factor of five.

(C) Calculate the relative standard deviation (RSD) and the upper confidence limit at the 95 percent confidence level using the measured HAP concentrations determined in paragraph (5)(i)(B) of this Condition. If the upper confidence limit of the RSD is less than 30 percent, then the selected MML is acceptable. If the upper confidence limit of the RSD is greater than or equal to 30 percent, then the selected MML is too low,

and the procedures specified in paragraphs (5)(i)(A) through (C) of this Condition must be repeated.

(ii) Provide for the Administrator's approval the selected value of the MML for a specific HAP and the rationale for selecting the MML including all data and calculations used to determine the MML. The approved MML must be used in all applicable compliance demonstration calculations.

(6) When using the MML determined using the procedures in paragraph (5)(ii) of this Condition or when using the MML determined using the procedures in paragraph (5)(i), except during set up, the analytical laboratory conducting the analysis must perform and meet the following quality assurance procedures each time a set of samples is analyzed to determine compliance.

(i) Using the selected test method, analyze in triplicate the concentration of the specific HAP in a representative sample. The sample must contain the specific HAP at a concentration that is within a factor of two of the MML. If there are no samples in the set being analyzed that contain the specific HAP at an appropriate concentration, then a sample below the MML may be spiked to produce the appropriate concentration, or a sample at a higher level may be diluted. After spiking, the sample must contain the specific HAP within 50 percent of the MML. If dilution is used instead, the diluted sample must contain the specific HAP within 20 percent of the MML and must not be diluted by more than a factor of five.

(ii) Calculate the RSD using the measured HAP concentrations determined in paragraph (6)(i) of this Condition. If the RSD is less than 20 percent, then the laboratory is performing acceptably

[40 CFR 63.457(c)]

P.27. Detectable leak procedures. To measure detectable leaks for closed-vent systems as specified in Condition P.8. the permittee shall comply with the following requirements :

(1) Method 21, of Part 60, Appendix A; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d)]

P.28. Negative pressure procedures. To demonstrate negative pressure at process equipment enclosure openings as specified in Condition P.8.(b), the owner or operator shall use one of the following procedures:

(1) An anemometer to demonstrate flow into the enclosure opening;
(2) Measure the static pressure across the opening;
(3) Smoke tubes to demonstrate flow into the enclosure opening; or
(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

[40 CFR 63.457(e)]

P.29. Liquid stream calculations. To demonstrate compliance with the mass flow rate, mass per megagram of ODP, and percent reduction requirements for liquid streams specified in Conditions P.4. through P.7., the owner or operator shall comply with the following requirements:

(1) The mass flow rates of total HAP or methanol entering and exiting the treatment process shall be calculated using the following equations:

$$E_b = \frac{K}{n \times 10^6}\left(\sum_{i=1}^{n} V_{bi} C_{bi}\right)$$

$$E_a = \frac{K}{n \times 10^6}\left(\sum_{i=1}^{n} V_{ai} C_{ai}\right)$$

where:

E_b= Mass flow rate of total HAP or methanol in the liquid stream entering the treatment process, kilograms per hour.
E_a= Mass flow rate of total HAP or methanol in the liquid exiting the treatment process, kilograms per hour.
K= Density of the liquid stream, kilograms per cubic meter.
V_{bi} = Volumetric flow rate of liquid stream entering the treatment process during each run i, cubic meters per hour, determined as specified in Condition P.26.
V_{ai} = Volumetric flow rate of liquid stream exiting the treatment process during each run i, cubic meters per hour, determined as specified in Condition P.26.
C_{bi} = Concentration of total HAP or methanol in the stream entering the treatment process during each run i, parts per million by weight, determined as specified in Condition P.26.
C_{ai} = Concentration of total HAP or methanol in the stream exiting the treatment process during each run i, parts per million by weight, determined as specified in Condition P.26.
n = Number of runs.

(2) The mass of total HAP or methanol per megagram ODP shall be calculated using the following equation:

Condition No. P.29. Continued:

$$F = \frac{E_a}{P}$$

where:

F = Mass loading of total HAP or methanol in the sample, in kilograms per megagram of ODP.
E = Mass flow rate of total HAP or methanol in the wastewater stream in kilograms per hour as determined using the procedures in paragraph (1) of this Condition.

P = The production rate of pulp during the sampling period in megagrams of ODP per hour.

(3) The percent reduction of total HAP across the applicable treatment process shall be calculated using the following equation:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

where:

R = Control efficiency of the treatment process, percent.
E_b = Mass flow rate of total HAP in the stream entering the treatment process, kilograms per hour, as determined in paragraph (1) of this Condition.
E_a = Mass flow rate of total HAP in the stream exiting the treatment process, kilograms per hour, as determined in paragraph (1) of this Condition.

(4) Compounds that meet the requirements specified in paragraphs (4)(i) or (ii) of this Condition are not required to be included in the mass flow rate, mass per megagram of ODP, or the mass percent reduction determinations.

(i) Compounds with concentrations at the point of determination that are below 1 part per million by weight; or

(ii) Compounds with concentrations at the point of determination that are below the lower detection limit where the lower detection limit is greater than 1 part per million by weight.

[40 CFR 63.457(j)]

P.30.a. Biological treatment system percent reduction and mass removal calculations. To demonstrate compliance with the condensate treatment standards specified in Condition P.6 and the monitoring requirements specified in Condition P.14., the permittee shall use one of the procedures specified in paragraphs (1) or (2) of this Condition. Permittees using a nonthoroughly mixed open biological treatment system shall also comply with paragraph (3) of this Condition.

(1) *N/A- mill not using percent reduction method*

Condition No. P.30.a. Continued:

(2) *Mass removal methanol procedure.* For the purposes of complying with the condensate treatment requirements specified in P.6., the methanol mass removal shall be calculated using the following equation:

$$F = \left(\frac{F_b * (f_{bio}(MeOH)}{(+1.087(} \right)$$

Where:

F= methanol mass removal (kg/Mg ODP).
F_b=inlet mass flow rate of methanol (kg/Mg ODP) determined using the procedures in Condition P.29.(2).
F_{bio}(MeOH)= the fraction of methanol removed in the biological treatment system. The site-specific biorate constants shall be determined using the appropriate procedures specified in Appendix C of Part 63. The permittee shall use a factor of 88.0 (baseline condition) for 63.446 compliance purposes.
r = ratio of the sum of acetaldehyde, methyl ethyl ketone, and propionaldehyde mass to methanol mass determined using the procedures in paragraph (1) of this section.

(3) The owner or operator of a nonthoroughly mixed open biological treatment system using the monitoring requirements specified in Condition P.16.b.(3) shall follow the procedures specified in section III.B.1 of Appendix E of Part 63 to determine the biorate constant, Ks, and characterize the open biological treatment system during the initial and any subsequent performance tests.

[40 CFR 63.457(l); Initial Performance Test dated March 19, 2007]

P.30.b. Biological treatment system percent reduction and mass removal calculations. If the Inlet and Outlet Concentration Measurement Procedure (Procedure 3) in Appendix C of Part 63 is used to determine the fraction of HAP compounds degraded in the biological treatment system as specified in Condition P.30.a., conduct the sampling and archival requirements specified in paragraphs (1) and (2) of this Condition.

(1) Obtain daily inlet and outlet liquid grab samples from each biological treatment unit to have HAP data available to perform quarterly performance test specified in Condition P.14.(3) and the compliance tests specified in Condition P.16.b.

Condition No. P.30.b. Continued:

(2) Store the samples as specified in Condition P.32. until after the results of the soluble BOD_5 test required in paragraph (2)(i) of this Condition are obtained. The storage requirement is needed since the soluble BOD_5 test requires 5 days or more to obtain results. If the results of the soluble BOD_5 test are outside of the range established during the initial performance test, then the archive sample shall be used to perform the mass removal determination.

(i) On a daily basis, monitor the composite daily sample of outlet soluble BOD5 concentration to monitor for maximum daily and maximum monthly average.

[40 CFR 63.457(j)(1)]

P.31. Condensate segregation procedures. The following procedures shall be used to demonstrate compliance with the condensate segregation requirements specified in Condition P.4.

(1) N/A -*mill not using percent reduction method*

(2) To demonstrate compliance with the percent mass requirements specified in Condition. P.4. the procedures specified in paragraphs (2)(i) through (ii) of this Condition shall be performed.

(i) Determine the total HAP mass contained in the high-HAP fraction condensates from each digester system, each turpentine recovery system, and each evaporator system[1] and the total condensates streams from the HVLC collection system and the LVHC collection system, using the procedures specified in Conditions P.26. and P.29.

(ii) Compliance with the segregation requirements specified in Condition P.4. is demonstrated if the total HAP mass determined in paragraph (2)(i) of this Condition is equal to or greater than the appropriate mass requirements specified in Condition P.4.

[1] Pursuant to 40 CFR 63.446(b), equipment systems for the purpose of this condition shall include: each digester system, each turpentine recovery system, each evaporator system condensate from: a) the vapors from each stage where weak liquor is introduced (feed stages) and b) each evaporator vacuum system for each stage where weak liquor is introduced (feed stages).

[40 CFR 63.457(m)]

P.32. Open biological treatment system monitoring sampling storage. The inlet and outlet grab samples required to be collected in Condition P.30.b. shall be stored at 4 ºC (40 ºF) to minimize the biodegradation of the organic compounds in the samples.

[40 CFR 63.457(n)]

40 CFR 63.447 Clean condensate alternative.

As an alternative to the requirements specified in §63.443(a)(1)(ii) through (a)(1)(v) for the control of HAP emissions from pulping systems using the Kraft process, the mill shall comply with the provisions of the Clean Condensate Alternative, 40 CFR 63.447.

The mill's CCA was the repositioning of eight of the existing 75-hp surface aerators from Zone 2 to Zone 1 of the aerated stabilization basin (No. 1 Lagoon) such that of the minimum 32 aerators, 23 in operation in Zone 1. This provided additional aeration capacity in Zone 1 which increased the oxygen availability and the methanol biodegradation efficiency within the zone over what is needed to demonstrate compliance with the condensate collection and treatment requirements of 63.446 (MACT I Phase I).

As demonstrated by the Initial Performance Test conducted on March 19, 2007, this repositioning resulted in total HAP (as methanol) reductions of 1.02 lb/ODTP versus 0.08 lb/ODTP that would have been achieved with compliance with §63.443(a)(1)(ii) through (a)(1)(v) of the Subpart for the HVLC sources at the mill.

The Nos. 1 and 2 Brown Stock Washer systems and the biological treatment system (No. 1 Lagoon) are affected sources under the CCA.

[40 CFR 63.447(a)]

P.33. CCA. The Permittee shall operate the No. 1 Lagoon and its associated aerators such that the total HAP emissions as a result of the pulping process condensates are equal to or less than 2.24 pounds/ODTP. This is equivalent to a minimum total HAP reduction of 0.08 lb/ODTP from the baseline emissions of 2.32 pounds/ODTP.

The Permittee shall comply with the pulping condensate collection and treatment requirements of 63.446 (as established in Conditions P.3.through P.8. above) for the CCA.

[CCA Plan dated June 2005; 40 CFR 63.447(c); 40 CFR 63.447(e)]

P.34. CCA- Continuous Monitoring System. The permittee shall calibrate, certify, operate, and maintain according to the manufacturer's specifications, the following continuous monitoring systems (CMS) for the CCA:

- The requirements specified in Condition Nos. P.10., and P.11.;
- The evaporator system foul condensate bypass valves shall be closed and secured with a lock-seal device and tag. Documentation of valve movement shall be used to establish that the methanol concentration in the shower water at the Nos.1 and 2 Brown Stock Washer systems is not increasing over the levels measured during the baseline performance tests due to evaporator system foul and contaminated condensates are routed into these systems.

[40 CFR 63.447(b); Initial Performance Test dated March 19, 2007 for CCA]

P.35. Quarterly Performance Testing. The Permittee shall conduct a performance test each quarter in accordance with the requirements of Condition P.14.

The Permittee shall comply with the test methods established in 63.457 (Conditions P.26. through P.32. and P.15.-P.17. above), except that the actual site-specific fraction of methanol removed by the biological treatment system (F_{bio}) as specified in Condition P.30. shall be used for the CCA.

[40 CFR 63.457(a)]

P.36. HAP concentration measurements. For purposes of complying with the requirements for the CCA, the owner or operator shall measure the total HAP concentration as one of the following:

(1) As the sum of all individual HAPs; or
(2) As methanol.

[40 CFR 63.457(f)]

P.37. Vent sampling port locations and gas stream properties. For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in the CCA, the owner or operator shall comply with the applicable procedures in paragraphs (1) through (6) of this Condition.

(1) Method 1 or 1A of Part 60, Appendix A, as appropriate, shall be used for selection of the sampling site as follows:

(i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere;

Condition No. P.37. Continued:

(ii) For determining compliance with percent reduction requirements, sampling sites shall be located prior to the inlet of the control device and at the outlet of the control device; measurements shall be performed simultaneously at the two sampling sites; and

(iii) For determining compliance with concentration limits or mass emission rate limits, the sampling site shall be located at the outlet of the control device.

(2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.

(3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of part 60, appendix A, as appropriate.

(4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.

(5) To determine vent gas concentrations, the owner or operator shall collect a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

(i) Method 308 in Appendix A of this part shall be used to determine the methanol concentration.

(ii) Except for the modifications specified in paragraphs (5)(ii)(A) through (5)(ii)(K) of this Condition, Method 26A of Part 60, Appendix A shall be used to determine chlorine concentration in the vent stream.

(A) *Probe/Sampling Line*. A separate probe is not required. The sampling line shall be an appropriate length of 0.64 cm (0.25 in) OD Teflon® tubing. The sample inlet end of the sampling line shall be inserted into the stack in such a way as to not entrain liquid condensation from the vent gases. The other end shall be connected to the impingers. The length of the tubing may vary from one sampling site to another, but shall be as short as possible in each situation. If sampling is conducted in sunlight, opaque tubing shall be used. Alternatively, if transparent tubing is used, it shall be covered with opaque tape.

(B) *Impinger Train*. Three 30 milliliter (ml) capacity midget impingers shall be connected in series to the sampling line. The impingers shall have regular tapered stems. Silica gel shall be placed in the third impinger as a desiccant. All impinger train connectors shall be glass and/or Teflon®.

Condition No. P.37. Continued:

(C) *Critical Orifice*. The critical orifice shall have a flow rate of 200 to 250 ml/min and shall be followed by a vacuum pump capable of providing a vacuum of 640 millimeters of mercury (mm Hg). A 45 millimeter diameter in-line Teflon® 0.8 micrometer filter shall follow the impingers to project the critical orifice and vacuum pump.

(D) The following are necessary for the analysis apparatus:

(*1*) Wash bottle filled with deionized water;
(*2*) 25 or 50 ml graduated burette and stand;
(*3*) Magnetic stirring apparatus and stir bar;
(*4*) Calibrated pH Meter;
(*5*) 150-250 ml beaker or flask; and
(*6*) A 5 ml pipette.

(E) The procedures listed in paragraphs (5)(ii)(E)(*1*) through (5)(ii)(E)(*7*) of this Condition shall be used to prepare the reagents.

(*1*) To prepare the 1 molarity (M) potassium dihydrogen phosphate solution, dissolve 13.61 grams (g) of potassium dihydrogen phosphate in water and dilute to 100 ml.

(*2*) To prepare the 1 M sodium hydroxide solution (NaOH), dissolve 4.0 g of sodium hydroxide in water and dilute to 100 ml.

(*3*) To prepare the buffered 2 percent potassium iodide solution, dissolve 20 g of potassium iodide in 900 ml water. Add 50 ml of the 1 M potassium dihydrogen phosphate solution and 30 ml of the 1 M sodium hydroxide solution. While stirring solution, measure the pH of solution electrometrically and add the 1 M sodium hydroxide solution to bring pH to between 6.95 and 7.05.

(*4*) To prepare the 0.1 normality (N) sodium thiosulfate solution, dissolve 25 g of sodium thiosulfate, pentahydrate, in 800 ml of freshly boiled and cooled distilled water in a 1-liter volumetric flask. Dilute to volume. To prepare the 0.01 N sodium thiosulfate solution, add 10.0 ml standardized 0.1 N sodium thiosulfate solution to a 100 ml volumetric flask, and dilute to volume with water.

Condition No. P.37. Continued:

(*5*) To standardize the 0.1 N sodium thiosulfate solution, dissolve 3.249 g of anhydrous potassium bi-iodate, primary standard quality, or 3.567 g potassium iodate dried at 103 +/- 2 degrees Centigrade for 1 hour, in distilled water and dilute to 1000 ml to yield a 0.1000 N solution. Store in a glass-stoppered bottle. To 80 ml distilled water, add, with constant stirring, 1 ml concentrated sulfuric acid, 10.00 ml 0.1000 N anhydrous potassium bi-iodate, and 1 g potassium iodide. Titrate immediately with 0.1 n sodium thiosulfate titrant until the yellow color of the liberated iodine is almost discharged. Add 1 ml starch indicator solution and continue titrating until the blue color disappears. The normality of the sodium thiosulfate
solution is inversely proportional to the ml of sodium thiosulfate solution consumed:

$$\text{Normality of Sodium Thiosulfate} = \frac{1}{\text{ml Sodium Thiosulfate Consumed}}$$

(*6*) To prepare the starch indicator solution, add a small amount of cold water to 5 g starch and grind in a mortar to obtain a thin paste. Pour paste into 1 L of boiling distilled water, stir, and let settle overnight. Use clear supernate for starch indicator solution.

(*7*) To prepare the 10 percent sulfuric acid solution, add 10 ml of concentrated sulfuric acid to 80 ml water in an 100 ml volumetric flask. Dilute to volume.

(F) The procedures specified in paragraphs (b)(5)(ii)(F)(*1*) through (b)(5)(ii)(F)(*5*) of this section shall be used to perform the sampling.

(*1*) Preparation of Collection Train. Measure 20 ml buffered potassium iodide solution into each of the first two impingers and connect probe, impingers, filter, critical orifice, and pump. The sampling line and the impingers shall be shielded from sunlight.

(*2*) Leak and Flow Check Procedure. Plug sampling line inlet tip and turn on pump. If a flow of bubbles is visible in either of the liquid impingers, tighten fittings and adjust connections and impingers. A leakage rate not in excess of 2 percent of the sampling rate is

Condition No. P.37. Continued:

acceptable. Carefully remove the plug from the end of the probe. Check the flow rate at the probe inlet with a bubble tube flow meter. The flow should be comparable or slightly less than the flow rate of the critical orifice with the impingers off-line. Record the flow and turn off the pump.

(*3*) Sample Collection. Insert the sampling line into the stack and secure it with the tip slightly lower than the port height. Start the pump, recording the time. End the sampling after 60 minutes, or after yellow color is observed in the second in-line impinger. Record time and remove the tubing from the vent. Recheck flow rate at sampling line inlet and turn off pump. If the
flow rate has changed significantly, redo sampling with fresh capture solution. A slight variation (less than 5 percent) in flow may be averaged. With the inlet end of the line elevated above the impingers, add about 5 ml water into the inlet tip to rinse the line into the first impinger.

(*4*) Sample Analysis[1]. Fill the burette with 0.01 N sodium thiosulfate solution to the zero mark. Combine the contents of the impingers in the beaker or flask. Stir the solution and titrate with thiosulfate until the solution is colorless. Record the volume of the first endpoint (TN, ml). Add 5 ml of the 10 percent sulfuric acid solution, and continue the titration until the contents of the flask are again colorless. Record the total volume of titrant required to go through the first and to the second endpoint (TA, ml). If the volume of neutral titer is less than 0.5 ml, repeat the testing for a longer period of time. It is important that sufficient lighting be present to clearly see the endpoints, which are determined when the solution turns from pale yellow to colorless. A lighted stirring plate and a white background are useful for this purpose.

(*5*) Interferences. Known interfering agents of this method are sulfur dioxide and hydrogen peroxide. Sulfur dioxide, which is used to reduce oxidant residuals in some bleaching systems, reduces formed iodine to iodide in the capture solution. It is therefore a negative interference for chlorine, and in some cases could result in erroneous negative chlorine concentrations. Any agent capable of reducing iodine to iodide could interfere in this manner. A chromium

Condition No. P.37. Continued:

trioxide impregnated filter will capture sulfur dioxide and pass chlorine and chlorine dioxide. Hydrogen peroxide, which is commonly used as a bleaching agent in modern bleaching systems, reacts with iodide to form iodine and thus can cause a positive interference in the chlorine measurement. Due to the chemistry involved, the precision of the chlorine analysis will decrease as the ratio of chlorine dioxide to chlorine increases. Slightly negative calculated concentrations of chlorine may occur when sampling a vent gas with high concentrations of chlorine dioxide and very low concentrations of chlorine.

(6) The minimum sampling time for each of the three test runs shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the test run.

(G) The following calculation shall be performed to determine the corrected sampling flow rate:

$$S_c = \frac{S_u (BP - PW)(293)}{(760)(273 + t)}$$

where:

S_C = Corrected (dry standard) sampling flow rate, liters per minute;
S_U = Uncorrected sampling flow rate, L/min;
BP = Barometric pressure at time of sampling;
PW = Saturated partial pressure of water vapor, mm Hg at temperature; and
t = Ambient temperature, °C.

(H) The following calculation shall be performed to determine the moles of chlorine in the sample:

Cl_2 Moles = 1/8000 (5 T_N - T_A) x N_{Thio}

where:

T_N = Volume neutral titer, ml;
T_A = Volume acid titer (total), ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

Condition No. P.37. Continued:

(I) The following calculation shall be performed to determine the concentration of chlorine in the sample:

$$ClO_2\ Moles = 1/4000(T_A - T_N) \times N_{Thio}$$

where:

T_A = Volume acid titer (total), ml;
T_N = Volume neutral titer, ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(~~K~~J) The following calculation shall be performed to determine the concentration of chlorine dioxide in the sample:

$$ClO_2\ ppmv = \frac{6010\,(T_A - T_N) \times N_{Thio}}{S_c \times t_s}$$

where:

S_C = Corrected (dry standard) sampling flow rate, liters per minute;
t_S = Time sampled, minutes;
T_A = Volume acid titer (total), ml;
T_N = Volume neutral titer, ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(iii) Any other method that measures the total HAP or methanol concentration that has been demonstrated to the Administrator's satisfaction.

(6) The minimum sampling time for each of the three runs per method shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

[1] As an alternative to the requirement in 40 CFR 63.457(b)(5)(ii)(F)(4), for additional testing over longer sampling times if the neutral titer is less than 0.5 milliliter (mL), the facility's sample will be acidified and titrated to the acid endpoint. If the acid titer is greater than 0.1 mL, the neutral titer will be assumed to be 0.1 mL, and the chlorine concentration will be reported as less than the calculated value. If the acid titer is less than 0.1 mL, the results will be calculated using 0.1 mL for both the neutral and acid titer.

Condition No. P.37. Continued:

[Construction Permit No. 1230001-011-AC; Construction Permit No. 1230001-012-AC; Rule 62-297.310(7)(a)4.c., F.A.C.; 40 CFR 63.457(b); EPA Approved Alternative Titration procedure for Method 26A dated 03/08/02]

P.38. Vent gas stream calculations. To demonstrate compliance with the mass emission rate, mass emission rate per megagram of ODP, and percent reduction requirements for vent gas streams for the CCA, the owner or operator shall use the following:

(1) The total HAP mass emission rate shall be calculated using the following equation:

$$E = K_2 \left(\sum_{j=1}^{n} C_j M_j \right) Q_s$$

where:

E = Mass emission rate of total HAP from the sampled vent, kilograms per hour.
K_2 = Constant, 2.494 x 10^{-6} (parts per million by volume)-1 (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.
C_j = Concentration on a dry basis of pollutant j in parts per million by volume as measured by the test methods specified in paragraph (b) of this section.
M_j = Molecular weight of pollutant j, gram/gram-mole.
Q_s = Vent gas stream flow rate (dry standard cubic meter per minute) at a temperature of 20 °C as indicated in paragraph (b) of this section.
n = Number of individual pollutants, i, summed to calculate total HAP.

(2) The total HAP mass emission rate per megagram of ODP shall be calculated using the following equation:

$$F = \frac{E}{P}$$

where:

F = Mass emission rate of total HAP from the sampled vent, in kilograms per megagram of ODP.
E = Mass emission rate of total HAP from the sampled vent, in kilograms per hour determined as specified in paragraph (i)(1) of this section.
P = The production rate of pulp during the sampling period, in megagrams of ODP per hour.

(3) The total HAP percent reduction shall be calculated using the following equation:

Condition No. P.38. Continued:

$$R = \frac{E_i - E_o}{E_i} \left(100\right)$$

where:

R = Efficiency of control device, percent.

E_i = Inlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.

E_o = Outlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this Condition.

[40 CFR 63.457(i)]

P.39. CCA -Excess Emissions. Any occurrence of the following shall be recorded as a period of excess emissions, each of which shall be documented as one full day (24-hours) of excess emissions. Periods of excess emissions shall not be considered a violation of the CCA (63.447) emissions standards if the event is associated with a SSM event and the Permittee has initiated corrective action in accordance with the SSM Plan:

- An excursion at the continuous monitoring systems specified in Condition Nos. P.10 and P.11;
- The breaking of the lock-seal devices/tags on the evaporator system foul condensate bypass values or opening of the bypass valves to the shower water for the Nos. 1 and 2 Brown Stock Washer systems.

[40 CFR 63.453(o)]

Startup, Shutdown, Malfunction Plan

P.40. This emissions unit is also subject to the SSM plan requirements of Section II. Facility-wide Conditions, Condition No. 6.

Subsection Q. 40 CFR Part 63, Applicable Subpart RR Common Conditions.

E.U. ID No.	Brief Description
046	Pulping System MACT I

The following conditions apply to the emissions unit(s) listed above:

Q.1. Applicability. The provisions of this subpart apply to the control of air emissions from individual drain systems for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. These air emission standards for individual drain systems are placed here for administrative convenience and only apply to those owners and operators of facilities subject to the other subparts that reference this subpart. The provisions of 40 CFR 63 Subpart A - General Provisions do not apply to this subpart except as noted in the subpart that references this subpart.
[40 CFR 63.960]

Q.2. Definitions. All terms used in this subpart shall have the meaning given to them in the Act and in this section. If a term is defined in both this section and in another subpart that references the use of this subpart, then the definition in this subpart shall take precedence when implementing this subpart.

Closure device means a cap, cover, hatch, lid, plug, seal, valve, or other type of fitting that, when the device is secured in the closed position, prevents or reduces air emissions to the atmosphere by blocking an opening to the individual drain system. Closure devices include devices that are detachable (e.g., a plug or manhole cover), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

Hard-piping means pipe or tubing that is manufactured and properly installed in accordance with relevant standards (e.g., ANSI B31-3) and good engineering practices.

Individual drain system means a stationary system used to convey regulated-material to a waste management unit or to discharge or disposal. The term includes hard-piping, all drains and junction boxes, together with their associated sewer lines and other junction boxes (e.g., manholes, sumps, and lift stations) conveying regulated material. For the purpose of this subpart, an individual drain system is not a drain and collection system that is designed and operated for the sole purpose of collecting rainfall runoff (e.g., storm water sewer system) and is segregated from all other individual drain systems.

Junction box means a sump, manhole, or access point to a sewer line or a lift station.

Regulated-material means the wastewater streams, residuals, and any other materials specified by the referencing subpart to be managed in accordance with the standards under this subpart.

Condition No. Q.2. Continued:

Sewer line means a lateral, trunk line, branch line, or other conduit used to convey regulated-material to a downstream waste management unit. Sewer lines include pipes, grates, and trenches.

Waste management unit means the equipment, structure, or device used to convey, store, treat, or dispose of regulated-material. Examples of waste management units include: wastewater tanks, surface impoundments, individual drain systems, and biological wastewater treatment units. Examples of equipment that may be waste management units include containers, air flotation units, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units.

Water seal means a seal pot, p-leg trap, or other type of trap filled with water (e.g., flooded sewers that maintain liquid levels adequate to prevent air flow through the system) that creates a liquid barrier between the sewer line and the atmosphere. The liquid level of the seal must be maintained in the vertical leg of a drain in order to be considered a water seal.

[40 CFR 63.961]

Q.3. (a) The permittee subject to this subpart shall control air emissions from the individual drain system using one or a combination of the following:

(1) Covers, water seals, and other air emission control equipment as specified in paragraph (b) of this section.

(2) Hard-piping.

(3) Venting of the individual drain system through a closed vent system to a control device in accordance with the following requirements:

(i) The individual drain system is designed and operated such that an internal pressure in the vapor headspace in the system is maintained at a level less than atmospheric pressure when the control device is operating, and

(ii) The closed vent system and control device are designed and operated in accordance with the requirements of §63.693 in 40 CFR 63 subpart DD - National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.

(b) Owners and operators controlling air emissions from an individual drain system in accordance with paragraph (a)(1) of this section shall meet the following requirements:

Condition No. Q.3. Continued:

(1) The individual drain system shall be designed to segregate the organic vapors from regulated material managed in the controlled individual drain system from entering any other individual drain system that is not controlled for air emissions in accordance with the standards specified in this subpart.

(2) Drain control requirements. Each drain shall be equipped with either a water seal or a closure device in accordance with the following requirements:

(i) When a water seal is used, the water seal shall be designed such that either:

(A) The outlet to the pipe discharging the regulated-material extends below the liquid surface in the water seal of the drain; or

(B) A flexible shield or other device is installed which restricts wind motion across the open space between the outlet of the pipe discharging the regulated material and the drain.

(ii) When a closure device is used (e.g., securing a cap or plug on a drain that is not receiving regulated-material), the closure device shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the drain opening and the closure device.

(3) Junction box control requirements. Each junction box shall be equipped with controls as follows:

(i) The junction box shall be equipped with a closure device (e.g., manhole cover, access hatch) that is designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the junction box opening and the closure device.

(ii) If the junction box is vented, the junction box shall be vented in accordance with the following requirements:

(A) The junction box shall be vented through a closed vent system to a control device except as provided for in paragraph (b)(3)(ii)(B) of this section. The closed vent system and control device shall be designed and

Condition No. Q.3. Continued:

operated in accordance in accordance with the standards specified in § 63.693.

(B) As an alternative to paragraph (b)(3)(ii)(A) of this section, the owner or operator may vent the junction box directly to the atmosphere when all of the following conditions are met:

(1) The junction box is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level. Large changes in the size of the junction box vapor headspace created by using a pump to repeatedly empty and then refill the junction box do not meet this condition.

(2) The vent pipe installed on the junction box shall be at least 90 centimeters in length and no greater than 10 centimeters in nominal inside diameter.

(3) Water seals are installed at the liquid entrance(s) to or exit from the junction box to restrict ventilation in the individual drain system and between components in the individual drain system. The owner or operator shall demonstrate (e.g., by visual inspection or smoke test) upon request by the Administrator that the junction box water seal is properly designed and restricts ventilation.

(4) Sewer line control requirements. Each sewer line shall not be open to the atmosphere and shall be covered or closed in a manner such that there are no visible cracks, holes, gaps, or other open spaces in the sewer line joints, seals, or other emission interfaces.

(5) Operating requirements. The owner or operator shall operate the air emission controls required by paragraphs (b)(2) through (b)(4) of this section in accordance with the following requirements:

(i) Each closure device shall be maintained in a closed position whenever regulated-material is in the individual drain system except when it is necessary to remove or open the closure device for sampling or removing material in the individual drain system, or for equipment inspection, maintenance, or repair.

(ii) Each drain equipped with a water seal and open to the atmosphere shall be operated to ensure that the liquid in the water seal is maintained at the appropriate level. Examples of acceptable means for complying with this provision include but are not limited to using a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap; continuously dripping water into the trap using a hose; or regular visual observations.

Condition No. Q.3. Continued:

(iii) Each closed-vent system and the control device used to comply with paragraph (b)(3)(ii)(A) of this section shall be operated in accordance with the standards specified in 40 CFR 63.693.

[40 CFR 63.962]

Q.4. Inspection and monitoring requirements**.**

(a) The permittee shall inspect the individual drain system in accordance with the following requirements:

(1) The individual drain system shall be visually inspected by the permittee as follows to check for defects that could result in air emissions to the atmosphere.

(i) The permittee shall visually inspect each drain as follows:

(A) In the case when the drain is using a water seal to control air emissions, the permittee shall verify appropriate liquid levels are being maintained and identify any other defects that could reduce water seal control effectiveness.

(B) In the case when the drain is using a closure device to control air emissions, the permittee shall visually inspect each drain to verify that the closure device is in place and there are no defects. Defects include, but are not limited to, visible cracks, holes, or gaps in the closure devices; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing plugs, caps, or other closure devices.

(ii) The permittee shall visually inspect each junction box to verify that closure devices are in place and there are no defects. Defects include, but are not limited to, visible cracks, holes, or gaps in the closure devices; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(iii) The permittee shall visually inspect the unburied portion of each sewer line to verify that all closure devices are in place and there are no defects. Defects include, but are not limited to, visible cracks, holes, gaps, or other open spaces in the sewer line joints, seals, or other emission interfaces.

Condition No. Q.4. Continued:

(iv) The permittee shall perform the inspections initially at the time of installation of the water seals and closure devices for the individual drain system and, thereafter, at least once every year.

(i) In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (b) of this section.

(ii) The permittee shall maintain a record of the inspection in accordance with the requirements specified in § 63.965(a) of this subpart.

(2) The permittee shall inspect and monitor the closed-vent system and the control device in accordance with the requirements specified in §63.693 in 40 CFR 63 subpart DD - National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.

(b) The permittee shall repair all detected defects as follows:

(1) The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 15 calendar days after detection except as provided in paragraph (b)(2) of this section.

(2) Repair of a defect may be delayed beyond 15 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the individual drain system and no alternative capacity is available at the facility site to accept the regulated-material normally managed in the individual drain system. In this case, the owner or operator shall repair the defect at the next time the process or unit that is generating the regulated-material managed in the individual drain system stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(3) The permittee shall maintain a record of the defect repair in accordance with the requirements specified in § 63.965(a)(3) of this subpart.

[40 CFR 63.964]

Q.5. Recordkeeping requirements**.** (a) Each permittee complying with §63.962(a)(1) of this subpart shall prepare and maintain the following records:

(1) A written site-specific individual drain system inspection plan that includes a drawing or schematic of the individual drain system and identifies each drain, junction box, and sewer line location.

(2) A record of the date that each inspection required by § 63.964(a) of this subpart is performed.

(3) When applicable, a record for each defect detected during inspections required by § 63.964(a) of this subpart that includes the following information: the location of the defect, a description of the defect, the date of detection, the corrective action

Condition No. Q.5. Continued:

> taken to repair the defect, and the date that the corrective action was completed. In the event that repair of the defect is delayed in accordance with the provisions of § 63.964(b)(2) of this section, the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(b) Owners and operators that use a closed-vent system and a control device in accordance with the provisions of § 63.962 shall prepare and maintain the records required for the closed-vent system and control device in accordance with the requirements of §63.693.

[40 CFR 63.965]

Q.6. Reporting requirements**.** Owners and operators that use a closed-vent system and a control device in accordance with the provisions of § 63.962 shall prepare and submit to the Administrator the reports required for closed-vent systems and control devices in accordance with the requirements of §63.693.

[40 CFR 63.966]

Subsection R. Common Conditions - Used Oil

Sub-sec-tion	EU No.	Description
A.	002	No.1 POWER BOILER
C.	004	No.1 BARK BOILER
D.	006	No.2 RECOVERY BOILER
E.	007	No.3 RECOVERY BOILER
F.	011	No.4 RECOVERY BOILER
G.	019	No.2 BARK BOILER
K.	024	No.4 LIME KILN AND STORAGE BINS (2)

The following specific conditions apply to the emissions unit(s) listed above:

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections listed above for applicability.}

Essential Potential to Emit (PTE) Parameters

R.1. The used oil fired in the emissions unit(s) listed above shall be facility generated.

R.2. a. The on-specification used oil fired in the emissions unit(s) listed above shall be blended with fuel oil for firing.

b. The on-spec used oil prior to blending shall comply with the limits **listed below**:

USED OIL SPECIFICATIONS	
Constituent/Property	**Allowable Level**
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum
PCB	2 ppm maximum

c. See section R.4. for used oil sampling and analysis procedures and frequency.Used oil which fails to comply with any of these specification levels is considered “off-specification” used and shall not be burned

[40 CFR 279.11, 40 CFR 279.61]

R.3. On-specification used oil may be fired as follows:

1. At any time provided the maximum concentration of PCBs is less than 2 ppm. The analysis and recordkeeping requirements apply to each amount of used oil, prior to blending.

2. Only during normal operation temperature and not during startup or shutdown, if the maximum concentration of PCBs is greater than, or equal to 2 ppm, but less than 50 ppm.

[40 CFR 279.61 and 761.20(e)]

R.4. Used Oil – On-site Generation. The Permittee shall sample and analyze the used oil to be burned, prior to any fuel oil blending, utilizing the procedures stated below:

(1) The permittee shall collect a composite sample (See R.4.(5) below) of used oil from the following locations:

a. Pulp Drying
b. Purification
c. Digesting
d. Chemicals
e. Powerhouse
f. Woodyard #1
g. Woodyard #2
h. Woodyard #3
i. Mobile Equipment

(2) The used oil sample(s) shall be submitted to an independent laboratory within two working days. The independent laboratory shall conduct an analysis of a composite sample (blended from the samples obtained from the above locations) for the constituents identified in Condition R.2. The permittee or the independent laboratory may prepare the composite sample obtained from the above locations.

(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM or EPA methods (such as those specified in EPA Publication SW-846 -Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

(4) The Permittee shall obtain the results of the testing stated in Condition R.4.(3) to verify the used oil meets the specifications stated in Condition R. 2.

(5) The permittee shall collect a composite sample of used oil from each of the specified locations on a once per year basis during the month of December.

(6) If any analysis result indicates noncompliance with the specifications stated in Condition R.2., the used oil shall not be blended with fuel oil and fired in any emissions unit authorized to burn blended fuel oil with facility-generated on-specification used oil. The permittee shall provide the Department immediate written notification, including a copy of the analysis results, and the proposed means of its disposal.

[Rule 62-4.070(3), F.A.C.; 40 CFR 279; and, 40 CFR 761; Comments from applicant dated April 27, 2009]

R.5. Used Oil Recordkeeping: The owner or operator shall obtain, make (within 15 days following each calendar month), and keep records related to the use of used oil in a form suitable for inspection at the facility by the Department. The records should include, but are not limited to the following:

(1) The gallons of on-specification used oil generated on-site each month.
(2) The gallons of on-specification used oil burned each month.
(3) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period.
(4) Results of the analyses required in any of the above conditions.
(5) The permittee shall maintain on-site records of all used oil sampling documentation and laboratory analysis information for a minimum period of 5 years.

[Rule 62-4.070(3), F.A.C.; Rule 62-213.440(1)(b)2., F.A.C.; 40 CFR 279.72; and, 40 CFR 761.20(e); Air Construction Permit No. 1230001-023-AC/PSD-FL-397]