International Paper Company
Pensacola Mill

Facility ID No. 0330042
Escambia County

Title V Air Operation Permit Renewal

Permit No. 0330042-016-AV
(Renewal of Title V Air Operation Permit No. 0330042-010-AV)

Permitting and Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Northwest District

160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

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Title V Air Operation Permit Renewal

Permit No. 0330042-016-AV

Table of Contents

Section **Page Number**

I. Facility Information.
- A. Facility Description. 2
- B. Summary of Emissions Units. 2
- C. Applicable Regulations. 3

II. Facility-wide Conditions. 5

III. Emissions Units and Conditions.
- A. 030, 029 - Recovery Boilers 1 and 2 7
- B. 033 - Power Boiler 3 10
- C. 037 - Power Boiler 4 14
- D. 002 - Power Boiler 5 17
- E. 003 - Power Boiler 6 19
- F. 032, 038 - Smelt Dissolving Tanks 1 and 2 21
- G. 028 - Lime Kiln Mud Dryer System 24
- H. 001 - Tall Oil Processing 29
- I. 049 - Tail Gas Scrubber, ClO_2 Generator and Storage Tank 31
- J. 051 - B-Line Bleach Plant 32
- K. 055 - No. 1 & 2 Multiple Effect Evaporator Sets 35
- L. 067 - Thermal Oxidizer 36
- M. 046 - Lime Slaker 39
- N. 044, - Dry Additives 41
- O. 052 - Woodyard Activities 43
- P. 063 - Low Volume High Concentration, NCG Handling System 45
- Q. 070, 071, 072, 073 - B-Lines #1 & #2 Brown Stock Washing Lines, Diffusion Washer, and B-Line O_2 Delignification 47
- R. 065 - No. 2 Condensate Stripper 53
- S. 069 - Pulping System 54
- T. Common Conditions 61

Appendices At End
- Appendix A - Abbreviations, Acronyms, Citations, and Identification Numbers
- Appendix I - Insignificant Emissions Units and/or Activities
- Appendix RR – Facility-wide Reporting Requirements
- Appendix TR - Facility-wide Testing Requirements
- Appendix TV - Title V Conditions
- Appendix U - Unregulated Emissions Units and/or Activities
- Statement of Basis
- Appendix SS-1 - Stack Sampling Facilities (version dated 10/07/96)
- Appendix CAM
- Appendix UPM
- 40 CFR 60 Subpart A
- 40 CFR 60 Subpart BB
- 40 CFR 63 Subpart A
- 40 CFR 63 Subpart S, Table 1
- 40 CFR 63 Subpart MM, Table 1
- Clean Condensate Alternative Compliance Plan (Continuous Monitoring System)
- NCG Contingency Plan
- SSM Plans - MACT I and II

Attachment: Permit History

PROPOSED PERMIT

PERMITTEE:
International Paper Company
375 Muscogee Road
Cantonment, Florida 32533-1422

Permit No. 0330042-016-AV
Pensacola Mill
Facility ID No. 0330042
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Pensacola Mill is located in Escambia County at 375 Muscogee Road, Cantonment, Florida. UTM Coordinates: Zone 16, 469 km East and 3386 km North; Latitude: 30° 36' 28.1" North and Longitude: 87° 19' 24.2" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named Permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date:
Renewal Application Due Date: Exp. DATE -225
Expiration Date: Eff. DATE + 5 years

(Proposed)

_____

Rick Bradburn
Air Program Administrator

RB/rp/c

This permit renews the facility's Title V Operation permit 0330042-010-AV, effective October 27, 2006, and incorporates the applicable requirements of air construction permit 0330042-015-AC, effective January 7, 2011, and construction permit 0330042-017-AC, being issued concurrently with this permit renewal. The mill has converted from a hardwood/softwood facility to a completely softwood facility. This increases the pulp and paper production to a peak daily level of approximately 2,500 air-dried tons of unbleached pulp per day (ADTUPD). The softwood pulp is used to produce unbleached linerboard and/or corrugated medium on No. 5 Paper Machine. A portion of the softwood pulp is bleached and pulp is produced on No. 4 Pulp Dryer. No. 3 Paper Machine is shut down. The mill will not be making modifications to the No. 5 Paper Machine authorized by permit 0330042-015-AC.

Subsection A. Facility Description

This facility is a Kraft pulp and paper mill consisting of a wood handling facility, digesters, brown stock washers, oxygen delignification, bleaching facilities, paper machines and associated equipment.

The facility consists of Recovery Boilers No. 1 and No. 2; Power Boilers No. 3, No. 4, No. 5, and No. 6; Smelt Dissolving Tanks No. 1 and No. 2; a Lime Kiln; a Lime Slaker; Tall Oil Processing; B-Line Bleach Plant; No. 1 and No.2 Multiple Effect Evaporator (MEE) Sets; Pulping System; Paper Machine Operations; Woodyard Activities; Non-Condensable Gas (NCG) Handling System; a Thermal Oxidizer; Tail Gas Scrubber; and, a Chlorine Dioxide Generator & Storage Operation.

Subsection B. Summary of Emissions Units

EU I.D.	Brief Description
030	Recovery Boiler # 1
029	Recovery Boiler # 2
033	Power Boiler # 3
037	Power Boiler # 4
002	Power Boiler # 5
003	Power Boiler # 6
032	Smelt Dissolving Tank # 1
038	Smelt Dissolving Tank # 2
028	Lime Kiln, Mud Dryer System
001	Tall Oil Processing
049	Tail Gas Scrubber, Chlorine Dioxide (ClO_2) Generator and ClO_2 Storage Tanks
051	B Bleach Plant Line
055	No. 1 & 2 Multiple Effect Evaporator Set
067	Thermal Oxidizer
046	Lime Slaker
044	Dry Additives, Starch Receiving and Storage
052	Woodyard Activities (Fines Cyclone)
063	Low Volume High Concentration Non -Condensable Gas (NCG) Handling System
065	No. 2 Condensate Stripper
069	Pulping System
070	B-Line #1 Brown Stock Washing Line
071	B-Line #2 Brown Stock Washing Line
072	Diffusion Washer
073	B-Line O_2 Delignification
066	Unregulated Emissions Units (see Appendix U-1)

Subsection C. Applicable Regulations

Based on the Title V air operation permit renewal application received March 16, 2011, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Rule 62-296.320(2), F.A.C.	Facility-Wide
Rule 62-296.320(4)(b)1. & 4., F.A.C.	Facility-Wide
Rule 62-213.440(1), F.A.C.	Facility-Wide
Rule 62-213.430(6), F.A.C.	Facility-Wide
Rule 62-4.040(1)(b), F.A.C.	Facility-Wide
Rule 62-296.320(1)(a), F.A.C.	Facility-Wide
Rule 62-296.320(4)(c), F.A.C.	Facility-Wide
Rule 62-213.440(3), F.A.C.	Facility-Wide
Rule 62-213.900, F.A.C.	Facility-Wide
Rule 62-4.070(3), F.A.C.	Facility-Wide
40 CFR 60 Subpart A - NSPS General Provisions	Facility-Wide
40 CFR 61.145 [Subpart M]	Facility-Wide
40 CFR 68	Facility-Wide
40 CFR 82.34 (a) & (b) [Subpart B]	Facility-Wide
40 CFR 82.154(a), (b), (e), & (f) [Subpart F]	Facility-Wide
40 CFR 82.156(i)(5), (i)(6), & (i)(9) [Subpart F]	Facility-Wide
40 CFR 82.166(k), (m), & (n) [Subpart F]	Facility-Wide
Rule 62-204.800(8), F.A.C.	003, 033, 037, 055, 065, 067, 069
Rule 62-204.800(11), F.A.C.	028, 029, 030, 032, 038, 051, 055, 053, 063, 067, 069, 070, 071, 072, 073
Rule 62-297.310, F.A.C.	002, 003, 028, 032, 038, 044, 072
Rule 62-296.320(4)(a), F.A.C.	032, 038, 046
Rule 62-296.404, F.A.C.	001, 028, 029, 030, 032, 038, 055, 069
Rule 62-296.405, F.A.C.	003, 037
Rule 62-296.406, F.A.C.	002, 033
Rule 62-297.401, F.A.C.	002, 003, 028, 032, 038, 044, 072
Rule 62-297.620(4), F.A.C.	044
40 CFR 60.40 through 60.49 [Subpart D]	033, 037

40 CFR 60.280through 60.284 [Subpart BB]	055, 065, 067, 069
40 CFR 63.440 through 63.457 [Subpart S]	051, 055, 063, 065, 067, 069, 070, 071, 072, 073
40 CFR 63.860 through 63.867 [Subpart MM]	028, 029, 030, 032, 038
40 CFR 82.154(a), (b), (e), & (f) [Subpart F]	Facility-Wide
40 CFR 82.156(i)(5), (i)(6), & (i)(9) [Subpart F]	Facility-Wide
40 CFR 82.166(k), (m), & (n) [Subpart F]	Facility-Wide
PSD-FL-066	033, 037
PSD-FL-126, & 126A	002
PSD-FL-200, & 200A	003, 028, 049, 051, 055

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. Permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C., and permits AC17-254898, AC17-113551, AC17-223343/PSD-FL-200, and 0330042-003-AC]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. Permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents 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), F.A.C.]

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility are listed in Appendix UPM.
[Rule 62-296.320(4)(c), F.A.C.; and, and, renewal Title V permit application received March 16, 2011]

Annual Reports and Fees

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

FW6. Annual Operating Report. 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. A copy of the form and instructions may be obtained from the Department's Northwest District office or electronically at http://www.dep.state.fl.us/air/rules/forms/aor.htm. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office. [Rule 62-210.370(3), F.A.C.]

FW7. 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/emission/tvfee.htm. [Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. Permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA)

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.
d. 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.
e. 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.
f. 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: (800) 424-8802.
g. 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.]

Subsection A. Emissions Units 030, 029

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
030	Recovery Boiler No. 1 - started up June 20, 1975
029	Recovery Boiler No. 2 - started up June 23, 1975

Recovery Boilers No. 1 and No. 2 are low odor design recovery boilers manufactured by Babcock and Wilcox. Each unit is a 655 MMBtu/hr heat input boiler designed to burn a maximum of 111,000 pounds per hour of virgin black liquor solids (120,652 pounds per hour as-fired black liquor solids) and recover 42,319 pounds of smelt per hour. Black liquor is normally used for fuel but natural gas, No.2, No. 4, No. 5, and No. 6 fuel oils may be used as a backup fuel at a maximum heat input rate of 572 MMBtu/hr. Each unit has a Koppers dual chamber electrostatic precipitator to control particulate emissions. Total reduced sulfur emissions are monitored with a continuous emission monitor (CEM) system. These emissions units are regulated under Rule 62-296.404, F.A.C., Kraft Pulp Mills and 40 CFR 63 subpart MM - (Emission Standards for Chemical Recovery Sources).

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable operating rate is as follows:

EU No.	lb Virgin Black Liquor Solids/hr
030	111,000
029	111,000

(Equivalent to burning 120,652 pounds per hour as-fired black liquor solids, recovering 42,319 pounds of smelt per hour recovered)

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.404, F.A.C.]

A.2. Methods of Operation.
The fuels that are allowed to be burned in these units are:

(1) Black liquor solids, primary fuel,
(2) Natural gas,
(3) No. 2, No. 4, No. 5, and No. 6 fuel oil (maximum sulfur content of 1 percent by weight)

[Rule 62-213.410, F.A.C.; Applicant's request in Title V permit application received March 16, 2011]

A.3. Hours of Operation. These emission units may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

A.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Combined Appendices, Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

A.5. Visible Emissions. Visible emissions shall not exceed 35% opacity for 6 percent or more of the operating time within any quarterly period. Monitoring requirements and compliance shall be in accordance with 40 CFR 63 subpart MM. [Rules 62-204.800(11), F.A.C. and 40 CFR 63.864]

A.6. PM Emissions. Particulate matter emissions from each unit shall not exceed 0.042 grain per dry standard cubic foot corrected to 8 percent oxygen. [Rules 62-210.800(11), F.A.C. 40 CFR 63.862, and permit 0330042-009-AV]

{Permitting Note: Subpart MM limits the particulate matter concentration to 0.044 grain per dry standard cubic foot corrected to 8 percent oxygen; however, the facility has requested a alternative permit limit to 0.042 grain per dry standard cubic foot corrected to 8 percent oxygen, in accordance with 40 CFR 63.862(a)(1)(ii)}

A.7. TRS Emissions. Total reduced sulfur emissions from each unit shall not exceed 5 ppm by volume on a dry basis at standard conditions corrected to 8% oxygen as a 12 hour average. [Rule 62-296.404(3)(c)1.b., F.A.C.]

Excess Emissions

A.8. Startup, Shutdown and Malfunction Plan. Permittee shall comply with all the applicable standards and requirements of 40 CFR 63.6(e) (Operation and Maintenance Requirements), and the facility's MACT I and II Startup, Shutdown and Malfunction Plan (SSM) attached and incorporated by reference. If this SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), Permittee shall maintain at the facility the 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 the revision of the plan. Any revision made to the SSM Plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a 40 CFR 70 or 71 permit revision. Moreover, none of the procedures specified in the SSM Plan for an affected source shall be deemed to fall within the permit shield. [Rules 62-204.800(11), F.A.C., 40 CFR 63.6(e), and 40 CFR 63.866(a)]

Continuous Monitoring Requirements

A.9. Total Reduced Sulfur Continuous Monitoring. See Subsection T, Common Conditions.

A.10. Continuous Opacity Monitoring System (COMS). Monitoring requirements and compliance shall be in accordance with 40 CFR 63 subpart MM, Subsection T, Common Conditions. [40 CFR 63.864]

Test Methods and Procedures

A.11. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
16	Semicontinuous Determination of Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A.
16A	Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique)-40 CFR 60 Appendix A.
16B	Determination of Total Reduced Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A.

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(11), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-297.401(5), (9), (16), (16)(a), and (16)(b), F.A.C.]

A.12. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.13. Compliance Tests Prior To Renewal. Compliance tests shall be performed for TRS once during the permit cycle (every five years), the year before permit renewal, but prior to the permit application renewal due date, such that the test report can be submitted with the permit renewal application. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the TRS emission limit. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

A.14. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

Other Requirements

A.15. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

A.16. 40 CFR 63 Subpart MM - NESHAP Requirements. See Subsection T, Common Conditions.

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
033	Power Boiler No. 3 - started up October 29, 1973

Power Boiler No. 3 was manufactured by Riley and is fueled by natural gas, coal, wood waste, or oil. Rated capacity is 268 MMBtu/hr heat input for 100% coal, 282 MMBtu/hr if fueled by wood waste, or 347 MMBtu/hr if fueled with oil and/or natural gas. Particulate emissions are controlled by multi-cyclones followed by a venturi wet scrubber manufactured by Neptune Airpol, Inc. Sulfur dioxide emissions are controlled by the sulfur content of the fuels and by addition of sodium hydroxide to scrubber fluid to control pH. The boiler has a CEM for SO_2, NO_x and O_2. A continuously monitored pressure drop has been approved in lieu of a CEM for opacity. This emissions unit is regulated under Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators.

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

EU No.	MMBtu/hr Heat Input (or other regulated capacity)	Fuel Type
033	347	Natural gas or fuel oil
033	268	Coal
033	282	Wood Waste

[Rules 62-4.160(2), 62-210.200(PTE), 62-296.405, F.A.C.; and, PSD-FL-066]

B.2. Methods of Operation - Fuels
The fuels that are allowed to be burned in this unit/these units are:

(1) Natural gas, primary fuel,
(2) Coal (maximum 4.0% sulfur by dry weight),
(3) Carbonaceous fuel (wood waste),
(4) No. 2, No. 4, No. 5, and No. 6 fuel oil (maximum, 1% sulfur by weight)
(5) Used Oil

Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. The owner shall maintain records to demonstrate that each shipment of used oil meets the specifications of 40 CFR 279. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
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

[Rules 62-4.160(2), 62-213.410, and 62-213.440(1), F.A.C., 40 CFR 279.11, and Applicant's request in Title V permit application received March 16, 2011]

B.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

B.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Combined Appendices, Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

B.5. Visible Emissions. Visible emissions shall not exceed 20% opacity except for one six minute period per hour of not more than 27% opacity. [Rule 62-296.405(1)(a), F.A.C. and PSD-FL-066]

B.6. NO_X Emissions. Nitrogen oxide shall not exceed:

A. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in pounds per million Btu) is determined by proration using the following formula:

$$NO_X = \frac{w\,(0.60) + x\,(0.20) + y\,(0.30) + z\,(0.70)}{w + x + y + z}$$

where:
NOx is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in pounds per million Btu heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;
w is the percentage of total heat input derived from lignite;
x is the percentage of total heat input derived from gaseous fossil fuel;
y is the percentage of total heat input derived from liquid fossil fuel; and
z is the percentage of total heat input derived from solid fossil fuel (except lignite).

B. 0.70 pounds per million Btu of heat from all fuels, or
C. 823.4 tons per year.

[PSD-FL-066]

B.7. SO_2 Emissions. Sulfur Dioxide*
Sulfur dioxide emissions shall not exceed 1,410.4 tons per year.

* For any combination of fuel usage, the emissions limit for sulfur dioxide shall be calculated from the following equation:

$$\text{Pounds of } SO_2\text{/MMBtu of total heat input} = \frac{0.64\,x + 1.2\,y}{x + y}$$

where:
x is the percent heat input derived from liquid fossil fuel (oil) and
y is the percent heat input derived from solid fossil fuel (coal).

[PSD-FL-066]

B.8. PM Emissions. Particulate matter emissions shall not exceed 0.1 pound per MMBtu heat input of fuel or a maximum of 118.3 tons per year. [Rule 62-296.405(1)(b), F.A.C., and PSD-FL-066]

Monitoring of Operations

B.9. This emissions unit is subject to the Compliance Assurance Monitoring (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. [Rule 62-213.440(1)(b)1.a., F.A.C; and 40 CFR 64]

B.10. The pressure drop across the scrubber shall be maintained at or above 9.1 inches of water. Monitoring of the scrubber pressure drop is used as a surrogate parameter in lieu of a continuous opacity monitor. Particulate matter testing shall be conducted with the scrubber pressure drop not more than one inch of water above 9.1. The pressure drop data shall be submitted with the PM test report. When firing coal the scrubber's continuous pH monitor target set point shall be 5.5 with the minimum measured pH being no less than 4.0. The pH meter shall be equipped with an audible alarm to detect excursions. The scrubber pressure drop and pH shall be continuously monitored and recorded. Compliance shall be based upon three-hour averages. For the purpose of periodic monitoring, continuous monitoring shall be considered 95% of emitting unit operating hours. A valid three-hour average will consist of at least 75% data collection. Records shall be maintained and available for inspection by the Department. [Rules 62-297.310, 62-4.160(2) and 62-213.440(1), F.A.C., permit AO17-223939, PSD-FL-066, and EPA letter dated July 20, 2000]

Continuous Monitoring Requirements

B.11. Permittee shall calibrate, operate and maintain a continuous monitoring system for the measurement of sulfur dioxide, nitrogen oxide and oxygen. Performance specifications, location of monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of: 40 CFR 51 Appendix P, adopted and incorporated by reference in Rule 62- 204.800(2), F.A.C., and 40 CFR 60 Appendix B, adopted by reference in Rule 62-204.800(8)(e), F.A.C., for existing and new emissions units. [Rules 62-296.405(1)(f) and 62-204.800(8), F.A.C.]

Test Methods and Procedures

B.12. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
5	Determination of Particulate Emissions from Stationary Sources - 40 CFR 60 Appendix A
6	Determination of Sulfur Dioxide Emissions from Stationary Sources - 40 CFR 60 Appendix A.
7	Determination of Nitrogen Oxide Emissions from Stationary Sources - 40 CFR 60 Appendix A.
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(8), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401(5), (6), (7), and (9), F.A.C]

B.13. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

B.14. Compliance Tests Prior To Renewal. Compliance tests shall be performed for Sulfur Dioxide (SO_2) and Nitrogen Oxide (NO_X) once during the permit cycle (every five years), the year before permit renewal, but prior to the permit application renewal due date, such that the test report can be submitted with the permit renewal application. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

B.15. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

Other Requirements

B.16. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
037	Power Boiler No. 4 - started up December 15, 1986

Power Boiler No. 4 is fueled by wood waste, coal, gas and oil. Rated capacity is 546 MMBtu/hr heat input for 100% coal or up to 666 MMBtu/hr if fueled with other fuels supplementing coal. Particulate emissions are controlled by multi-cyclones followed by a venturi wet scrubber manufactured by FMC Type TI, model 280K. Sulfur dioxide emissions are controlled by the sulfur content of the fuels and/or by addition of sodium hydroxide to scrubber fluid to control pH. The boiler has a CEM for SO_2, NO_x and O_2. A continuously monitored pressure drop has been approved in lieu of a CEM for opacity. This emissions unit is regulated under Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators.

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

EU No.	MMBtu/hr Heat Input	Fuel Type
037	666	Wood waste, natural gas, or fuel oil
037	546	Coal

[Rules 62-4.160(2), 62-210.200(PTE), 62-296.405, F.A.C.; and, PSD-FL-066]

C.2. Methods of Operation - Fuels.
The fuels that are allowed to be burned in this unit/these units are:

(1) Carbonaceous fuel (wood waste), primary fuel
(2) Natural gas
(3) Coal (maximum 4.0% sulfur by dry weight),
(4) No. 2, No. 4, No. 5, and No. 6 fuel oil (maximum 1% sulfur by weight),
(5) Used oil (see below),

Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. The owner shall maintain records to demonstrate that each shipment of used oil meets the specifications of 40 CFR 279. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
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

[Rules 62-4.160(2), 62-213.410 and 62-213.440(1), F.A.C., and 40 CFR 279.11]

C.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-4.160(2), and 62-210.200(PTE), F.A.C.]

C.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Combined Appendices, Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

C.5. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per MMBtu heat input of fuel or a maximum of 240.9 tons per year. [Rule 62-296.405(1)(b), F.A.C., and PSD-FL-066]

C.6. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed:

A. For any combination of fuel usage, the emissions limit for sulfur dioxide shall be calculated from the following equation:

$$\text{Pounds of } SO_2\text{/MMBtu of total heat input} = \frac{0.64\,x + 1.2\,y}{x + y}$$

where:
x is the percent heat input derived from liquid fossil fuel (oil) and
y is the percent heat input derived from solid fossil fuel (coal).

B. 2,868.9 tons per year.

[PSD-FL-066]

C.7. Nitrogen Oxide. Nitrogen oxide shall not exceed:

A. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in pounds per million Btu) is determined by proration using the following formula:

$$NO_X = \frac{w\,(0.60) + x\,(0.20) + y\,(0.30) + z\,(0.70)}{w + x + y + z}$$

where:
NO_X is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in pounds per million Btu heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;
w is the percentage of total heat input derived from lignite;
x is the percentage of total heat input derived from gaseous fossil fuel;
y is the percentage of total heat input derived from liquid fossil fuel; and
z is the percentage of total heat input derived from solid fossil fuel (except lignite).

B. 0.70 pounds per million Btu of heat from all fuels, or

C. 1,673.2 tons per year

[PSD-FL-066]

C.8. Visible Emissions. Visible emissions shall not exceed 20% opacity except for one six minute period per hour of not more than 27% opacity. [Rule 62-296.405(1)(a), F.A.C., and PSD-FL-066]

Monitoring of Operations

C.9. The pressure drop across the scrubber shall be maintained at or above 10.0 inches of water. Monitoring of the scrubber pressure drop is used as a surrogate parameter in lieu of a continuous opacity monitor. Particulate

matter testing shall be conducted with the scrubber pressure drop not more than one inch of water above 10.0. The pressure drop data shall be submitted with the PM test report. When firing coal the scrubber's continuous pH monitor target set point shall be 5.5 with the minimum measured pH being no less than 4.0. The pH meter shall be equipped with an audible alarm to detect excursions. The scrubber pressure drop and pH shall be continuously monitored and recorded. Compliance shall be based upon three-hour averages. For the purpose of periodic monitoring, continuous monitoring shall be considered 95% of emitting unit operating hours. A valid three-hour average will consist of at least 75% data collection. Records shall be maintained and available for inspection by the Department. [Rules 62-297.310, 62-4.160(2) and 62-213.440(1), F.A.C., and permit AO17-223940]

C.10. CAM Plan. This emissions unit is subject to the Compliance Assurance Monitoring (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. [Rules 62-204.800(12); and 62-213.440(1)(b)1.a., F.A.C; and 40 CFR 64]

Continuous Monitoring Requirements

C.11. Permittee shall calibrate, operate and maintain a continuous monitoring system for the measurement of sulfur dioxide, nitrogen oxide and oxygen. Performance specifications, location of monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of: 40 CFR 51 Appendix P, adopted and incorporated by reference in Rule 62- 204.800(2), F.A.C., and 40 CFR 60 Appendix B, adopted by reference in Rule 62-204.800(8)(e), F.A.C., for existing and new emissions units. [Rules 62-296.405(1)(f) and 62-204.800(8), F.A.C.]

Test Methods and Procedures

C.12. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
5	Determination of Particulate Emissions from Stationary Sources - 40 CFR 60 Appendix A
6	Determination of Sulfur Dioxide Emissions from Stationary Sources - 40 CFR 60 Appendix A.
7	Determination of Nitrogen Oxide Emissions from Stationary Sources - 40 CFR 60 Appendix A.
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(8), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-297.401(5), (6), (7), and (9), F.A.C.]

C.13. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR of this permit. [Rule 62-297.310, F.A.C.]

C.14. Compliance Tests Prior To Renewal. Compliance tests shall be performed for Sulfur Dioxide (SO_2) and Nitrogen Oxide (NO_X) once during the permit cycle (every five years), the year before permit renewal, but prior to the permit application renewal due date, such that the test report can be submitted with the permit renewal application. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

C.15. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

Other Requirements

C.16. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
002	Power Boiler No. 5 - started up February 12, 1988

This is a 195 MMBtu/hr heat input natural gas fired boiler manufactured by Wicks. NO_x emissions are controlled by a combination of flue gas recirculation and low NO_x burners. The boiler was constructed under permit AC17-140962/PSD-FL-126 and later modified under permit AC17-192933/PSD-FL-126A

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

EU No.	MMBtu/hr Heat Input	Fuel Type
002	195	Natural gas

[Rules 62-4.160(2), 62-210.200(PTE), 62-296.406, F.A.C.; and, PSD-FL-126 and permit AC17-192933]

D.2. Methods of Operation - Fuels. The fuel that is allowed to be burned in this unit is natural gas. Daily fuel usage records shall be maintained and available for inspection by the Department. [Rules 62-4.160(2) and 62-213.410, F.A.C.; and Applicant's request in Title V permit application received March 16, 2011]

D.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

D.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Combined Appendices, Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

D.5. Nitrogen Oxides. Nitrogen oxide shall not exceed 0.1 pounds per MMBtu of heat input. [PSD-FL-126 and 126A, and permits AC17-140962 and AC17-192933]

D.6. Carbon Monoxide. Carbon monoxide shall not exceed 47 pounds per hour. [PSD-FL-126 and 126A, and permits AC17-140962 and AC17-192933]

D.7. Visible Emissions. Visible emissions shall not exceed 5% opacity. [PSD-FL-126 and 126A, and permits AC17-140962 and AC17-192933]

Excess Emissions

D.8 Excess Emissions Allowed. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

D.9 Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

D.10. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
7	Determination of Nitrogen Oxide Emissions from Stationary Sources - 40 CFR 60 Appendix A.
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(8), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401(7), (9), and (10), F.A.C. and permit AO17-203050]
{Permitting Note: Nonconforming stack test ports (located in a bend in the flue gas ductwork) have been used for CO and NO_X testing for years and are allowed for CO and NO_X testing only.}

D.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

D.12. Additional Compliance Test Requirements. During periods that this emissions unit is maintained solely for back-up service, stack tests for NO_X and CO, and VE tests shall be conducted once during the permit cycle the year before permit renewal, but prior to the permit application renewal due date, such that the test report can be submitted with the permit renewal application. If the emissions unit is operated for regular service during the permit cycle, a stack test for NO_X and CO, and a VE test shall be conducted within 90 days of startup. [Rule 62-297.310, F.A.C., and permit 0330042-017-AC]

Other Requirements

D.13. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

Subsection E. Emissions Unit 003

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
003	Power Boiler No. 6 - started up April 5, 1994

This is a 533 MMBtu/hr heat input natural gas fired boiler. NO_x emissions are controlled by a combination of flue gas recirculation and low NO_x burners. The boiler was constructed under permit AC17-223343/PSD-FL-200 and replaced Power Boilers 1 and 2. NO_x emissions are monitored with a CEM system.

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

EU No.	MMBtu/hr Heat Input	Fuel Type
003	533	Natural gas

[Rules 62-4.160(2), 62-210.200(PTE), and 62-296.405, F.A.C.; and, permits AC17-223343/PSD-FL-200 and 0330042-004-AC/PSD-FL-200(A)]

E.2. Methods of Operation - Fuels. The fuel that is allowed to be burned in this unit is natural gas. Daily fuel usage records shall be maintained and available for inspection by the Department. [Rule 62-213.410, F.A.C.; Applicant's request in Title V permit application received March 16, 2011 permit 0330042-004-AC/PSD-FL-200(A)]

E.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-4.160(2) and 62-210.200(PTE), F.A.C.]

E.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Combined Appendices, Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

E.5. Nitrogen Oxides. Nitrogen oxides shall not exceed 0.06 pounds per MMBtu of heat input based on a 24-hour average. [Permit AC17-223343/PSD-FL-200]

E.6. Carbon Monoxide. Carbon monoxide shall not exceed 0.1 pounds per MMBtu of heat input based on a 24-hour average. [Permit AC17-223343/PSD-FL-200]

E.7. Particular Matter. Not applicable; Natural gas usage (for PSD tracking purposes: 11.7 TPY projected potential emissions). [Permits AC17-223343/PSD-FL-200 and 0330042-004-AC/PSD-FL-200(A)]

E.8. Sulfur Dioxide. Not applicable; Natural gas usage (for PSD tracking purposes: 2.2 TPY projected potential emissions). [Permits AC17-223343/PSD-FL-200 and 0330042-004-AC/PSD-FL-200(A)]

E.9. Volatile Organic Compounds. Volatile organic compounds shall not exceed 0.01 pounds per MMBtu of heat input based on a 24 hour average. [Permit AC17-223343/PSD-FL-200]

E.10 Visible Emissions. Visible emissions shall not exceed 20% opacity except for one six minute period per hour of not more than 27% opacity. [Permit AC17-223343/PSD-FL-200]

Continuous Monitoring Requirements

E.11. Permittee shall calibrate, operate and maintain a continuous monitoring system for the measurement of nitrogen oxide. Performance specifications, location of monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of 40 CFR 51 Appendix P, adopted and incorporated by reference in Rule 62-204.800(2), F.A.C., and 40 CFR 60 Appendix B, adopted by reference in Rule 62-204.800(8)(e), F.A.C., for existing and new emissions units. [Rules 62-296.405(1)(f) and 62-204.800(8), F.A.C. and 40 CFR 60.48b]

Test Methods and Procedures

E.12. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
7D	Determination of Nitrogen Oxide Emissions from Stationary Sources - Alkaline-Permanganate/Ion Chromatographic Method - 40 CFR 60 Appendix A
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(8), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401(7)(d), (7)(e), (9), (10), and (25)(a), F.A.C., and permit AC17-223343/PSD-FL-200]

E.13. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

E.14. Compliance Tests Prior To Renewal. Compliance tests shall be performed for Nitrogen Oxide (NO_X) once during the permit cycle (every five years), the year before permit renewal, but prior to the permit application renewal due date, such that the test report can be submitted with the permit renewal application. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

E.15. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

Other Requirements

E.16. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
032	Smelt Dissolving Tank No. 1 - started up in June 1975
038	Smelt Dissolving Tank No. 2 - started up in June 1975

Each Smelt Dissolving Tank is rated to receive a maximum of 42,319 pounds per hour of molten smelt consisting primarily of sodium carbonate, sodium sulfide and sodium sulfate from the recovery boilers. The smelt is dissolved in weak wash to yield green liquor for the slaking process. Particulate matter and reduced sulfur emissions are controlled by a wet venturi scrubber manufactured by Air Pol. These emissions units are regulated under Rule 62-296.404, F.A.C., Kraft Pulp Mills and 40 CFR 63 subpart MM (MACT II), (Emission Standards for Chemical Recovery Sources).

Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity. The maximum allowable black liquor solids operating rates are as follows:

EU No.	LBs Virgin Black liquor solids/hr	Fuel Type
032	111,000	Black liquor solids
038	111,000	Black liquor solids

(Equivalent to burning 120,652 pounds per hour as-fired black liquor solids, and recovering 42,319 pounds per hour of molten smelt) for each smelt dissolving tank)
[Rules 62-4.160(2), 62-210.200(PTE), and 62-296.404, F.A.C.]

F.2. Methods of Operation. Black liquor solids are allowed to be burned in recovery Boilers # 1 & # 2. [Rule 62-213.410, F.A.C. and Applicant's request in Title V permit application received March 16, 2011]

F.3. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rules 62-4.160(20 and 62-210.200(PTE), F.A.C.]

F.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Combined Appendices, Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

F.5. Particulate Matter. Particulate matter from Smelt Dissolving Tank #1 shall not exceed 0.22 grain per dry standard cubic foot or 0.31 pounds per ton of black liquor solids fired. Particulate matter from Smelt Dissolving Tank #2 shall not exceed 0.18 grain per dry standard cubic foot or 0.32 pounds per ton of black liquor solids fired. [Rules 62-210.800(11), F.A.C. and 40 CFR 63.862]
{Permitting Note: Subpart MM limits the particulate matter to 0.20 pounds per ton of black liquor solids fired; however, the facility has requested a alternative permit limit in accordance with 40 CFR 63.862(a)(1)(ii)}

F.6. Total Reduced Sulfur. Total reduced sulfur from each unit shall not exceed 0.048 pounds per 3000 pounds of black liquor solids as hydrogen sulfide. [Rule 62-296.404(3)(d)1., F.A.C.]

F.7. Visible Emissions. Visible emissions shall not be greater than 20% opacity. If observed greater than 20% opacity by the Department, a special compliance test may be required to demonstrate compliance with the particulate matter mass emissions standard. [Rule 62-296.404(2)(b), F.A.C.]

Excess Emissions

F.8. Startup, Shutdown and Malfunction Plan. Permittee shall comply with all the applicable standards and requirements of 40 CFR 63.6(e) (Operation and Maintenance Requirements), and the facility's MACT I and II Startup, Shutdown and Malfunction Plan (SSM) attached and incorporated by reference. If this SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), 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 the revision of the plan. Any revision made to the SSM 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 in the SSM Plan for an affected source shall be deemed to fall within the permit shield. [Rules 62-210.800(11), F.A.C.; 40 CFR 63.6(e); and 40 CFR 63.866(a)]

Continuous Monitoring Requirements

F.11. Continuous Parameter Monitoring System (CPMS)
The weak wash scrubber flow CPMS shall be operated and maintained as follows:

EU ID	Description	PM Limitations	CPMS Limits	
			Min. Pressure Drop	Min. Scrubber Liquid Flow
EU 032	Smelt Dissolving Tank #1	PM < 0.22 gr/dscf (0.31 lb/ton BLS)	3.5 inches of water	135 gal/min
EU 038	Smelt Dissolving Tank #2	PM < 0.18 gr/dscf (0.32 lb/ton BLS)	3.5 inches of water	130 gal/min

Monitoring requirements and compliance shall be in accordance with 40 CFR 63 subpart MM. Monitoring records shall be maintained and available for inspection by the Department. The scrubber flow set points shall be re-evaluated during compliance testing and are subject to Department approval. [Rules 62-210.800(11); 62-296.404(3)(d)2., F.A.C.; and 40 CFR 63.864]

F.12. Total Reduced Sulfur. TRS compliance shall be demonstrated by maintaining the Continuous Parameter Monitoring System outlined above. The scrubber flow set points shall be re-evaluated during compliance testing and are subject to Department approval. [Rules 62-213.440(1) and 62-296.404(3)(d)1., F.A.C.]

F.13. 40 CFR 63 Subpart MM - NESHAP Requirements. See Subsection T, Common Conditions.

Test Methods and Procedures

F.14. Test Methods. Required tests shall be performed in accordance with the following reference methods:

5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
16	Semicontinuous Determination of Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A.

16A	Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique)-40 CFR 60 Appendix A.
16B	Determination of Total Reduced Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A.

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(8), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401(5), (9), (16), (16)(a), and (16)(b), F.A.C.]

F.15. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR of this permit. [Rule 62-297.310, F.A.C.]

F.15. Compliance Tests Prior To Renewal. Compliance tests shall be performed for Total Reduced Sulfur (TRS) once during the permit cycle (every five years), the year before permit renewal, but prior to the permit application renewal due date, such that the test report can be submitted with the permit renewal application. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limit. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

F.9. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

Other Requirements

F.10. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
028	Lime Kiln/Mud Dryer - started up November 14, 1972

The Lime Kiln has a maximum operating rate of 20.83 tons per hour of lime as CaO and is fueled by natural gas, with No. 4, No. 5 and No. 6 fuel oil as backup. The kiln also serves as a backup control device for the Non-Condensable Gas (NCG) system. Emissions are controlled by an electrostatic precipitator, which is vented in series to a modified packed column wet scrubber using NaOH as the scrubbing media. Sulfur dioxide emissions are controlled by the sulfur content of the fuel oil (maximum of 1% by weight) and maintaining a minimum scrubber pH of 7.5. Total reduced sulfur compliance is maintained by proper combustion and the scrubber. Total reduced sulfur emissions are monitored with a CEM system. This emissions unit is regulated under Rule 62-296.404, F.A.C. - Kraft Pulp Mills, and 40 CFR 63 subpart MM - Emission Standards for Chemical Recovery Sources.

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The maximum allowable operating rate is as follows:

EU No.	tons/hr
028	20.83

[Rules 62-4.160(2), 62-210.200(PTE), and 62-296.405, F.A.C.]

G.2. Methods of Operation
The fuels that are allowed to be burned in this unit/these units are:
(1) Natural gas, primary fuel
(2) No. 2, No. 4, No. 5, and No.6 fuel oil (maximum 1.0% sulfur content by weight)
Operation of the emissions unit while firing any fuel oil is for back-up service. Records of the sulfur content of the fuel oils shall be maintained and available for inspection by the Department. [Rule 62-213.410, F.A.C. and Applicant's request in Title V permit application received March 16, 2011]

G.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

G.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Combined Appendices, Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

G.5. NOx [No. 4, No. 5, and No. 6 Fuel Oil]. Nitrogen oxide shall not exceed 200 ppmvd at 10% O_2 (49.3 lbs/hr) based on a 24-hour average. [Permit AC17-223343/PSD-FL-200]

G.6. NOx [Natural Gas]. Nitrogen oxide shall not exceed 175 ppmvd at 10% O_2 (43.1 lbs/hr) based on a 24-hour average. [Permit AC17-223343/PSD-FL-200]

G.7. Carbon Monoxide. Carbon monoxide shall not exceed 45 ppmvd at 10% O_2 (6.75 lbs/hr) based on a 24-hour average. [Permit AC17-223343/PSD-FL-200]

G.8. Particulate Matter. Particulate matter emissions from this unit shall not exceed 0.030 grains per dry standard cubic foot corrected to 10 percent oxygen. [40 CFR 63.862(a)(1)(ii)]
{Permitting Note: 40 CFR 63 subpart MM limits the particulate matter to 0.064 gr/dscf; however, the facility has requested a alternative permit limit in accordance with 40 CFR 63.862(a)(1)(ii)}

G.9. Volatile Organic Compounds. Volatile organic compounds shall not exceed 104 ppmvd at 10% O_2 (as propane) (24.5 lbs/hr) based on a 24-hour average. [Permit AC17-223343/PSD-FL-200]

G.10. Total Reduced Sulfur. Total reduced sulfur shall not exceed 8 ppmvd at 10% oxygen (1.46 lbs/hr) based on a 12-hour average. [Permit AC17-223343/PSD-FL-200]

G.11. Sulfur Dioxide. Sulfur dioxide shall not exceed 6.49 pounds per hour. [Permit AC17-223343/PSD-FL-200]

G.12. Visible Emissions. Visible emissions shall be less than 20% opacity. [Permit AC17-223343/PSD-FL-200]

Monitoring of Operations

G.13. Sulfur Dioxide. Sulfur dioxide compliance shall be assured by maintaining a minimum scrubber pH of 7.5 based on a 12-hour average. The pH shall be continuously monitored and recorded. Records shall be maintained and available for inspection by the Department. For the purpose of periodic monitoring, continuous monitoring shall be considered 95% of emitting unit operating hours. [Rules 62-297.310, 62-4.160(2), and 62-213.440(1), F.A.C., and permit AC17-223343]

Continuous Monitoring Requirements

G.14. Total Reduced Sulfur Continuous Monitoring. See Subsection T, Common Conditions.

G.15. Total Reduced Sulfur Emissions. Total reduced sulfur emissions shall not be vented to the atmosphere at any point connected to or between the emissions unit and the control device except in the event of an emergency that presents a danger to life or property, or during those times when the control device is shut down for essential maintenance. A log of NCG ventings to the atmosphere shall be maintained and available for inspection by the Department upon request. The log shall include, but not limited to, the date and time, duration, cause, and corrective actions taken for each venting occurrence. In no event shall the cumulative venting time exceed ten days in any annual period. Total reduced sulfur releases shall be handled in accordance with the facility's NCG Contingency Plan attached and incorporated by reference into this permit. [Rule 62-296.404(3)(a)3., F.A.C. and permit 0330042-006-AC]

G.16. Continuous Parameter Monitoring System (CPMS). The minimum Lime Kiln/Mud Dryer scrubber CPMS shall be operated and maintained as follows:

			CPMS Limits		
EU No.	**Description**	**Limitation**	**Min. Prod. Rate**	**Max. Prod. Rate**	**Min. Scrubber Liquid Flow**
028	Lime Kiln	PM < 0.030 gr/dscf, corr. 10% O_2	2.61 tons of lime per hour as CaO	20.83 tons of lime per hour as CaO	1,151 gal/minute

(Note: minimum scrubber pH of 7.5 based on a 12-hour average)

Monitoring requirements and compliance shall be in accordance with 40 CFR 63 subpart MM. Monitoring records shall be maintained and available for inspection by the Department. The scrubber set points shall be re-evaluated during compliance testing and are subject to Department approval. [Rules 62-210.800(11), F.A.C. and 40 CFR 63.864]

G.17. Continuous Opacity Monitoring System (COMS). A COMS shall be operated and maintained in accordance with 40 CFR 63 subpart MM. [Rules 62-210.800(11), F.A.C. and 40 CFR 63.864]

Test Methods and Procedures

G.18. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
5	Determination of Particulate Emissions from Stationary Sources-40 CFR 60 Appendix A
6C	Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)-40 CFR 60 Appendix A.
7D	Determination of Nitrogen Oxide Emissions from Stationary Sources-Alkaline-Permanganate/Ion Chromatographic Method-40 CFR 60 Appendix A
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)-40 CFR 60 Appendix A
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources-40 CFR 60 Appendix A
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
16	Semicontinuous Determination of Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A
16A	Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique)-40 CFR 60 Appendix A
16B	Determination of Total Reduced Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(8), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401(5), (6)(c), (7)(d), (7)(e), (8), (9), (10), (16), (16)(a), (16)(b), and (25)(a), F.A.C. and permit AC17-223343/PSD-FL-200]

G.19. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR of this permit. All emissions tests shall be conducted once during each federal fiscal year (October 1 - September 30) while firing natural gas. [Rule 62-297.310, F.A.C.]

G.20. Additional Compliance Test Requirements. While firing natural gas: Stack tests for PM, NO_X, SO_2, CO, VOC and a VE test shall be conducted annually using natural gas as the fuel. While firing natural gas as the fuel, a stack test for TRS is required only once during the permit cycle, the year before permit renewal, but prior to the permit application renewal due date, such that the test report using fuel oil can be submitted with the permit renewal application.
While firing fuel oil: Stack tests for PM, NO_X, SO_2, CO, VOC and TRS, and a VE test shall be conducted using fuel oil as the fuel only once during the permit cycle, the year before permit renewal, but prior to the permit application renewal due date, such that the test report using fuel oil can be submitted with the permit renewal application. If the emissions unit is operated using any fuel oil for regular service during the permit cycle, a stack test for PM, NO_X, SO_2, CO, VOC and TRS, and a VE test shall be conducted using fuel oil within 90 days of startup using fuel oil for regular non-back-up service. [Rule 62-297.310, F.A.C., and permits AC17-223343 and 0330042-017-AC]

Recordkeeping and Reporting Requirements

G.21. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

G.22. Continuous Opacity Monitoring System (COMS) Records. Records of COMS readings shall be maintained in accordance with 40 CFR 63 subpart MM and made available for Department inspection. Records shall be maintained for a minimum of five years. [Rules 62-210.800(11), F.A.C. and 40 CFR 63.864]

Other Requirements

G.23. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

G.24. When routing non-condensable gases (NCG) to this unit for thermal destruction, the NCG and HAP emission streams shall be introduced with the primary fuel or into the flame zone. [Rules 62-210.800(11), F.A.C. and 40 CFR 63.443(d)(4)]

G.25. 40 CFR 63 Subpart MM - NESHAP Requirements. See Subsection T, Common Conditions.

G.26. Startup, Shutdown and Malfunction Plan. Permittee shall comply with all the applicable standards and requirements of 40 CFR 63.6(e) (Operation and Maintenance Requirements), and the facility's MACT I and II Startup, Shutdown and Malfunction Plan (SSM) attached and incorporated by reference. If this SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), 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 the revision of the plan. Any revision made to the SSM 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 in the SSM Plan for an affected source shall be deemed to fall within the permit shield. [Rules 62-210.800(11), F.A.C., 40 CFR 63.6(e), and 40 CFR 63.866(a)]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	Tall Oil Processing - started up November 14, 1972

A maximum of 22,500 pounds per hour of black liquor soap is treated with sulfuric acid to yield 11,400 pounds per hour of crude tall oil. Resulting TRS gases are vented through a packed scrubber and treated with white liquor. Total reduced sulfur emissions are controlled by maintaining 35 gallon per minute scrubber flow. This emissions unit is regulated under Rule 62-296.404, F.A.C. - Kraft Pulp Mills.

The maximum 22,500 pounds per hour of black liquor soap was requested by Permittee in an October 4, 2011 letter stating that before 1996, in permit AO17-181741, 22,500 pounds per hour of black liquor soap was the permitted rate but emission testing done at lower rates were used in subsequent permits.

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity. The maximum allowable operating rate shall be limited to 110 percent of the highest operating rate, expressed in pounds of black liquor soap per hour, at which emission testing demonstrates compliance with the applicable total reduced sulfur emission limit, or, a maximum of 22,500 pounds per hour of black liquor soap, whichever is lower. [Rules 62-4.160(2), 62-296.404 and 62-210.200(PTE), F.A.C.]

H.2. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

H.3. Total Reduced Sulfur. Total reduced sulfur shall not exceed 0.05 pounds per ton of crude tall oil produced based on a 12-hour average. [Rule 62-296.404(3)(b)1., F.A.C.]

Monitoring of Operations

H.4. Total Reduced Sulfur. TRS compliance shall be demonstrated with a minimum white liquor flow to the scrubber of 35 gallons per minute as a 12-hour average. The scrubber flow rate shall be monitored and recorded hourly. Records shall be maintained and available for inspection by the Department. [Rules 62-213.440(1) and 62-296.404(3)(b)1., F.A.C.]

Test Methods and Procedures

H.5. Test Methods. Required tests shall be performed in accordance with the following reference methods:

16	Semicontinuous Determination of Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A
16A	Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique)-40 CFR 60 Appendix A

16B	Determination of Total Reduced Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800(8), F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401(16), (16)(a), and (16)(b), F.A.C.]

H.6. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR of this permit. [Rule 62-297.310, F.A.C.]

H.7. Compliance Tests Prior To Renewal. Compliance tests shall be performed for Total Reduced Sulfur (TRS) once before permit renewal (every five years), but prior to the permit renewal application due date, such that the test report can be submitted with the permit renewal application. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limit. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

H.8. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

Other Requirements

H.9. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

Subsection I. Emissions Units 049

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
049	Tail Gas Scrubber, Chlorine Dioxide (ClO_2) Generator and ClO_2 Storage Tanks - started up October 21, 1992

The Chlorine Dioxide (ClO_2) Generator uses a R8/R10 process utilizing methanol, sulfuric acid, and sodium chlorate to generate chlorine dioxide. The system produces a maximum of 41.1 tons of ClO_2 per day. Emissions from the ClO_2 generator and three Storage Tanks are controlled by the white liquor scrubber (Tail Gas Scrubber) with a pH set point of 12. In the event the white liquor scrubber is not functional, the emissions from the storage tanks will be controlled by two chilled water scrubbers with a maximum temperature set point of 50 degrees Fahrenheit and a minimum flow rate of 25 gallons per minute. This emissions unit was permitted under Construction/PSD Permit AC17-223343/PSD-FL-200.

Essential Potential to Emit (PTE) Parameters

I.1. Permitted Capacity. The maximum allowable operating rate is as follows:

EU No.	Tons/day chlorine dioxide
049	41.1

[Rules 62-4.160(2), 62-210.200(PTE), and 62-296.404, F.A.C.]

I.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Monitoring of Operations

I.3. Chlorine and chlorine dioxide emissions from the ClO_2 generator and three storage tanks shall be controlled by the white liquor scrubber (tail gas scrubber) with a pH minimum set point of 12 based on a 12-hour average. The pH shall be continuously monitored and recorded. In the event the white liquor scrubber is not functional, the emissions from the storage tanks shall be controlled by two chilled water scrubbers with a maximum temperature set point of 50 degrees F and a minimum flow rate of 25 gallons per minute. The chilled water scrubber temperature shall be continuously monitored and recorded and the chilled water scrubber flow rate shall be monitored and recorded once per shift. Monitoring records shall be maintained and available for inspection by the Department. [Permit AC17-223343/PSD-FL-200]

Other Requirements

I.4. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
051	B Bleach Plant Line - started up October 21, 1992

Emissions from B-Line Bleach Plant are controlled by a Cl/ClO_2 scrubber. The scrubber uses white liquor to maintain a minimum pH of 10.0. This emission unit is regulated under 40 CFR 63 subpart S - National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.

The A-Line bleach plant was shutdown as a result of the Mill reconfiguration under permit 0330042-012-AC and the B-Line Bleach Plant was reconfigured from a hardwood/softwood pulping line to softwood only. The bleach plant operates at a reduced level since bleached pulp production decreased.

The old A-Line #4 and #6 high density tanks are being reused as a broke storage tank for the No. 5 Paper Machine and a high density storage tank for the bleached pulp for the B-Line, respectively. The batch digesters are now equipped with a turpentine recovery system for processing softwood. The O_2 delignification, brown stock washer systems, and bleach plant are now used to process softwood pulp. The A-Line Kamyr continuous digester was modified to allow for a greater softwood pulping rate. The diffusion washer and refiners were modified to improve pulp quality processed by No. 5 Paper Machine. The O_2 delignification and bleaching operations were removed, with some of the process units and tanks being reused. The secondary knotter, rejects drainer, brown stock decker, #1 post oxygen washer (POW), secondary knotter level tank, screen dilution tank, refined reject tank, and pine O_2 blow tank of the current A-Line O_2 delignification process were taken out of service and/or used for other operations. The #1 brown stock decker, screen dilution tank, and pine O_2 blow tank will be reused in future A-Line operations. The #1 POW was reconfigured to act as a second brown stock decker (#2), the pine O_2 blow tank now serves as a new screen feed tank, the press feed tank serves as a reject refiner feed tank, and the screen dilution tank serve as a cleaner dilution tank in the future. The A-Line bleach plant scrubber, E/O tower, E/O washer hood vent, and E/O seal tank will not be operated in the future. The mill will not be making modifications to the No. 5 Paper Machine authorized by permit 0330042-015-AC.

Essential Potential to Emit (PTE) Parameters

J.1. Permitted Capacity. The maximum allowable operating rate is as follows:

EU No.	Air dried bleached pulp tons/day
051	830*

*(equivalent to 747 oven dried bleached tons per day).
[Rules 62-4.160(2), and 62-210.200(PTE), F.A.C. and permits AC17-223343/PSD-FL-200, 0330042-004-AC/PSD-FL-200(A), and 0330042-011-AC]

J.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Continuous Monitoring Requirements

J.3 Continuous Monitoring System (CMS). The white liquor flow CMS shall be operated and maintained as follows:

B-Line Hardwood Bleach Plant (EU 051), Limit Chlorinated HAP < 10 ppm				
CMS Limits				
Large Fan*		1st Stage Scrubber recirc Pump Amps	2nd Stage Scrubber recirc Pump Amps	Scrubber pH
Amps - Not greater than 89	Zero Speed Switch*	Not less than 70	Not less than 49	Not less than 10

Changes based on 9/21/2011 Chlorinated HAP emission test.
The scrubber liquid pH, scrubber large fan amps and scrubber liquid pump amps shall be measured and recorded at least once every successive 15 minute period. The CMS shall include continuous recorders. All CMS limits are based on a three-hour average. Monitoring records shall be maintained and available for inspection by the Department. The CMS set points shall be re-evaluated during compliance testing and are subject to Department approval.

*A zero-speed switch may be used in the place of measuring amperage to monitor the large fan operation. The zero-speed switch shall be set so that an alarm results if the large fan's rotation speed is not within the high/low rotation speed range that indicates proper fan operation.
[Rules 62-210.800(11), F.A.C., 40 CFR 63.453 and requested by applicant (removal of A-Line bleach plant permit 0330042-012-AC)]
{Permitting note: Permittee requested and received approval from the EPA to use the alternate CMS operational parameters listed above.}

Test Methods and Procedures

J.4. Emissions Tests. See Combined Appendices, Appendix TR. [Rule 62-297.310, F.A.C.]

Other Requirements

J.5. Determination of Process Variables. See Combined Appendices, Appendix TR**.** [Rule 62-297.310(5), F.A.C.]

J.6. 40 CFR 63.440 - Applicability
Each owner or operator must comply with the requirements of 40 CFR 63 subpart A - General Provisions of this part, as indicated in Table 1 to this subpart (attached).

J.7. 40 CFR 63.445 - Standards for the bleaching system
(a) Each bleaching system that does not use any chlorine or chlorinated compounds for bleaching is exempt from the requirements of this section. Owners or operators of the following bleaching systems shall meet all the provisions of this section:

(1) Bleaching systems that use chlorine;
(2) Bleaching systems bleaching pulp from kraft, sulfite, or soda pulping processes that uses any chlorinated compounds; or
(3) Bleaching systems bleaching pulp from mechanical pulping processes using wood or from any process using secondary or non-wood fibers that use chlorine dioxide.

(b) The equipment at each bleaching stage, of the bleaching systems listed in paragraph (a) of this section, where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (c) of this section. The enclosures and closed-vent system shall meet the requirements specified in 40 CFR 63.450.

(c) The control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment specified in paragraph (b) of this section shall:

(1) Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight;

(2) Achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or

(3) Achieve a treatment device outlet mass emission rate of 0.001 kg of total chlorinated HAP mass per megagram (0.002 pounds per ton) of ODP.

(d) The owner or operator of each bleaching system subject to paragraph (a)(2) of this section shall comply with paragraph (d)(1) or (d)(2) of this section to reduce chloroform air emissions to the atmosphere, except the owner or operator of each bleaching system complying with extended compliance under 40 CFR 63.440(d)(3)(ii) shall comply with paragraph (d)(1) of this section.

(1) Comply with the following applicable effluent limitation guidelines and standards specified in 40 CFR 430:

(i) Dissolving-grade kraft bleaching systems and lines 40 CFR 430.14 through 430.17;

(ii) Paper-grade kraft and soda bleaching systems and lines, 40 CFR 430.24(a)(1) and (e), and 40 CFR 430.26 (a) and (c);

(iii) Dissolving-grade sulfite bleaching systems and lines, 40 CFR 430.44 through 430.47; or

(iv) Paper-grade sulfite bleaching systems and lines, 40 CFR 430.54 (a) and (c), and 430.56 (a) and (c).

(2) Use no hypochlorite or chlorine for bleaching in the bleaching system or line.

J.8. 40 CFR 63.450 - Standards for enclosures and closed-vent systems. See Subsection T, Common Conditions.

J.9. 40 CFR 63.453 - Monitoring Requirements. See Subsection T, Common Conditions.

J.10. 40 CFR 63.454 - Recordkeeping Requirements. See Subsection T, Common Conditions.

J.11. 40 CFR 63.455 - Reporting Requirements. See Subsection T, Common Conditions.

J.12. 40 CFR 63.457 - Test methods and procedures. See Subsection T, Common Conditions.

J.13. Startup, Shutdown and Malfunction Plan. Permittee shall comply with all the applicable standards and requirements of 40 CFR 63.6(e) (Operation and Maintenance Requirements), and the facility's MACT I and II Startup, Shutdown and Malfunction Plan (SSM) attached and incorporated by reference. If this SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), 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 the revision of the plan. Any revision made to the SSM Plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a 40 CFR 70 or 71 permit revision. Moreover, none of the procedures specified in the SSM Plan for an affected source shall be deemed to fall within the permit shield. [Rules 62-210.800(11), F.A.C.; 40 CFR 63.6(e); and 40 CFR 63.455]

J.14. PSD - Actual Emissions Reporting This emissions unit is subject to the PSD Avoidance Recordkeeping and Reporting Requirements of Subsection T, Common Conditions. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C., and 0330042-015-AC]

Subsection K. Emissions Units 055

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
055	No. 1 & 2 Multiple Effect Evaporator (MEE) Set

The evaporators are used to concentrate the weak black liquor prior to firing in the recovery furnaces. The off-gas from the evaporators vent into the NCG system and combust in the thermal oxidizer or lime kiln as a backup. This emissions unit is regulated by 40 CFR 63 subpart S - National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.

Essential Potential to Emit (PTE) Parameters

K.1. Capacity
The following operational conditions are applicable to both the No. 1 and No. 2 MEE sets:

1) When the Nos. 1 and 2 MEE sets are operated simultaneously, the maximum operating rate shall be 278,000 lbs/hr dry Black Liquor Solids (BLS) as a total combined input to them (24-hour average) and determined by measuring solids and flow into each evaporator set;
2) When only one MEE set is in operation, the maximum operating rate shall be 181,000 lbs/hr dry BLS and determined by measuring solids and flow into that evaporator set (24-hour average).

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C., and permit AC17-223343/PSD-FL-200]

K.2. Methods of Operation. The off-gas from the evaporators shall be vented into the Non-Condensable Gas (NCG) Handling System and combusted in the thermal oxidizer or lime kiln. [Rule 62-4.160(2), F.A.C., and permit AC17-223343/PSD-FL-200]

K.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

K.4. Total Reduced Sulfur Emissions. Total reduced sulfur emissions shall not be vented to the atmosphere at any point connected to or between the emissions unit and the control device except in the event of an emergency that presents a danger to life or property, or during those times when the control device is shut down for essential maintenance. A log of NCG ventings to the atmosphere shall be maintained and available for inspection by the Department upon request. The log shall include, but not limited to, the date and time, duration, cause, and corrective actions taken for each venting occurrence. In no event shall the cumulative venting time exceed 10 days in any annual period. Total reduced sulfur releases shall be handled in accordance with the facility's NCG Contingency Plan, incorporated by reference into this permit. [Rule 62-296.404(3)(a)3., F.A.C.]

Other Requirements

K.5. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

Subsection L. Emissions Unit 067

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
067	Thermal Oxidizer - started up December 11, 2001

The thermal oxidizer is the primary control device for MACT regulated non-condensable gases. The lime kiln/mud dryer will serve as the back-up control system. The thermal oxidizer is fired by natural gas and has an estimated maximum incineration rate of 1,500 pounds per hour as methanol loading of the stripper off gas, and is equipped with a waste heat recovery system. This emissions unit was first permitted in permit 0330042-006-AC, issued on March 1, 2001. The system is designed to reduce HAP emissions to 20 ppm at 10% oxygen as required by the MACT (40 CFR 63 subpart S). SO_2 emissions are controlled by an SO_2 scrubber with mist eliminator. The system also uses candle filters to reduce particulate matter and sulfuric acid mist emissions. Staged combustion is used to minimize nitrogen oxide emissions. This emission unit is regulated under 40 CFR 63 subpart S (Cluster Rule/MACT I) - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry, 40 CFR 60 subpart BB - Standards of Performance for Kraft Pulp Mills; and Rules 62-296.404, Kraft Pulp Mills and 62-296.401, F.A.C., Incinerators.

Essential Potential to Emit (PTE) Parameters

L.1. Methods of Operation - (i.e., Fuels). The emissions unit shall utilize natural gas only as a supplemental fuel. [Rules 62-4.160(2) and 62-213.440(1), F.A.C., and permit 0330042-006-AC]

L.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

L.3. Particulate Matter. Particulate matter emissions shall not exceed 2.0 pound per hour. [Permit 0330042-012-AC]

L.4. Particulate Matter less than 10 microns (PM10). PM 10 emissions shall not exceed 2.0 pound per hour. [Permit 0330042-012-AC]

L.5. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 5.7 pounds per hour. [Permit 0330042-006-AC]

L.6. Total Reduced Sulfur. Total reduced sulfur emissions shall not exceed 0.5 pounds per hour. [Permit 0330042-006-AC]

L.7. Sulfuric Acid Mist (H_2SO_4). Sulfuric acid mist emissions shall not exceed 1.4 pounds per hour. [Permit 0330042-012-AC]

L.8. Nitrogen Oxide. Nitrogen oxide emissions shall not exceed 15.6 pounds per hour. [Permit 0330042-012-AC]

L.9. Carbon Monoxide. Carbon monoxide emissions shall not exceed 6.8 pounds per hour. [Permit 0330042-006-AC]

L.10. Volatile Organic Compounds. Volatile organic compound emissions shall not exceed 1.1 pounds per hour. [Permit 0330042-006-AC]

L.11. Visible Emissions. Visible emissions shall not exceed 5% opacity except for up to 20% for one 3-minute period during any hour. [Rule 62-296.401(1)(a), F.A.C., and permit 0330042-006-AC]

L.12. Total HAP emissions from the Mill equipment regulated under 40 CFR 63 subpart S shall:
(1) Reduce total HAP emissions by 98 percent or more by weight; or
(2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or
(3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871° C (1600° F) and a minimum residence time of 0.75 seconds.
[40 CFR 63.443(d)(1), (2) and (3) and permit 0330042-006-AC]

Monitoring of Operations

L.13.a. Total Reduced Sulfur. TRS gases that are collected and transported to the thermal oxidizer for incineration shall be subject to a minimum of 1,200 degrees F for at least 0.5 seconds. Temperature shall be monitored and recorded continuously, and the records made available for Department inspection. The temperature devices shall be certified by the manufacturer to be accurate to within ±1 percent of the temperature being measured. [Rule 62-296.404(3)(a)(1), 62-204.800(8), F.A.C., 40 CFR 60.283(a)(1)(iii), 40 CFR 60.284(b)(1) and permit 0330042-006-AC]

L.13.b. Total Reduced Sulfur Emissions. Total reduced sulfur emissions shall not be vented to the atmosphere at any point connected to or between the emissions unit and the control device except in the event of an emergency that presents a danger to life or property, or during those times when the control device is shut down for essential maintenance. A log of NCG ventings to the atmosphere shall be maintained and available for inspection by the Department upon request. The log shall include, but not limited to, the date and time, duration, cause, and corrective actions taken for each venting occurrence. In no event shall the cumulative venting time exceed ten days in any annual period. Total reduced sulfur releases shall be handled in accordance with the facility's NCG Contingency Plan attached and incorporated by reference into this permit. [Rule 62-296.404(3)(a)3., F.A.C., and permit 0330042-006-AC]

L.14. Sulfur Dioxide. Sulfur dioxide compliance shall be assured by maintaining a minimum scrubber pH of 9.9 based on a 12 hour rolling average. The pH shall be continuously monitored and recorded. Records shall be maintained and available for inspection by the Department. For the purpose of periodic monitoring, continuous monitoring shall be considered 95% of emitting unit operating hours. [Rule 62-213.440(4), F.A.C., and permit 0330042-006-AC]

L.15. Particulate matter, PM10, visible emissions and sulfuric acid mist. Particulate matter, PM10, visible emissions and sulfuric acid mist compliance shall be assured by maintaining a minimum pressure differential (ΔP) across the candle filters of 1.5 inches of water based on a 12-hour rolling average. The ΔP shall be shall be continuously monitored and recorded. Records shall be maintained and available for inspection by the Department. For the purpose of periodic monitoring, continuous monitoring shall be considered 95% of emitting unit operating hours. [Rule 62-213.440(4), F.A.C., and permit 0330042-006-AC]

L.16. Continuous Monitoring System (CMS). A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs. The thermal oxidizer shall be operated at a minimum temperature of 1,451 degrees Fahrenheit based on a three-hour rolling average. The temperature shall be measured and recorded at least once every successive 15-

minute period. Monitoring records shall be maintained and available for inspection by the Department. The temperature set point shall be re-evaluated during compliance testing and is subject to Department approval. [40 CFR 63.453]

L.17. This emissions unit is subject to the Compliance Assurance Monitoring (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. [Rules 62-204.800(12) and 62-213.440(1)(b)1.a., F.A.C.; 40 CFR 64]

Test Methods and Procedures

L.18 Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
5	Determination of Particulate Emissions from Stationary Sources-40 CFR 60 Appendix A
6C	Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)-40 CFR 60 Appendix A.
7D	Determination of Nitrogen Oxide Emissions from Stationary Sources-Alkaline-Permanganate/Ion Chromatographic Method -40 CFR 60 Appendix A
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)-40 CFR 60 Appendix A
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources-40 CFR 60 Appendix A
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
16	Semicontinuous Determination of Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A
16A	Determination of Total Reduced Sulfur Emissions from Stationary Sources (Impinger Technique)-40 CFR 60 Appendix A
16B	Determination of Total Reduced Sulfur Emissions from Stationary Sources-40 CFR 60 Appendix A
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in 40 CFR 60 Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-297.401(5), (6)(c), (7)(d), (7)(e), (8), (9), (10), (16), (16)(a), (16)(b), and (25)(a), F.A.C.]

L.19. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Combined Appendices, Appendix TR of this permit. [Rule 62-297.310, F.A.C.]

L.20. Compliance Tests Prior To Renewal. Compliance tests shall be performed for Total Reduced Sulfur (TRS) once before permit renewal, (every five years), but prior to the permit renewal application due date, such that the test report can be submitted with the permit renewal application. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limit. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

L.21. Quarterly Emission Reports. See Combined Appendices, Appendix RR. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

Other Requirements

L.22. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

L.23. PSD - Actual Emissions Reporting This emissions unit is subject to the PSD Avoidance Recordkeeping and Reporting Requirements of Subsection T, Common Conditions. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C., and 0330042-015-AC]

Subsection M. Emissions Unit 046

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
046	Lime Slaker - started up in November 1986

Lime and green liquor react to yield white liquor and lime mud. Particulate emissions are controlled by four water showers in a scrubber manufactured by Dorr-Oliver. This emissions unit is regulated under Rules 62-296.404, F.A.C., Kraft Pulp Mills.

Permittee requested in a letter dated November 9, 2011, to remove the emissions testing requirements for the Lime Slaker, referencing a letter from FDEP dated November 15, 2005.

Essential Potential to Emit (PTE) Parameters

M.1. Permitted Capacity. The maximum allowable operating rate is 20.8 Tons of lime as CaO added to green liquor per hour per hour. [Rules 62-4.160(2), and 62-210.200(PTE), F.A.C.]

M.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

M.3. Lime Slaker Wet Scrubber A minimum water flow rate to the wet scrubber of 40 gallons per minute shall be maintained for reasonable assurance of compliance with the particulate emission limit. [Rule 62-213.440(1), F.A.C., letter of November 15, 2011and permit AO17-215911]

Emission Limitations and Standards

Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.

M.4. Particulate Matter. Particulate matter shall not exceed 1.59 pounds per hour. [Permit AO17-215911]

M.5. Visible Emissions. Visible emissions shall not be greater than 20% opacity. If observed greater than 20% opacity by the Department, a special compliance test may be required to demonstrate compliance with the particulate matter mass emissions standard. [Rule 62-296.404(2)(b), F.A.C.]

Test Methods and Procedures

M.6. Visible Emissions. The test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-296.404(4)(b), and 62-297.401, F.A.C.]

Excess Emissions

M.7. Excess Emissions Allowed. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

M.8. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

M.9. Lime Slaker Wet Scrubber Water Flow The scrubber water flow shall be monitored and recorded. The flow rate shall be logged once per shift. Records shall be maintained and available for inspection by the Department.
[Rule 62-213.440(1), F.A.C., and permit AO17-215911]

Continuous Monitoring Requirements

M.10. This emissions unit is subject to the Compliance Assurance Monitoring (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. [Rules 62-204.800(12) and 62-213.440(1)(b)1.a., F.A.C., and 40 CFR 64]

Other Requirements

M.11. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
044	Dry Additives, Starch Receiving and Storage - started up February 1, 1986

Dry additives are received in bags and are batch handled in a variety of make-down systems. Particulate emissions are controlled by a rotating wet scrubber manufactured by American Air Filter, model W size 12 Roto-Clone. Also, starch is pneumatically loaded from rail cars or trucks to a storage silo. The maximum designed operating rate is 500 pounds of starch loaded to silo per minute. Particulate emissions are controlled by a baghouse filter manufactured by Fuller Company. The alkaline conversion process consists of a starch silo and clay silo. Each unit has a separate baghouse to control emissions. The maximum designed operating rate is 1,500 pounds of starch loaded to silo per minute and 1,500 pounds of clay loaded to silo per minute. This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.

Permitting Note: Emissions Units 039, Coal Crushing, and 040, Coal Handling used to be grouped with EU 044 because they had the same opacity limitations and standards. They have been redesignated as Insignificant Emissions Units due to "as-received" coal being already sized to specification. This has greatly reduced coal crushing, now in a fully-enclosed building, to a current operating time of two hours per day, 350 days per year. The resulting calculated emissions of 0.152 and 0.2172 tons per year are below the permitting thresholds of five tons per year for PM and PM_{10} specified in Rule 62-213.430(6)(b)(3), F.A.C.

Essential Potential to Emit (PTE) Parameters

N.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time is based on the specified averaging time of the applicable test method.

N.2. Visible Emissions. Visible emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C. and permits AC17-31400, AC17-31397 and AC17-111195]

Excess Emissions

N.3. Excess Emissions Allowed. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

N.4. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

N.5. Emissions Tests. See Combined Appendices, Appendix TR. [Rule 62-297.310, F.A.C.]

N.6. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Visible emissions tests shall be conducted on the source judged

to have the highest emissions of the two starch silos, the dry additives make-down systems, and the clay silo. The visible emissions tests do not need to be conducted if the emissions unit is not operational. The visible emissions tests shall be conducted within 30 days of the emissions unit becoming operational. [Rule 62-297.401, F.A.C.] *{Permitting Note: Estimated maximum starch loading from rail cars and trucks to silo is 500 pounds per minute. Estimated maximum starch and clay loading to silo in the alkaline conversion process is 1,500 pounds per minute for each. The unit is currently not operating, but the facility wishes to keep it in the permit in the event it needs to use these dry additives again in the future.}*

Other Requirements

N.7. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

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The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
052	Woodyard Activities - initially permitted February 11, 1986

Pine is received as logs and/or chips by rail cars and/or trucks. The logs are debarked and chipped and the chips are classified through screens according to thickness. The chip handling system consists of one fines cyclone. Visible emissions from this system are limited to 5% opacity. The maximum feed rate of pine wood chips to the thickness screening system is 237 tons per hour. This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. The woodyard can process approximately 3,025 cords per day. Additional purchased softwood chips and logs will supplement current chip and softwood log operations.

The No. 1 cyclone separator and the air density separator are no longer used in the woodyard.

Permittee requested removal of the 3,944 tons per day limit in Specific Condition O.1. Capacity, to allow the Mill more flexibility in operating the woodyard on a daily basis without compromising the overall throughput which is indirectly limited by the Mill's pulp production capacity.

Essential Potential to Emit (PTE) Parameters

O.1. Capacity. The maximum allowable feed rate of pine wood chips to the pine chip thickness screening system shall not exceed an hourly maximum of 237 tons per hour. The weight shall be determined on an as-fed basis to the Kamyr Digester. [Rule 62-4.160(2), F.A.C. and permits AC17-145671 and AC17-254898]

O.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time is based on the specified averaging time of the applicable test method.

O.3. Visible Emissions. Visible emissions shall not exceed 5% opacity. [Rule 62-4.160(2), F.A.C., and permits AC17-145671 and AC17-254898]

O.4. Particulate Matter. For purposes of tracking PSD increment consumption the maximum allowable particulate mass emissions factor for the pine chip thickness screening system is 0.63 lb/hr from the fines cyclone. [Rule 62-4.160(2), F.A.C., and permits AC17-145671 and AC17-254898]
{Permitting Note: The No. 1 cyclone separator and the air density separator are no longer used in the woodyard so their PM limits are removed from this permit. Title V permit fees do not apply.}

Excess Emissions

O.5. Excess Emissions Allowed. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

O.6. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

O.7. Emissions Tests. See Combined Appendices, Appendix TR. [Rule 62-297.310, F.A.C.]

O.8. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

Monitoring of Operations

O.9. Monitoring of Operations

1. Records of the amounts of roundwood and purchased chips shall be maintained and available for inspection by the Department.
2. The fugitive particulate emissions shall be submitted in the annual operating report, using factors:
   a. 0.0324 tons per 1000 cords of roundwood, and
   b. 0.0125 tons per 1000 cords for purchased chips.
3. The annual projected roundwood and purchased chips to be processed through the woodyard are:

	(cords/year)
Roundwood	698,110
Purchases Chips	359,998
Total	1,058,108 or 1.058 MM cords/yr

Note: A roundwood cord weighs approximately 5,400 pounds.
A purchased chip cord weighs approximately 5,000 pounds.

4. Permittee shall monitor and record the following parameters whenever the pine chip thickness screening system is in operation:
   a. Hourly feed rate of pine chips to the pine chips thickness screening system. The hourly feed rate shall be monitored only during compliance testing, unless otherwise ordered by the Department.
   b. Daily feed rate of pine chips to the pine chips thickness screening system as measured by the Kamyr Digester feed rate.
   c. Daily hours of operation of the pine chips thickness screening system.
5. All monitoring and recording systems shall be regularly calibrated and maintained in proper working condition pursuant to written procedures and schedules based on the recommendations of the instrument manufacturer.
6. Fugitive and unconfined particulate matter emissions shall be minimized in accordance with the following operational parameters:
   a. Chips manufactured on site will be screened prior to storage.
   b. Chips will be screened once removed from storage prior to conveying to the digesters.
   c. Drop distance for chip storage stacker will be maintained to a minimum.
   d. All conveyor systems will be covered or enclosed.
   e. All roadways for ingress or egress will be paved.
   f. Reduced speeds for vehicular traffic.
   g. Use of liquid resinous adhesives or other liquid dust suppressants or wetting agents.
   h. Removal of PM from paved roads and/or other paved areas by vacuum cleaning or otherwise wetting prior to sweeping.
   i. Covering of trucks, trailers, front-end loaders and other vehicles or containers to prevent spillage of PM during transport.
   j. Use of mulch, hydroseeding, grassing, and or other vegetative ground cover on barren areas to prevent or reduce windblown PM.

[Rule 62-4.160(2), F.A.C., and permits AC17-145671, AC17-254898 and AC17-113553]

Other Requirements

O.10. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

O.11. PSD - Actual Emissions Reporting This emissions unit is subject to the PSD Avoidance Recordkeeping and Reporting Requirements of Subsection T, Common Conditions. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C., and 0330042-015-AC]

Subsection P. Emissions Unit 063

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
063	Low Volume High Concentration (LVHC) Non- Condensable Gas (NCG) Handling System - started up November 28, 1989

The NCG handling system collects non-condensed gases containing total reduced sulfur compounds. These gases are collected from twelve batch digesters processed through two blow tanks, a primary condenser and a secondary condenser; a Kamyr continuous digester processed through three flash tanks, a stripper reboiler, a secondary condenser, No. 2 condensate stripper; and two sets of multiple effect evaporators. Total reduced sulfur emissions are controlled by combustion in the Thermal Oxidizer or Lime Kiln as a backup. This emissions unit is regulated under 40 CFR 63 subpart S - National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. As part of permit 0330042-012-AC, methanol levels in the condensate are expected to be reduced, with the NCG load to the Thermal Oxidizer (EU 067) increasing slightly due to the greater production throughput. The No. 1 Steam Stripper remains inactive.

NOTE: The Kamyr Digester is sometimes referred to as the A-Line digester. This is not to be confused with the A-Line Bleach Plant, which no longer exists.

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

Essential Potential to Emit (PTE) Parameters

P.1. Capacity. The combined maximum operating rate of the Batch Digester System (B Line) and Kamyr Digester System (A Line) shall not exceed 694,373 ADTUP per year. For testing purposes, an anticipated daily maximum operating rate for the Batch digester is 892 ADTUP per day and an anticipated daily maximum operating rate for the Kamyr digester is 1,868.2 ADTUP per day. Both rates represent a peak short-term production rate that the Mill will be able to achieve and are referenced in this permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C., Requested by applicant]
{Permitting Note: This project was determined to avoid PSD based on the worst case baseline actual to projected actual emission analysis (either maximum A-line or maximum B-line). Although the Mill has the capability to produce a total of 694,373 ADTUP per year from the A-Line Kamyr digester, the worst-case projected actual emissions were based on maximum operating rates of 291,571 ADTUP per year for the Batch digester system (B-Line) or 493,628 ADTUP per year for the Kamyr digester system (A-Line).}

P.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Monitoring of Operations

P.3. The emissions from the batch digester system, Kamyr digester system, No. 2 condensate stripper and No. 1 and 2 multiple effective evaporator systems shall be collected and incinerated in the thermal oxidizer or lime kiln. [Rules 62-204.800(8) and 62-296.404(3)(a)1., F.A.C. Requested by applicant (Removal of No. 1 condensate stripper)]
{Permitting Note: The Mill reconfiguration reduces the amount of methanol in the collected condensate}

P.4. Low Volume High Concentration Gases (LVHC). LVHC gases shall be collected and transported to the thermal oxidizer or lime kiln for incineration. When firing LVHC gases in the thermal oxidizer, the system shall reduce total HAP emissions by 98 percent or more by weight; reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million (ppm) or less by volume, corrected to 10 percent oxygen on a dry basis; or subject the LVHC gases to a minimum temperature of 1,600ºF and a minimum residence time of 0.75 seconds. When firing LVHC gases in the lime kiln, the gases shall be introduced with the primary fuel or into the flame zone. Malfunctions shall be handled in accordance with the facility's NCG Contingency Plan attached to and made a part of this permit. [Rules 62-296.404(3)(a), F.A.C.; 62-210.800(11), F.A.C; and 40 CFR 63.443(d)(4)]
{Permitting Note: See Subsections G and L and Specific Condition for Total Reduced Sulfur (TRS) Emissions for additional requirements of the thermal oxidizer (EU No. 067) and lime kiln (EU No. 028).}

P.5. Total Reduced Sulfur (TRS) Emissions. Total reduced sulfur emissions shall not be vented to the atmosphere at any point connected to or between the emissions unit and the control device except in the event of an emergency that presents a danger to life or property, or during those times when the control device is shut down for essential maintenance. A log of NCG ventings to the atmosphere shall be maintained and available for inspection by the Department upon request. The log shall include, but not limited to, the date and time, duration, cause, and corrective actions taken for each venting occurrence. In no event shall the cumulative venting time exceed 10 days in any annual period. Total reduced sulfur releases shall be handled in accordance with the facility's NCG Contingency Plan, incorporated by reference into this permit. [Rule 62-296.404(3)(a)3., F.A.C.]

P.6. Emissions Tests. See Combined Appendices, Appendix TR. [Rule 62-297.310, F.A.C.]

Other Requirements

P.7. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

P.8. PSD - Actual Emissions Reporting This emissions unit is subject to the PSD Avoidance Recordkeeping and Reporting Requirements of Subsection T, Common Conditions. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C., and 0330042-015-AC]

Subsection Q. Emissions Unit 064

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
070	B-Line #1 Brown Stock Washing Line - started up January 1, 1970
071	B-Line #2 Brown Stock Washing Line -started up January 1, 1970
072	Diffusion Washer – started up January 1, 1970
073	B-Line O_2 Delignification – started up January 1, 1985

Two brown stock washers remove black liquor dissolved solids from pulp following the digesters, using minimal wash water. A diffusion washer further washes the pulp in a submerged environment. An O_2 delignification unit removes lignin from the pulp, using oxygen and alkali wash.

Based on information submitted by Permittee on May 18, 2011, the Department determined that the B-Line #1 Brown Stock Washing Line, the B-Line #2 Brown Stock Washing Line, the Diffusion Washer, and the B-Line O_2 Delignification emissions units were regulated emissions units subject to 40 CFR 63 subpart S - National Emission Standards for Hazardous Air Pollutants. These emissions units were previously listed in Appendix U as unregulated emissions units.

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

40 CFR Part 63 Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry

Q.1. <u>40 CFR 63.440 - Applicability</u>
(a) The provisions of this subpart apply to the owner or operator of processes that produce pulp, paper, or paperboard; that are located at a plant site that is a major source as defined in 40 CFR 63.2 of subpart A of this part; and that use the following processes and materials:
(1) Kraft, soda, sulfite, or semi-chemical pulping processes using wood; or
(2) - (3) *Not Applicable*
(b) The affected source to which the existing source provisions of this subpart apply is as follows:
(1) For the processes specified in paragraph (a)(1) of this section, the affected source is the total of all HAP emission points in the pulping and bleaching systems; or
(2) *Not Applicable*
(c) *Not Applicable*
(d) Each existing source shall achieve compliance no later than April 16, 2001, except as provided in paragraphs (d)(1) through (d)(3) of this section.
(1) Each kraft pulping system shall achieve compliance with the pulping system provisions of 40 CFR 63.443 for the equipment listed in 40 CFR 63.443(a)(1)(ii) through (a)(1)(v) as expeditiously as practicable, but in no event later than April 17, 2006 and the owners and operators shall establish dates, update dates, and report the dates for the milestones specified in 40 CFR 63.455(b).
(2) - (3) *Not Applicable*
(e) - (f) *Not Applicable*
(g) Each owner or operator of an affected source specified in paragraphs (a) through (c) of this section must comply with the requirements of 40 CFR subpart A - General Provisions of this part, as indicated in table 1.

Q.2. <u>40 CFR 63.443 - Standards for the pulping system at kraft, soda, and semi-chemical processes</u>

(a) The owner or operator of each pulping system using the kraft process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems, as specified in paragraphs (c) and (d) of this section.

(1) At existing affected sources, the total HAP emissions from the following equipment systems shall be controlled:

(i) *Not Applicable*

(ii) Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in paragraphs (a)(1)(ii)(A) or (ii)(B) or the combined rate specified in paragraph (a)(1)(ii)(C) of this section.

(A) Each knotter system with emissions of 0.05 kilograms or more of total HAP per megagram of ODP (0.1 pounds per ton).

(B) Each screen system with emissions of 0.10 kilograms or more of total HAP per megagram of ODP (0.2 pounds per ton).

(C) Each knotter and screen system with emissions of 0.15 kilograms or more of total HAP per megagram of ODP (0.3 pounds per ton).

(iii) Each pulp washing system;

(iv) Each decker system that:

(A) Uses any process water other than fresh water or paper machine white water; or

(B) Uses any process water with a total HAP concentration greater than 400 parts per million by weight; and

(v) *Not Applicable*

(b) - (e) *Not Applicabl*e

Q.3. <u>40 CFR 63.447 - Clean condensate alternative</u>

As an alternative to the requirements specified in 40 CFR 63.443(a)(1)(ii) through (a)(1)(v) for the control of HAP emissions from pulping systems using the kraft process, an owner or operator must demonstrate to the satisfaction of the Administrator, by meeting all the requirements below, that the total HAP emissions reductions achieved by this clean condensate alternative technology are equal to or greater than the total HAP emission reductions that would have been achieved by compliance with 40 CFR 63.443(a)(1)(ii) through (a)(1)(v).

(a) For the purposes of this section only the following additional definitions apply.

(1) *Clean condensate alternative affected source* means the total of all HAP emission points in the pulping, bleaching, causticizing, and papermaking systems (exclusive of HAP emissions attributable to additives to paper machines and HAP emission points in the LVHC system).

(2) *Causticizing system* means all equipment associated with converting sodium carbonate into active sodium hydroxide. The equipment includes smelt dissolving tanks, lime mud washers and storage tanks, white and mud liquor clarifiers and storage tanks, slakers, slaker grit washers, lime kilns, green liquor clarifiers and storage tanks, and dreg washers ending with the white liquor storage tanks prior to the digester system, and any other equipment serving the same function as those previously listed.

(3) *Papermaking system* means all equipment used to convert pulp into paper, paperboard, or market pulp, including the stock storage and preparation systems, the paper or paperboard machines, and the paper machine white water system, broke recovery systems, and the systems involved in calendering, drying, on-machine coating, slitting, winding, and cutting.

(b) Each owner or operator shall install and operate a clean condensate alternative technology with a continuous monitoring system to reduce total HAP emissions by treating and reducing HAP concentrations in the pulping process water used within the clean condensate alternative affected source.

(c) Each owner or operator shall calculate HAP emissions on a kilogram per megagram of ODP basis and measure HAP emissions according to the appropriate procedures contained in 40 CFR 63.457.

(d) Each owner or operator shall determine the baseline HAP emissions for each equipment system and the total of all equipment systems in the clean condensate alternative affected source based on the following:

(1) Process and air pollution control equipment installed and operating on December 17, 1993, and;

(2) Compliance with the following requirements that affect the level of HAP emissions from the clean condensate alternative affected source:

(i) The pulping process condensates requirements in 40 CFR 63.446;

(ii) The applicable effluent limitation guidelines and standards in 40 CFR 430 subparts A, B, D, and E; and

(iii) All other applicable requirements of local, State, or Federal agencies or statutes.

(e) Each owner or operator shall determine the following HAP emission reductions from the baseline HAP emissions determined in paragraph (d) of this section for each equipment system and the total of all equipment systems in the clean condensate alternative affected source:

(1) The HAP emission reduction occurring by complying with the requirements of 40 CFR 63.443(a)(1)(ii) through (a)(1)(v), and

(2) The HAP emissions reduction occurring by complying with the clean condensate alternative technology.

(f) For the purposes of all requirements in this section, each owner or operator may use as an alternative, individual equipment systems (instead of total of all equipment systems) within the clean condensate alternative affected source to determine emissions and reductions to demonstrate equal or greater than the reductions that would have been achieved by compliance with 40 CFR 63.443(a)(1)(ii) through (a)(1)(v).

(g) The initial and updates to the control strategy report specified in 40 CFR 63.455(b) shall include to the extent possible the following information:

(1) A detailed description of:

(i) The equipment systems and emission points that comprise the clean condensate alternative affected source;

(ii) The air pollution control technologies that would be used to meet the requirements of 40 CFR 63.443(a)(1)(ii) through (a)(1)(v); and

(iii) The clean condensate alternative technology to be used.

(2) Estimates and basis for the estimates of total HAP emissions and emission reductions to fulfill the requirements paragraphs (d), (e), and (f) of this section.

(h) Each owner or operator shall report to the Administrator by the applicable compliance date specified in 40 CFR 63.440(d) or (e) the rationale, calculations, test procedures, and data documentation used to demonstrate compliance with all the requirements of this section.

Q.4. PSD - Actual Emissions Reporting This emissions unit is subject to the PSD Avoidance Recordkeeping and Reporting Requirements of Subsection T, Common Conditions. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C., and 0330042-015-AC]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
065	No.2 Condensate Stripper - started up August 12, 2000

No. 2 Condensate Stripper utilizes a column and associated condensers to strip TRS compounds from condensate streams from various processes in the facility. The stripped TRS gases are routed to the Thermal Oxidizer or Lime Kiln/Mud Dryer as backup for combustion. This emissions unit is regulated by 40 CFR 63 subpart S and Rule 62-296.404, F.A.C.

No. 1 Condensate Stripper (EU 064) was shown as deactivated in permit application 0330042-016-AV.

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

Essential Potential to Emit (PTE) Parameters

R.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Monitoring of Operations

R.2. The off-gas from the No. 2 Condensate Stripper shall be vented into the Non-Condensable Gas (NCG) Handling System and combusted in the thermal oxidizer or lime kiln. [Permit 0330042-006-AC]

R.3. Total Reduced Sulfur Emissions. Total reduced sulfur emissions shall not be vented to the atmosphere at any point connected to or between the emissions unit and the control device except in the event of an emergency that presents a danger to life or property, or during those times when the control device is shut down for essential maintenance. A log of NCG ventings to the atmosphere shall be maintained and available for inspection by the Department upon request. The log shall include, but not limited to, the date and time, duration, cause, and corrective actions taken for each venting occurrence. In no event shall the cumulative venting time exceed 10 days in any annual period. Total reduced sulfur releases shall be handled in accordance with the facility's NCG Contingency Plan, incorporated by reference into this permit. [Rule 62-296.404(3)(a)3., F.A.C.]

Continuous Monitoring Requirements

R.4. Continuous Monitoring System (CMS). The condensate stripper CMS shall be operated and maintained as follows:

			CMS Limit
EU No.	**Description**	**Limits**	***Effective Steam Ratio**
065	No. 2 Steam Stripper	92% Methanol Removal Efficiency by Weight	17%

*Effective Steam to Condensate Ratio = [Feed Steam - Process Wastewater Feed Flow x (T1-T2)/1000]/Process Wastewater Feed Flow
Where:

Steam flows and process wastewater feed flows are given in pounds per hour,
T1 = stripper bottom temperature in degrees Fahrenheit,
T2 = process wastewater feed temperature in degrees Fahrenheit.

The effective steam to condensate ratio shall be measured and recorded at least once every successive 15-minute period. The CMS shall include a continuous recorder. All CMS limits are based on a three-hour average. Monitoring records shall be maintained and available for inspection by the Department. The set points shall be re-evaluated during permit renewal and revision, with changes subject to Department approval. [Rule 62-210.800(11), F.A.C., and 40 CFR 63.453]
{Permitting Note: Permittee requested and received approval from the EPA to use the alternate CMS operational parameters listed above.}

Other Requirements

R.5. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.].

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
069	Pulping System

The non-condensable gases (TRS/HAP/VOC) from the system are collected and combusted in the thermal oxidizer (primary NCG control system) or in the lime kiln (back-up NCG control system). This emissions unit is regulated by 40 CFR 63 subpart S - National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.

Based on information submitted by Permittee, the Department determined that the Pulping System emissions unit is a regulated emissions unit subject to 40 CFR 63 subpart S - National Emission Standards for Hazardous Air Pollutants. This emissions unit was previously listed in Appendix U as an unregulated emissions unit.

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

Test Methods and Procedures

S.1. Emissions Tests. See Combined Appendices, Appendix TR. [Rule 62-297.310, F.A.C.]

Other Requirements

S.2. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

40 CFR 63 Subpart S - National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry

S.3. 40 CFR 63.440 - Applicability
Each owner or operator must comply with the requirements of subpart A - General Provisions of this part, as indicated in Table 1 to this subpart (attached).

S.4. 40 CFR 63.443 - Standards for the pulping system at kraft, soda, and semi-chemical processes
(a) The owner or operator of each pulping system using the kraft process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems, as specified in paragraphs (c) and (d) of this section.

(1) At existing affected sources, the total HAP emissions from the following equipment systems shall be controlled:

(i) Each LVHC system;

(ii) Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in paragraphs (a)(1)(ii)(A) or (ii)(B) or the combined rate specified in paragraph (a)(1)(ii)(C) of this section.

(A) Each knotter system with emissions of 0.05 kilograms or more of total HAP per megagram of ODP (0.1 pounds per ton).

(B) Each screen system with emissions of 0.10 kilograms or more of total HAP per megagram of ODP (0.2 pounds per ton).

(C) Each knotter and screen system with emissions of 0.15 kilograms or more of total HAP per megagram of ODP (0.3 pounds per ton).

(iii) Each pulp washing system

(iv) Each decker system that:

(A) Uses any process water other than fresh water or paper machine white water; or

(B) Uses any process water with a total HAP concentration greater than 400 parts per million by weight; and

(v) Each oxygen delignification system.

(2) *Not Applicable*

(b) *Not Applicable*

(c) Equipment systems listed in paragraphs (a) and (b) of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (d) of this section. The enclosures and closed-vent system shall meet the requirements specified in 40 CFR 63.450.

(d) The control device used to reduce total HAP emissions from each equipment system listed in paragraphs (a) and (b) of this section shall:

(1) Reduce total HAP emissions by 98 percent or more by weight; or

(2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or

(3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871° C (1,600^{o} F) and a minimum residence time of 0.75 seconds; or

(4) Reduce total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone.

(e) Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and (d) provided that the 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 the following levels:

(1) One percent for control devices used to reduce the total HAP emissions from the LVHC system; and

(2) Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and

(3) Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

S.5. <u>40 CFR 63.446 - Standards for kraft pulping process condensates</u>

(a) The requirements of this section apply to owners or operators of kraft processes subject to the requirements of this subpart.

(b) The pulping process condensates from the following equipment systems shall be treated to meet the requirements specified in paragraphs (c), (d), and (e) of this section:

(1) Each digester system;

(2) Each turpentine recovery system;

(3) Each evaporator stage where weak liquor is introduced (feed stages) in the evaporator system;

(4) Each HVLC collection system; and

(5) Each LVHC collection system.

(c) One of the following combinations of HAP-containing pulping process condensates generated, produced, or associated with the equipment systems listed in paragraph (b) of this section shall be subject to the requirements of paragraphs (d) and (e) of this section:

(1) All pulping process condensates from the equipment systems specified in paragraphs (b)(1) through (b)(5) of this section.

(2) The combined pulping process condensates from the equipment systems specified in paragraphs (b)(4) and (b)(5) of this section, plus pulping process condensate stream(s) that in total contain at least 65 percent of the total HAP mass from the pulping process condensates from equipment systems listed in paragraphs (b)(1) through (b)(3) of this section.

(3) The pulping process condensates from equipment systems listed in paragraphs (b)(1) through (b)(5) of this section that in total contain a total HAP mass of 3.6 kilograms or more of total HAP per megagram (7.2 pounds per ton) of ODP for mills that do not perform bleaching or 5.5 kilograms or more of total HAP per megagram (11.1 pounds per ton) of ODP for mills that perform bleaching.

(d) The pulping process condensates from the equipment systems listed in paragraph (b) of this section shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified in paragraphs (d)(1) and (d)(2) of this section.

(1) Each closed collection system shall meet the individual drain system requirements specified in 40 CFR 63.960, 63.961, and 63.962 of subpart RR of this part, except for closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450, instead of in accordance with 40 CFR 63.693 as specified in 40 CFR 63.962 (a)(3)(ii), (b)(3)(ii)(A), and (b)(*5*)(iii); and

(2) If a condensate tank is used in the closed collection system, the tank shall meet the following requirements:

(i) The fixed roof and all openings (e.g., access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements in 40 CFR 63.450 and routed to a control device that meets the requirements in 40 CFR 63.443(d); and

(ii) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

(e) Each pulping process condensate from the equipment systems listed in paragraph (b) of this section shall be treated according to one of the following options:

(1) Recycle the pulping process condensate to an equipment system specified in 40 CFR 63.443(a) meeting the requirements specified in 40 CFR 63.443(c) and (d); or

(2) Discharge the pulping process condensate below the liquid surface of a biological treatment system meeting the requirement specified in paragraph (e)(3) of this section; or

(3) Treat the pulping process condensates to reduce or destroy the total HAP by at least 92 percent or more by weight; or

(4) At mills that do not perform bleaching, treat the pulping process condensates to remove 3.3 kilograms or more of total HAP per megagram (6.6 pounds per ton) of ODP, or achieve a total HAP concentration of 210 parts per million or less by weight at the outlet of the control device; or

(5) At mills that perform bleaching, treat the pulping process condensates to remove 5.1 kilograms or more of total HAP per megagram (10.2 pounds per ton) of ODP, or achieve a total HAP concentration of 330 parts per million or less by weight at the outlet of the control device.

(f) Each HAP removed from a pulping process condensate stream during treatment and handling under paragraphs (d) or (e) of this section, except for those treated according to paragraph (e)(2) of this section, shall be controlled as specified in 40 CFR 63.443(c) and (d).

(g) *Not Applicable*

(h) *Not Applicable*

(i) *Not Applicable*

S.6. <u>40 CFR 63.447 - Clean condensate alternative</u>

As an alternative to the requirements specified in 40 CFR 63.443(a)(1)(ii) through (a)(1)(v) for the control of HAP emissions from pulping systems using the kraft process, an owner or operator must demonstrate to the satisfaction of the Administrator, by meeting all the requirements below, that the total HAP emissions reductions achieved by this clean condensate alternative technology are equal to or greater than the total HAP emission reductions that would have been achieved by compliance with 40 CFR 63.443(a)(1)(ii) through (a)(1)(v).

(a) For the purposes of this section only the following additional definitions apply.

(1) *Clean condensate alternative affected source* means the total of all HAP emission points in the pulping, bleaching, causticizing, and papermaking systems (exclusive of HAP emissions attributable to additives to paper machines and HAP emission points in the LVHC system).

(2) *Causticizing system* means all equipment associated with converting sodium carbonate into active sodium hydroxide. The equipment includes smelt dissolving tanks, lime mud washers and storage tanks, white and mud liquor clarifiers and storage tanks, slakers, slaker grit washers, lime kilns, green liquor clarifiers and storage tanks, and dreg washers ending with the white liquor storage tanks prior to the digester system, and any other equipment serving the same function as those previously listed.
(3) *Papermaking system* means all equipment used to convert pulp into paper, paperboard, or market pulp, including the stock storage and preparation systems, the paper or paperboard machines, and the paper machine white water system, broke recovery systems, and the systems involved in calendering, drying, on-machine coating, slitting, winding, and cutting.

(b) Each owner or operator shall install and operate a clean condensate alternative technology with a continuous monitoring system to reduce total HAP emissions by treating and reducing HAP concentrations in the pulping process water used within the clean condensate alternative affected source.

(c) Each owner or operator shall calculate HAP emissions on a kilogram per megagram of ODP basis and measure HAP emissions according to the appropriate procedures contained in 40 CFR 63.457.

(d) Each owner or operator shall determine the baseline HAP emissions for each equipment system and the total of all equipment systems in the clean condensate alternative affected source based on the following:

(1) Process and air pollution control equipment installed and operating on December 17, 1993, and;
(2) Compliance with the following requirements that affect the level of HAP emissions from the clean condensate alternative affected source:
(i) The pulping process condensates requirements in 40 CFR 63.446;
(ii) The applicable effluent limitation guidelines and standards in 40 CFR 430 subparts A, B, D, and E; and
(iii) All other applicable requirements of local, State, or Federal agencies or statutes.

(e) Each owner or operator shall determine the following HAP emission reductions from the baseline HAP emissions determined in paragraph (d) of this section for each equipment system and the total of all equipment systems in the clean condensate alternative affected source:

(1) The HAP emission reduction occurring by complying with the requirements of 40 CFR 63.443(a)(1)(ii) through (a)(1)(v), and
(2) The HAP emissions reduction occurring by complying with the clean condensate alternative technology.

(f) For the purposes of all requirements in this section, each owner or operator may use as an alternative, individual equipment systems (instead of total of all equipment systems) within the clean condensate alternative affected source to determine emissions and reductions to demonstrate equal or greater than the reductions that would have been achieved by compliance with 40 CFR 63.443(a)(1)(ii) through (a)(1)(v).

(g) The initial and updates to the control strategy report specified in 40 CFR 63.455(b) shall include to the extent possible the following information:

(1) A detailed description of:
(i) The equipment systems and emission points that comprise the clean condensate alternative affected source;
(ii) The air pollution control technologies that would be used to meet the requirements of 40 CFR 63.443(a)(1)(ii) through (a)(1)(v); and
(iii) The clean condensate alternative technology to be used.
(2) Estimates and basis for the estimates of total HAP emissions and emission reductions to fulfill the requirements paragraphs (d), (e), and (f) of this section.

(h) Each owner or operator shall report to the Administrator by the applicable compliance date specified in 40 CFR 63.440(d) or (e) the rationale, calculations, test procedures, and data documentation used to demonstrate compliance with all the requirements of this section.

(i) Clean Condensate Alternative Plan. Permittee shall comply with all the applicable standards and requirements of 40 CFR 63.447 (Clean Condensate Alternative), and the facility's Clean Condensate Alternative Plan attached and incorporated by reference into this permit.

[40 CFR 63.6(e)]

S.7. 40 CFR 63.450 - Standards for enclosures and closed-vent systems. See Subsection T, Common Conditions.

S.8. 40 CFR 63.453 - Monitoring Requirements. See Subsection T, Common Conditions.

S.9. 40 CFR 63.454 - Recordkeeping Requirement. See Subsection T, Common Conditions.

S.10. 40 CFR 63.455 - Reporting Requirements. See Subsection T, Common Conditions.

S.11. 40 CFR 63.457 - Test methods and procedures. See Subsection T, Common Conditions.

S.12. Startup, Shutdown and Malfunction Plan. Permittee shall comply with all the applicable standards and requirements of 40 CFR 63.6(e) (Operation and Maintenance Requirements), and the facility's MACT I Startup, Shutdown and Malfunction Plan (SSM) attached and incorporated by reference. If this SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), 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 five years after the revision of the plan. Any revision made to the SSM Plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a 40 CFR 70 or 71 permit revision. Moreover, none of the procedures specified in the SSM Plan for an affected source shall be deemed to fall within the permit shield. [Rule 62-210.800(11), F.A.C; 40 CFR 63.6(e); and 40 CFR 63.455]

NESHAPS 40 CFR 63 Subpart RR - National Emission Standards for Individual Drain Systems

S.13. 40 CFR 63.962 - Standards

(a) 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 40 CFR 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:

(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 operated in accordance in accordance with the standards specified in 40 CFR 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.
(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.

S.14. 40 CFR 63.964 - Inspection and monitoring requirements
(a) Permittee shall inspect the individual drain system in accordance with the following requirements:
(1) The individual drain system shall be visually inspected by Permittee as follows to check for defects that could result in air emissions to the atmosphere.
(i) Permittee shall visually inspect each drain as follows:
(A) In the case when the drain is using a water seal to control air emissions, 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, 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) 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) 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.
(iv) 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.
(v) In the event that a defect is detected, Permittee shall repair the defect in accordance with the requirements of paragraph (b) of this section.
(vi) Permittee shall maintain a record of the inspection in accordance with the requirements specified in 40 CFR 63.965(a) of this subpart.
(2) Permittee shall inspect and monitor the closed-vent system and the control device in accordance with the requirements specified in 40 CFR 63.693 in 40 CFR 63 subpart DD - National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.
(b) Permittee shall repair all detected defects as follows:
(1) Permittee shall make first efforts at repair of the defect no later than five 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) Permittee shall maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 63.965(a)(3) of this subpart.

Test Methods and Procedures

S.15. Emissions Tests. See Combined Appendices, Appendix TR. [Rule 62-297.310, F.A.C.]

Other Requirements

S.16. Determination of Process Variables. See Combined Appendices, Appendix TR. [Rule 62-297.310(5), F.A.C.]

S.17. PSD - Actual Emissions Reporting This emissions unit is subject to the PSD Avoidance Recordkeeping and Reporting Requirements of Subsection T, Common Conditions. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C., and 0330042-015-AC]

Subsection T. Common Conditions

{Permitting Notes: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through S for applicability. Common Conditions that were included in this subsection in previous permits, but are now gone, are included in Attachment Appendices.}

T.1. Total Reduced Sulfur Continuous Emissions Monitoring Requirements. Permittee shall maintain a continuous monitoring system for monitoring total reduced sulfur (TRS) emissions. The TRS continuous emissions monitoring system shall be installed, calibrated, certified and operated 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 located, installed and certified pursuant to the provisions of 40 CFR 60 Appendix B, Performance Specification 2 and Performance Specification 3, and 40 CFR 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 section 3.2 of Performance Specification 5 is not adopted. For the purposes of compliance testing and certification of continuous emissions monitoring systems, 40 CFR 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 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 Rule 62-296.404(5)(b)1.d., F.A.C.

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

(i) A total reduced sulfur concentration of 30 ppm for the total reduced sulfur continuous emissions monitoring system on any new design direct-fired kraft recovery furnace that is not direct-fired, new design suspension-burning kraft recovery furnace, incinerator, digester system or multiple effect evaporator system.

(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, new design kraft recovery furnace that is not direct-fired, new design direct-fired suspension-burning kraft recovery furnace, cross recovery furnace, lime kiln or calciner.

(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.

[Rules 62-296.404(5) and 62-204.800(7), F.A.C.]

T.2. PSD Avoidance Recordkeeping and Reporting Requirements, Actual Emissions Reporting: Permit 0330042-015-AC was 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 ten 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 ten-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report may be submitted by electronic mail to nwdair@dep.state.fl.us. 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.

Following project 0330042-015-AC, the Department requires the annual reporting of actual emissions of volatile organic compounds (VOC), nitrogen oxides (NO_X), sulfur dioxide (SO_2), sulfuric acid mist (SAM or H_2SO_4), TRS, and particulate matter (PM/PM_{10}) from the following units:

EU I.D. No.	Reg/Unreg	EU Description
054	U	Kamyr Digester and Brown Stock Washers
061	U	A-Line Bleach Plant EO Washer
051	R	B-Line Bleach Plant Scrubber
067	R	Thermal Oxidizer
052	R	Woodyard Activities
050	U	A-Line Bleach Plant Scrubber
053	U	B-Line Batch Digesters and Brown Stock Washers
063	R	LVHC NCG Handling
066	U	Unregulated, the No. 3 and No. 5 Paper Machines, No. 4 Pulp Dryer, A-Line Diffusion Washing, and the A-Line O_2 Decker System
069	R	Pulping System
070	R	B-Line #1 Brown Stock Washing Line
071	R	B-Line #2 Brown Stock Washing Line
072	R	Diffusion Washer
073	R	B-Line O_2 Delignification

[Rules 62-212.300(1)(e) and 62-210.370, F.A.C., and 0330042-015-AC]

{Permitting Note: Project ONYX (permit 0330042-012-AC) began actual emissions reporting for PSD in 2006 for ten years. With changes in permit 0330042-015-AC, the actual emissions reporting for ten years is reset, with report 1 for emissions year 2011}

T.3 40 CFR 63.450 - Standards for enclosures and closed-vent systems
(a) Each enclosure and closed-vent system specified in 40 CFR 63.443(c), 63.444(b), and 63.445(b) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (b) through (d) of this section.
(b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in 40 CFR 63.457(e). 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.
(c) Each component of the closed-vent system used to comply with 40 CFR 63.443(c), 63.444(b), and 63.445(b) 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 40 CFR 63.457(d).
(d) 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, 63.444, or 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
(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.

T.4. 40 CFR 63.453 - Monitoring Requirements
(a) Each owner or operator subject to the standards specified in 40 CFR 63.443(c) and (d), 63.444(b) and (c), 63.445(b) and (c), 63.446(c), (d), and (e), 63.447(b) or 63.450(d), shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in 40 CFR 63.2 of this part) as specified in paragraphs (b) through (m) of this section, except as allowed in paragraph (m) of this section. The CMS shall include a continuous recorder.
(b) A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of 40 CFR 63.443(d)(1) through (d)(3). Owners and operators complying with the requirements in 40 CFR 63.443(d)(2) or (d)(3) shall monitor the parameter specified and for the temperature and concentration limits specified.
(c) A CMS shall be operated to measure and maintain the following parameters for each gas scrubber used to comply with the bleaching system requirements of 40 CFR 63.445(c).

(1) The pH or the oxidation/reduction potential of the gas scrubber effluent;
(2) The gas scrubber vent gas inlet flow rate; and
(3) The gas scrubber liquid influent flow rate.

(d) *Not Applicable*
(e) *Not Applicable*
(f) *Not Applicable*
(g) A CMS shall be operated to measure the following parameters for each steam stripper used to comply with the treatment requirements in 40 CFR 63.446(e)(3), (4), or (5):

(1) The process wastewater feed rate;
(2) The steam feed rate; and
(3) The process wastewater column feed temperature.

(h) As an option to the requirements specified in paragraph (g) of this section, a CMS shall be operated to measure the methanol outlet concentration to comply with the steam stripper outlet concentration requirement specified in 40 CFR 63.446(e)(4) or (e)(5).
(i) A CMS shall be operated to measure the appropriate parameters determined according to the procedures specified in paragraph (n) of this section to comply with the condensate applicability requirements specified in 40 CFR 63.446(c).
(j) *Not Applicable*
(k) Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the requirements specified in paragraphs (k)(1) through (k)(6) of this section.

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.
(2) Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected every 30 days 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 40 CFR 63.450(c) measured initially and annually by the procedures in 40 CFR 63.457(d).
(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e).
(5) The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least once every 30 days 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 paragraphs (k)(1) through (k)(5) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR 63.450, 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.

(l) Each pulping process condensate closed collection system used to comply with 40 CFR 63.446(d) shall be visually inspected every 30 days and shall comply with the inspection and monitoring requirements specified in 40 CFR 63.964 of subpart RR of this part, except for the closed-vent system and control device inspection and monitoring requirements specified in 40 CFR 63.964(a)(2) of subpart RR of this part, the closed-vent system and the control device shall meet the requirements specified in paragraphs (a) and (k) of this section.
(m) Each owner or operator using a control device, technique or an alternative parameter other than those specified in paragraphs (b) through (l) of this section shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements.
(n) To establish or reestablish, the value for each operating parameter required to be monitored under paragraphs (b) through (j), (l), and (m) of this section or to establish appropriate parameters for paragraphs (f), (i), and (m) of this section, each owner or operator shall use the following procedures:

(1) During the initial performance test required in 40 CFR 63.457(a) or any subsequent performance test, 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 selecting the monitoring parameters necessary to comply with paragraphs (f), (i), and (m) of this section; and
(4) 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.

(o) Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under paragraphs (a) through (n) of this section and established under this subpart. Except as provided in paragraph (p) of this section, 40 CFR 63.443 (e), or 63.446 (g), 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 this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

(p) *Not Applicable*

T.5. 40 CFR 63.454 - Recordkeeping Requirements

(a) 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 of subpart A of this part, as shown in Table 1, and the requirements specified in paragraphs (b) through (d) of this section for the monitoring parameters specified in 40 CFR 63.453.

(b) 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.

(c) *Not Applicable*

(d) The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in paragraph (a) of this section 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.

T.6. 40 CFR 63.455 - Reporting Requirements

(a) Each owner or operator of a source subject to this subpart shall comply with the reporting requirements of subpart A of this part as specified in Table 1 and all the following requirements in this section. The initial notification report specified under 40 CFR 63.9(b)(2) of subpart A of this part shall be submitted by April 15, 1999.

(b) *Not Applicable*

(c) *Not Applicable*

(d) *Not Applicable*

T.7. 40 CFR 63.457 - Test methods and procedures
(a) *Initial performance test*. An initial performance test is required for all emission sources subject to the limitations in 40 CFR 63.443, 63.444, 63.445, 63.446, and 63.447, except those controlled by a combustion device that is designed and operated as specified in 40 CFR 63.443(d)(3) or (d)(4).
(b) *Vent sampling port locations and gas stream properties*. For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in 40 CFR 63.443, 63.444, 63.445, and 63.447, each owner or operator shall comply with the applicable procedures in paragraphs (b)(1) through (b)(6) of this section.

(1) Method 1 or 1A of 40 CFR 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.

(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 40 CFR 60 Appendix A, as appropriate.
(4) The moisture content of the vent gas shall be measured using Method 4 of 40 CFR 60 Appendix A.
(5) To determine vent gas concentrations, the owner or operator shall collect a minimum of three samples 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 (b)(5)(ii)(A) through (b)(5)(ii)(K) of this section, Method 26A of 40 CFR 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.
(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 (b)(5)(ii)(E)(*1*) through (b)(5)(ii)(E)(*7*) of this section 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 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 a 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.

(*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. 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 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.

(G) The following calculation shall be performed to determine the corrected sampling flow rate:

$$S_C = S_U \frac{(BP - PW)(293)}{(760)(273 + t)}$$

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
t = Ambient temperature, °C

(H) The following calculation shall be performed to determine the moles of chlorine in the sample:

Cl_2 Moles = $1/8000\ (5\ T_N - T_A) \times N_{Thio}$
where:

T_N = Volume neutral titer, ml
T_A = Volume acid titer (total), ml
N_{Thio} = Normality of sodium thiosulfate titrant

(I) The following calculation shall be performed to determine the concentration of chlorine in the sample:

$$Cl_2 \text{ ppmv} = \frac{3005\ (5\ T_N - T_A) \times N_{Thio}}{S_C \times t_S}$$

where:

S_C = Corrected (dry standard) sampling flow rate, liters per minute
t_S = Time sampled, minutes
T_N = Volume neutral titer, ml
T_A = Volume acid titer (total), ml
N_{Thio} = Normality of sodium thiosulfate titrant

(J) The following calculation shall be performed to determine the moles of chlorine dioxide 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
N_{Thio} = Normality of sodium thiosulfate titrant

(K) The following calculation shall be performed to determine the concentration of chlorine dioxide in the sample:

$$ClO_2 \text{ ppmv} = \frac{6010\ (T_A - T_N) \times N_{Thio}}{S_C \times t_S}$$

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
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.

(c) *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 in 40 CFR 63.444, 63.446, and 63.447, the owner or operator shall comply with the following procedures:

(1) Samples shall be collected using the sampling procedures specified in Method 305 of 40 CFR 60 Appendix A;

(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;

(3) To determine liquid stream total HAP or methanol concentrations, the owner or operator shall collect a minimum of three samples that are representative of normal conditions and average the resulting pollutant concentrations using one of the following:

(i) Method 305 in Appendix A of this part, adjusted using the following equation:

$$\bar{C} = \sum_{i=1}^{n} C_i / fm_i$$

where***:***

$\bar{C}$ = 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 of subpart G.

n = Number of individual pollutants, i, summed to calculate total HAP.

(ii) Any other method that measures total HAP concentration that has been demonstrated to the Administrator's satisfaction.

(4) To determine soluble BOD5 in the effluent stream from a biological treatment unit used to comply with 40 CFR 63.446(e)(2) and 63.453(j), the owner or operator shall use Method 405.1, of 40 CFR 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 (c)(4) of this section. Dilution water shall be seeded with 1 milliliter of final effluent per liter of dilution water. Dilution ratios may require adjustment to reflect the lower oxygen demand of the filtered sample in comparison to the total BOD5. Three BOD bottles and different dilutions shall be used for each sample.

(d) *Detectable leak procedures*. To measure detectable leaks for closed-vent systems as specified in 40 CFR 63.450 or for pulping process wastewater collection systems as specified in 40 CFR 63.446(d)(2)(i), the owner or operator shall comply with the following:

(1) Method 21, of 40 CFR 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.

(e) *Negative pressure procedures*. To demonstrate negative pressure at process equipment enclosure openings as specified in 40 CFR 63.450(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.

(f) *HAP concentration measurements*. For purposes of complying with the requirements in 40 CFR 63.443, 63.444, and 63.447, 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.

(g) *Condensate HAP concentration measurement*. For purposes of complying with the kraft pulping condensate requirements in 40 CFR 63.446, the owner or operator shall measure the total HAP concentration as methanol except for the purposes of complying with the initial performance test specified in 40 CFR 63.457(a) for 40 CFR 63.446(e)(2) and as specified in 40 CFR 63.453 (j)(2)(ii).

(h) *Bleaching HAP concentration measurement*. For purposes of complying with the bleaching system requirements in 40 CFR 63.445, the owner or operator shall measure the total HAP concentration as the sum of all individual chlorinated HAP's or as chlorine.

(i) *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 specified in 40 CFR 63.443, 63.444, 63.445, and 63.447, 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, 2.494×10^{-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:

$$R = \frac{E_i - E_o (100)}{E_i}$$

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 section

(j) *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 40 CFR 63.446, the owner or operator shall use the following:

(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 paragraph (c) of this section
V_{ai} = Volumetric flow rate of liquid stream exiting the treatment process during each run i, cubic meters per hour, determined as specified in paragraph (c) of this section
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 paragraph (c) of this section
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 paragraph (c) of this section
n = Number of runs

(2) The mass of total HAP or methanol per megagram ODP shall be calculated using the following equation:

$$F = \frac{E}{P}$$

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 (j)(1) of this section
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:

$$R = \frac{E_b - E_a (100)}{E_b}$$

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 (j)(1) of this section
E_a = Mass flow rate of total HAP in the stream exiting the treatment process, kilograms per hour, as determined in paragraph (j)(1) of this section

(4) Compounds that meet the requirements specified in paragraphs (j)(4)(i) or (4)(ii) of this section 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.

(k) *Oxygen concentration correction procedures*. To demonstrate compliance with the total HAP concentration limit of 20 ppmv in 40 CFR 63.443(d)(2), the concentration measured using the methods specified in paragraph (b)(5) of this section shall be corrected to 10 percent oxygen using the following procedures:

(1) The emission rate correction factor and excess air integrated sampling and analysis procedures of Methods 3A or 3B of 40 CFR 60 Appendix A shall be used to determine the oxygen concentration. The samples shall be taken at the same time that the HAP samples are taken.

(2) The concentration corrected to 10 percent oxygen shall be computed using the following equation:

$$C_c = C_m \left(\frac{10.9}{20.9 - \% O_{2d}} \right)$$

where:
C_c = Concentration of total HAP corrected to 10 percent oxygen, dry basis, parts per million by volume
C_m = Concentration of total HAP dry basis, parts per million by volume, as specified in paragraph (b) of this section
$\%0_{2d}$ = Concentration of oxygen, dry basis, percent by volume

(l) *Biological treatment system percent reduction calculation*. To determine compliance with an open biological treatment system option specified in 40 CFR 63.446(e)(2) and the monitoring requirements specified in 40 CFR 63.453(j)(2), the percent reduction due to destruction in the biological treatment system shall be calculated using the following equation:

$$R = f_{bio} \times 100$$

where:
R = Destruction of total HAP or methanol in the biological treatment process, percent

f_{bio} = The fraction of total HAP or methanol removed in the biological treatment system. The site-specific biorate constants shall be determined using the procedures specified and as limited in Appendix C of 40 CFR 63.

(m) *Condensate segregation procedures*. The following procedures shall be used to demonstrate compliance with the condensate segregation requirements specified in 40 CFR 63.446(c).

(1) To demonstrate compliance with the percent mass requirements specified in 40 CFR 63.446(c)(1), the procedures specified in paragraphs (m)(1)(i) through (1)(iii) of this section shall be performed.

(i) Determine the total HAP mass of all condensates from each equipment system listed in 40 CFR 63.446(b)(1) through (b)(3) using the procedures specified in paragraphs (c) and (j) of this section.

(ii) Multiply the total HAP mass determine in paragraph (m)(1)(i) of this section by 0.65 to determine the target HAP mass for the high-HAP fraction condensate stream or streams.

(iii) Compliance with the segregation requirements specified in 40 CFR 63.446(c)(1) is demonstrated if the condensate stream or streams from each equipment system listed in 40 CFR 63.446(b)(1) through (b)(3) being treated as specified in 40 CFR 63.446(e) contain at least as much total HAP mass as the target total HAP mass determined in paragraph (m)(1)(ii) of this section.

(2) To demonstrate compliance with the percent mass requirements specified in 40 CFR 63.446(c)(2), the procedures specified in paragraphs (m)(2)(i) through (2)(ii) of this section shall be performed.

(i) Determine the total HAP mass contained in the high-HAP fraction condensates from each equipment system listed in 40 CFR 63.446(b)(1) through (b)(3) and the total condensates streams from the equipment systems listed in 40 CFR 63.446(b)(4) and (b)(5), using the procedures specified in paragraphs (c) and (j) of this section.

(ii) Compliance with the segregation requirements specified in 40 CFR 63.446(c)(2) is demonstrated if the total HAP mass determined in paragraph (m)(2)(i) of this section is equal to or greater than the appropriate mass requirements specified in 40 CFR 63.446(c)(2).

(n) *Biological treatment system monitoring sampling storage*. The inlet and outlet grab samples required to be collected in 40 CFR 63.453(j)(2) shall be stored at 4° C (40° F) to minimize the biodegradation of the organic compounds in the samples.

Appendix A to 40 CFR 63 - Test Method

Method 308 - Procedure for Determination of Methanol Emission from Stationary Sources

1.0 *Scope and Application*

1.1 Analyte. Methanol. Chemical Abstract Service (CAS) No. 67-56-1.

1.2 Applicability. This method applies to the measurement of methanol emissions from specified stationary sources.

2.0 *Summary of Method*. A gas sample is extracted from the sampling point in the stack. The methanol is collected in deionized distilled water and adsorbed on silica gel. The sample is returned to the laboratory where the methanol in the water fraction is separated from other organic compounds with a gas chromatograph (GC) and is then measured by a flame ionization detector (FID). The fraction adsorbed on silica gel is extracted with an aqueous solution of n-propanol and is then separated and measured by GC/FID.

3.0 *Definitions*. [Reserved]

4.0 *Interferences*. [Reserved]

5.0 *Safety*.

5.1 Disclaimer. This method may involve hazardous materials, operations, and equipment. This test method does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this

test method to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before performing this test method.
5.2 Methanol Characteristics. Methanol is flammable and a dangerous fire and explosion risk. It is moderately toxic by ingestion and inhalation.
6.0 *Equipment and Supplies.*
6.1 Sample Collection. The following items are required for sample collection:
6.1.1 Sampling Train. The sampling train is shown in Figure 308-1 and component parts are discussed below.
6.1.1.1 Probe. Teflon®, approximately 6-millimeter (mm) (0.24 inch) outside diameter.
6.1.1.2 Impinger. A 30-milliliter (ml) midget impinger. The impinger must be connected with leak-free glass connectors. Silicone grease may not be used to lubricate the connectors.
6.1.1.3 Adsorbent Tube. Glass tubes packed with the required amount of the specified adsorbent.
6.1.1.4 Valve. Needle valve, to regulate sample gas flow rate.
6.1.1.5 Pump. Leak-free diaphragm pump, or equivalent, to pull gas through the sampling train. Install a small surge tank between the pump and rate meter to eliminate the pulsation effect of the diaphragm pump on the rotameter.
6.1.1.6 Rate Meter. Rotameter, or equivalent, capable of measuring flow rate to within 2 percent of the selected flow rate of up to 1000 milliliter per minute (ml/min). Alternatively, the tester may use a critical orifice to set the flow rate.
6.1.1.7 Volume Meter. Dry gas meter (DGM), sufficiently accurate to measure the sample volume to within 2 percent, calibrated at the selected flow rate and conditions actually encountered during sampling, and equipped with a temperature sensor (dial thermometer, or equivalent) capable of measuring temperature accurately to within 3 C (5.4 F).
6.1.1.8 Barometer. Mercury (Hg), aneroid, or other barometer capable of measuring atmospheric pressure to within 2.5 mm (0.1 inch) Hg. See the NOTE in Method 5 (40 CFR 60 Appendix A), section 6.1.2.
6.1.1.9 Vacuum Gauge and Rotameter. At least 760-mm (30-inch) Hg gauge and 0- to 40-ml/min rotameter, to be used for leak-check of the sampling train.
6.2 Sample Recovery. The following items are required for sample recovery:
6.2.1 Wash Bottles. Polyethylene or glass, 500-ml, two.
6.2.2 Sample Vials. Glass, 40-ml, with Teflon®-lined septa, to store impinger samples (one per sample).
6.2.3 Graduated Cylinder. 100-ml size.
6.3 Analysis. The following are required for analysis:
6.3.1 Gas Chromatograph. GC with an FID, programmable temperature control, and heated liquid injection port.
6.3.2 Pump. Capable of pumping 100 ml/min. For flushing sample loop.
6.3.3 Flow Meter. To monitor accurately sample loop flow rate of 100 ml/min.
6.3.4 Regulators. Two-stage regulators used on gas cylinders for GC and for cylinder standards.
6.3.5 Recorder. To record, integrate, and store chromatograms.
6.3.6 Syringes. 1.0- and 10-microliter (l) size, calibrated, for injecting samples.
6.3.7 Tubing Fittings. Stainless steel, to plumb GC and gas cylinders.
6.3.8 Vials. Two 5.0-ml glass vials with screw caps fitted with Teflon®-lined septa for each sample.
6.3.9 Pipettes. Volumetric type, assorted sizes for preparing calibration standards.
6.3.10 Volumetric Flasks. Assorted sizes for preparing calibration standards.
6.3.11 Vials. Glass 40-ml with Teflon®-lined septa, to store calibration standards (one per standard).
7.0 *Reagents and Standards.*

NOTE: Unless otherwise indicated, all reagents must conform to the specifications established by the Committee on Analytical Reagents of the American Chemical Society. Where such specifications are not available, use the best available grade.

7.1 Sampling. The following are required for sampling:
7.1.1 Water. Deionized distilled to conform to the American Society for Testing and Materials (ASTM) Specification D 1193-77, Type 3. At the option of the analyst, the potassium permanganate ($KMnO_4$) test for

oxidizable organic matter may be omitted when high concentrations of organic matter are not expected to be present.
7.1.2 Silica Gel. Deactivated chromatographic grade 20/40 mesh silica gel packed in glass adsorbent tubes. The silica gel is packed in two sections. The front section contains 520 milligrams (mg) of silica gel, and the back section contains 260 mg.
7.2 Analysis. The following are required for analysis:
7.2.1 Water. Same as specified in section 7.1.1.
7.2.2 n-Propanol, 3 Percent. Mix 3 ml of n-propanol with 97 ml of water.
7.2.3 Methanol Stock Standard. Prepare a methanol stock standard by weighing 1 gram of methanol into a 100-ml volumetric flask. Dilute to 100 ml with water.
7.2.3.1 Methanol Working Standard. Prepare a methanol working standard by pipetting 1 ml of the methanol stock standard into a 100-ml volumetric flask. Dilute the solution to 100 ml with water.
7.2.3.2 Methanol Standards For Impinger Samples. Prepare a series of methanol standards by pipetting 1, 2, 5, 10, and 25 ml of methanol working standard solution respectively into five 50-ml volumetric flasks. Dilute the solutions to 50 ml with water. These standards will have 2, 4, 10, 20, and 50 µg/ml of methanol, respectively. After preparation, transfer the solutions to 40-ml glass vials capped with Teflon® septa and store the vials under refrigeration. Discard any excess solution.
7.2.3.3 Methanol Standards for Adsorbent Tube Samples. Prepare a series of methanol standards by first pipetting 10 ml of the methanol working standard into a 100-ml volumetric flask and diluting the contents to exactly 100 ml with 3 percent n-propanol solution. This standard will contain 10 µg/ml of methanol. Pipette 5, 15, and 25 ml of this standard, respectively, into four 50-ml volumetric flasks. Dilute each solution to 50 ml with 3 percent n-propanol solution. These standards will have 1, 3, and 5 µg/ml of methanol, respectively. Transfer all four standards into 40-ml glass vials capped with Teflon®-lined septa and store under refrigeration. Discard any excess solution.
7.2.4 GC Column. Capillary column, 30 meters (100 feet) long with an inside diameter (ID) of 0.53 mm (0.02 inch), coated with DB 624 to a film thickness of 3.0 micrometers, (µm) or an equivalent column. Alternatively, a 30-meter capillary column coated with polyethylene glycol to a film thickness of 1 µm such as AT-WAX or its equivalent.
7.2.5 Helium. Ultra high purity.
7.2.6 Hydrogen. Zero grade.
7.2.7 Oxygen. Zero grade.
8.0 *Procedure.*
8.1 Sampling. The following items are required for sampling:
8.1.1 Preparation of Collection Train. Measure 20 ml of water into the midget impinger. The adsorbent tube must contain 520 mg of silica gel in the front section and 260 mg of silica gel in the backup section. Assemble the train as shown in Figure 308-1. An optional, second impinger that is left empty may be placed in front of the water-containing impinger to act as a condensate trap. Place crushed ice and water around the impinger.
8.1.2 Leak Check. A leak check prior to the sampling run is optional; however, a leak check after the sampling run is mandatory. The leak-check procedure is as follows:
Temporarily attach a suitable (e.g., 0- to 40-ml/min) rotameter to the outlet of the DGM, and place a vacuum gauge at or near the probe inlet. Plug the probe inlet, pull a vacuum of at least 250 mm (10 inch) Hg, and note the flow rate as indicated by the rotameter. A leakage rate not in excess of 2 percent of the average sampling rate is acceptable.

8.1.1 Preparation of Collection Train. Measure 20 ml of water into the midget impinger. The adsorbent tube must contain 520 mg of silica gel in the front section and 260 mg of silica gel in the backup section. Assemble the train as shown in Figure 308-1. An optional, second impinger that is left empty may be placed in front of the water-containing impinger to act as a condensate trap. Place crushed ice and water around the impinger.
8.1.2 Leak Check. A leak check prior to the sampling run is optional; however, a leak check after the sampling run is mandatory. The leak-check procedure is as follows:
Temporarily attach a suitable (e.g., 0- to 40-ml/min) rotameter to the outlet of the DGM, and place a vacuum gauge at or near the probe inlet. Plug the probe inlet, pull a vacuum of at least 250 mm (10 inch) Hg, and note the flow rate as indicated by the rotameter. A leakage rate not in excess of 2 percent of the average sampling rate is acceptable.

NOTE: Carefully release the probe inlet plug before turning off the pump.

8.1.3 Sample Collection. Record the initial DGM reading and barometric pressure. To begin sampling, position the tip of the Teflon® tubing at the sampling point, connect the tubing to the impinger, and start the pump. Adjust the sample flow to a constant rate between 200 and 1000 ml/min as indicated by the rotameter. Maintain this constant rate (± 10 percent) during the entire sampling run. Take readings (DGM, temperatures at DGM and at impinger outlet, and rate meter) at least every 5 minutes. Add more ice during the run to keep the temperature of the gases leaving the last impinger at 20 C (68 F) or less. At the conclusion of each run, turn off the pump, remove the Teflon® tubing from the stack, and record the final readings. Conduct a leak check as in section 8.1.2. (This leak check is mandatory.) If a leak is found, void the test run or use procedures acceptable to the Administrator to adjust the sample volume for the leakage.
8.2 Sample Recovery. The following items are required for sample recovery:

Figure 308.1. Sampling train schematic

8.2.1 Impinger. Disconnect the impinger. Pour the contents of the midget impinger into a graduated cylinder. Rinse the midget impinger and the connecting tubes with water, and add the rinses to the graduated cylinder. Record the sample volume. Transfer the sample to a glass vial and cap with a Teflon® septum. Discard any excess sample. Place the samples in an ice chest for shipment to the laboratory.
8.2.2. Adsorbent Tubes. Seal the silica gel adsorbent tubes and place them in an ice chest for shipment to the laboratory.
9.0 *Quality Control.*
9.1 Miscellaneous Quality Control Measures. The following quality control measures are required:

Section	Quality control measure	Effect
8.1.2, 8.1.3, 10.1	Sampling equipment leak check and calibration	Ensures accurate measurement of sample volume
10.2	GC calibration	Ensures precision of GC analysis

9.2 Applicability. When the method is used to analyze samples to demonstrate compliance with a source emission regulation, an audit sample must be analyzed, subject to availability.
9.3 Audit Procedure. Analyze an audit sample with each set of compliance samples. Concurrently analyze the audit sample and a set of compliance samples in the same manner to evaluate the technique of the analyst and the standards preparation. The same analyst, analytical reagents, and analytical system shall be used both for the compliance samples and the EPA audit sample.
9.4 Audit Sample Availability. Audit samples will be supplied only to enforcement agencies for compliance tests. Audit samples may be obtained by writing:

Source Test Audit Coordinator (MD-77B)
Air Measurement Research Division
National Exposure Research Laboratory
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

or by calling the Source Test Audit Coordinator (STAC) at (919) 541-7834. The audit sample request must be made at least 30 days prior to the scheduled compliance sample analysis.
9.5 Audit Results. Calculate the audit sample concentration according to the calculation procedure provided in the audit instructions included with the audit sample. Fill in the audit sample concentration and the analyst's name on the audit response form included with the audit instructions. Send one copy to the EPA Regional Office or the appropriate enforcement agency and a second copy to the STAC. The EPA Regional Office or the appropriate enforcement agency will report the results of the audit to the laboratory being audited. Include this response with the results of the compliance samples in relevant reports to the EPA Regional Office or the appropriate enforcement agency.
10.0 *Calibration and Standardization.*
10.1 Metering System. The following items are required for the metering system:
10.1.1 Initial Calibration.
10.1.1.1 Before its initial use in the field, first leak-check the metering system (drying tube, needle valve, pump, rotameter, and DGM) as follows: Place a vacuum gauge at the inlet to the drying tube, and pull a vacuum of 250 mm (10 inch) Hg; plug or pinch off the outlet of the flow meter, and then turn off the pump. The vacuum shall remain stable for at least 30 seconds. Carefully release the vacuum gauge before releasing the flow meter end.
10.1.1.2 Next, remove the drying tube, and calibrate the metering system (at the sampling flow rate specified by the method) as follows: Connect an appropriately sized wet test meter (e.g., 1 liter per revolution (0.035 cubic feet per revolution)) to the inlet of the drying tube. Make three independent calibrations runs, using at least five revolutions of the DGM per run. Calculate the calibration factor, Y (wet test meter calibration volume divided by

the DGM volume, both volumes adjusted to the same reference temperature and pressure), for each run, and average the results. If any Y-value deviates by more than 2 percent from the average, the metering system is unacceptable for use. Otherwise, use the average as the calibration factor for subsequent test runs.
10.1.2 Posttest Calibration Check. After each field test series, conduct a calibration check as in section 10.1.1 above, except for the following variations: (a) the leak check is not to be conducted, (b) three, or more revolutions of the DGM may be used, and (c) only two independent runs need be made. If the calibration factor does not deviate by more than 5 percent from the initial calibration factor (determined in section 10.1.1), then the DGM volumes obtained during the test series are acceptable. If the calibration factor deviates by more than 5 percent, recalibrate the metering system as in section 10.1.1, and for the calculations, use the calibration factor (initial or recalibration) that yields the lower gas volume for each test run.
10.1.3 Temperature Sensors. Calibrate against mercury-in-glass thermometers.
10.1.4 Rotameter. The rotameter need not be calibrated, but should be cleaned and maintained according to the manufacturer's instruction.
10.1.5 Barometer. Calibrate against a mercury barometer.
10.2 Gas Chromatograph. The following procedures are required for the gas chromatograph:
10.2.1 Initial Calibration. Inject 1 µl of each of the standards prepared in sections 7.2.3.3 and 7.2.3.4 into the GC and record the response. Repeat the injections for each standard until two successive injections agree within 5 percent. Using the mean response for each calibration standard, prepare a linear least squares equation relating the response to the mass of methanol in the sample. Perform the calibration before analyzing each set of samples.
10.2.2 Continuing Calibration. At the beginning of each day, analyze the mid level calibration standard as described in section 10.5.1. The response from the daily analysis must agree with the response from the initial calibration within 10 percent. If it does not, the initial calibration must be repeated.
11.0 *Analytical Procedure*.
11.1 Gas Chromatograph Operating Conditions. The following operating conditions are required for the GC:
11.1.1 Injector. Configured for capillary column, splitless, 200° C (392° F).
11.1.2 Carrier. Helium at 10 ml/min.
11.1.3 Oven. Initially at 45° C for 3 minutes; then raise by 10° C to 70° C; then raise by 70° C/min to 200° C.
11.2 Impinger Sample. Inject 1 µl of the stored sample into the GC. Repeat the injection and average the results. If the sample response is above that of the highest calibration standard, either dilute the sample until it is in the measurement range of the calibration line or prepare additional calibration standards. If the sample response is below that of the lowest calibration standard, prepare additional calibration standards. If additional calibration standards are prepared, there shall be at least two that bracket the response of the sample. These standards should produce approximately 50 percent and 150 percent of the response of the sample.
11.3 Silica Gel Adsorbent Sample. The following items are required for the silica gel adsorbent samples:
11.3.1 Preparation of Samples. Extract the front and backup sections of the adsorbent tube separately. With a file, score the glass adsorbent tube in front of the first section of silica gel. Break the tube open. Remove and discard the glass wool. Transfer the first section of the silica gel to a 5-ml glass vial and stopper the vial. Remove the spacer between the first and second section of the adsorbent tube and discard it. Transfer the second section of silica gel to a separate 5-ml glass vial and stopper the vial.
11.3.2 Desorption of Samples. Add 3 ml of the 10 percent n-propanol solution to each of the stoppered vials and shake or vibrate the vials for 30 minutes.
11.3.3 Inject a 1-µl aliquot of the diluted sample from each vial into the GC. Repeat the injection and average the results. If the sample response is above that of the highest calibration standard, either dilute the sample until it is in the measurement range of the calibration line or prepare additional calibration standards. If the sample response is below that of the lowest calibration standard, prepare additional calibration standards. If additional calibration standards are prepared, there shall be at least two that bracket the response of the sample. These standards should produce approximately 50 percent and 150 percent of the response of the sample.

12.0 *Data Analysis and Calculations*.
12.1 Nomenclature.

C_{af} = Concentration of methanol in the front of the adsorbent tube, µg/ml
C_{ab} = Concentration of methanol in the back of the adsorbent tube, µg/ml
C_i = Concentration of methanol in the impinger portion of the sample train, µg/ml
E = Mass emission rate of methanol, µg/hr (lb/hr)
M_{tot} = Total mass of methanol collected in the sample train, µg
P_{bar} = Barometric pressure at the exit orifice of the DGM, mm Hg (in. Hg)
P_{std} = Standard absolute pressure, 760 mm Hg (29.92 in. Hg)
Q_{std} = Dry volumetric stack gas flow rate corrected to standard conditions, dscm/hr (dscf/hr)
T_m = Average DGM absolute temperature, degrees K (^oR)
T_{std} = Standard absolute temperature, 293 degrees K (528 R)
V_{af} = Volume of front half adsorbent sample, ml
V_{ab} = Volume of back half adsorbent sample, ml
V_i = Volume of impinger sample, ml
V_m = Dry gas volume as measured by the DGM, dry cubic meters (dcm), dry cubic feet (dcf)
$V_{m(std)}$ = Dry gas volume measured by the DGM, corrected to standard conditions, dry standard cubic meters (dscm), dry standard cubic feet (dscf).

12.2 Mass of Methanol. Calculate the total mass of methanol collected in the sampling train using Equation 308-1.

$$M_{tot} = V_iC_i + V_{af}C_{af} + V_{ab}C_{ab} \qquad \text{Equation 308-1}$$

12.3 Dry Sample Gas Volume, Corrected to Standard Conditions. Calculate the volume of gas sampled at standard conditions using Equation 308-2.

$$V_{m(std)} = \frac{V_m Y T_{std} P_{bar}}{T_m P_{std}} \qquad \text{Equation 308-2}$$

12.4 Mass Emission Rate of Methanol. Calculate the mass emission rate of methanol using Equation 308-3.

$$E = \frac{M_{tot} Q_{sd}}{V_{m(std)}} \qquad \text{Equation 308-3}$$

13.0 *Method Performance*. [Reserved]
14.0 *Pollution Prevention*. [Reserved]
15.0 *Waste Management*. [Reserved]
16.0 *Bibliography*.

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17.0 *Tables, Diagrams, Flowcharts, and Validation Data.* [Reserved]

T.8. 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

40 CFR 63.860 - Applicability and designation of affected source

The requirements of the General Provisions in subpart A of this part that apply to the owner or operator subject to the requirements of this subpart are identified in Table 1 to this subpart.

40 CFR 63.864 - Monitoring requirements

(a)-(c) [Reserved]
(d) Continuous opacity monitoring system (COMS). The owner or operator of each affected kraft or soda recovery furnace or lime kiln equipped with an ESP must install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (d)(1) through (4) of this section.

(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).

(e) Continuous parameter monitoring system (CPMS). For each CPMS required in this section, the owner or operator of each affected source or process unit must meet the requirements in paragraphs (e)(1) through (14) of this section.

(1)-(9) [Reserved]
(10) The owner or operator of each affected kraft or soda recovery furnace, kraft or soda lime kiln, sulfite combustion unit, or kraft or soda smelt dissolving tank equipped with a wet scrubber must install, calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop 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 (e)(10)(i) and (ii) of this section:

(i) The monitoring device used for the continuous measurement of the pressure drop 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.

(11) *Not Applicable*
(12) *Not Applicable*
(13) The owner or operator of each affected source or process unit that uses an ESP, wet scrubber, RTO, or fabric filter may monitor alternative control device operating parameters subject to prior written approval by the Administrator.
(14) *Not Applicable*

(f) [Reserved]
(g) *Not Applicable*
(h)-(i) [Reserved]

(j) Determination of operating ranges. [Completed]
(k) On-going compliance provisions.

(1) Following the compliance date, owners or operators of all affected sources or process units are required to implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under 40 CFR 63.866(a) if the monitoring exceedances in paragraphs (k)(1)(i) through (vi) of this section occur:

(i) For a new or existing kraft or soda recovery furnace or lime kiln equipped with an ESP, when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity;

(ii) For a new or existing kraft or soda recovery furnace, kraft or soda smelt dissolving tank, kraft or soda lime kiln, or sulfite combustion unit equipped with a wet scrubber, when any 3-hour average parameter value is outside the range of values established in paragraph (j) of this section.

(iii) *Not Applicable*
(iv) *Not Applicable*
(v) *Not Applicable*
(vi) *Not Applicable*

(2) Following the compliance date, owners or operators of all affected sources or process units are in violation of the standards of 40 CFR 63.862 if the monitoring exceedances in paragraphs (k)(2)(i) through (vii) of this section occur:

(i) For an existing kraft or soda recovery furnace equipped with an ESP, when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period;

(ii) *Not Applicable*

(iii) For a new or existing kraft or soda recovery furnace, kraft or soda smelt dissolving tank, kraft or soda lime kiln, or sulfite combustion unit equipped with a wet scrubber, when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in paragraph (j) of this section;

(iv) *Not Applicable*
(v) *Not Applicable*
(vi) *Not Applicable*
(vii) *Not Applicable*

(3) For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.

40 CFR 63.865 - Performance test requirements and test methods

The owner or operator of each affected source or process unit subject to the requirements of this subpart is required to conduct an initial performance test using the test methods and procedures listed in 40 CFR 63.7 and paragraph (b) of this section, except as provided in paragraph (c)(1) of this section.

(a) The owner or operator of a process unit seeking to comply with a PM emission limit under 40 CFR 63.862(a)(1)(ii)(A) must use the procedures in paragraphs (1) and (2) of this section:

(1) Determine the overall PM emission limit for the chemical recovery system at the mill using Equation 1 of this section as follows:

$$EL_{PM} = \left[C_{ref,RF} \left(Q_{RFtot} \right) + C_{ref,LK} \left(Q_{LKtot} \right) \right] \left(F1 \right) \left(BLS_{tot} \right) + ER1_{ref,SDT} \qquad \text{(Eq. 1)}$$

Where:

EL_{PM} = Overall PM emission limit for all existing process units in the chemical recovery system at the kraft or soda pulp mill, kg/Mg (lb/ton) of black liquor solids fired.
$C_{ref,RF}$ = Reference concentration of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen for existing kraft or soda recovery furnaces.
Q_{RFtot} = sum of the average volumetric gas flow rates measured during the performance test and corrected to 8 percent oxygen for all existing recovery furnaces in the chemical recovery system at the kraft or soda pulp mill, dry standard cubic meters per minute (dscm/min) (dry standard cubic feet per minute (dscf/min)).
$C_{ref,LK}$ = Reference concentration of 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen for existing kraft or soda lime kilns.
Q_{LKtot} = Sum of the average volumetric gas flow rates measured during the performance test and corrected to 10 percent oxygen for all existing lime kilns in the chemical recovery system at the kraft or soda pulp mill, dscm/min (dscf/min).
F1 = Conversion factor, 1.44 minutes*kilogram/day*gram (min*kg/d*g) (0.206 minutes*pound/day*grain [min*lb/d*gr]).
BLS_{tot} = Sum of the average black liquor solids firing rates of all existing recovery furnaces in the chemical recovery system at the kraft or soda pulp mill measured during the performance test, megagrams per day (Mg/d) (tons per day [ton/d]) of black liquor solids fired.
$ER1_{ref,SDT}$ = Reference emission rate of 0.10 kg/Mg (0.20 lb/ton) of black liquor solids fired for existing kraft or soda smelt dissolving tanks.

(2) Establish an emission limit for each kraft or soda recovery furnace, smelt dissolving tank, and lime kiln; and, using these emissions limits, determine the overall PM emission rate for the chemical recovery system at the mill using the procedures in paragraphs (a)(2)(i) through (v) of this section, such that the overall PM emission rate calculated in paragraph (a)(2)(v) of this section is less than or equal to the overall PM emission limit determined in paragraph (a)(1) of this section, as appropriate.

(i) The PM emission rate from each affected recovery furnace must be determined using Equation 2 of this section as follows:

$$ER_{RF} = (F1)(C_{EL,\,RF})(Q_{RF}) / (BLS) \qquad \text{(Eq. 2)}$$

Where:
ER_{RF} = emission rate from each recovery furnace, kg/Mg (lb/ton) of black liquor solids.
F1 = conversion factor, 1.44 min·kg/d·g (0.206 min·/d·gr).
$C_{EL,\,RF}$ = PM emission limit proposed by owner or operator for the recovery furnace, g/dscm (gr/dscf) corrected to 8 percent oxygen.
Q_{RF} = average volumetric gas flow rate from the recovery furnace measured during the performance test and corrected to 8 percent oxygen, dscm/min (dscf/min).
BLS = average black liquor solids firing rate of the recovery furnace measured during the performance test, Mg/d (ton/d) of black liquor solids.

(ii) The PM emission rate from each affected smelt dissolving tank must be determined using Equation 3 of this section as follows:

$$ER_{SDT} = (F1)(C_{EL,\,SDT})(Q_{SDT}) / (BLS) \qquad \text{(Eq. 3)}$$

Where:
ER_{SDT} = emission rate from each SDT, kg/Mg (lb/ton) of black liquor solids fired.
F1 = conversion factor, 1.44 mi·kg/d·g (0.206 mi·lb/d·gr).

$C_{EL,\ SDT}$ = PM emission limit proposed by owner or operator for the smelt dissolving tank, g/dscm (gr/dscf).
Q_{SDT} = average volumetric gas flow rate from the smelt dissolving tank measured during the performance test, dscm/min (dscf/min).
BLS = average black liquor solids firing rate of the associated recovery furnace measured during the performance test, Mg/d (ton/d) of black liquor solids fired. If more than one SDT is used to dissolve the smelt from a given recovery furnace, then the black liquor solids firing rate of the furnace must be proportioned according to the size of the SDT.

(iii) The PM emission rate from each affected lime kiln must be determined using Equation 4 of this section as follows:

$$ER_{LK} = (F1)(C_{EL,\ LK})(Q_{LK})(CaO_{tot} / BLS_{tot}) / (CaO_{LK}) \qquad \text{(Eq. 4)}$$

Where:
ER_{LK} = emission rate from each lime kiln, kg/Mg (lb/ton) of black liquor solids.
F1 = conversion factor, 1.44 mi·kg/d·g (0.206 mi·lb/d·gr).
$C_{EL,LK}$ = PM emission limit proposed by owner or operator for the lime kiln, g/dscm (gr/dscf) corrected to 10 percent oxygen.
Q_{LK} = average volumetric gas flow rate from the lime kiln measured during the performance test and corrected to 10 percent oxygen, dscm/min (dscf/min).
CaO_{LK} = lime production rate of the lime kiln, measured as CaO during the performance test, Mg/d (ton/d) of CaO.
CaO_{tot} = sum of the average lime production rates for all existing lime kilns in the chemical recovery system at the mill measured as CaO during the performance test, Mg/d (ton/d).
BLS_{tot} = sum of the average black liquor solids firing rates of all recovery furnaces in the chemical recovery system at the mill measured during the performance test, Mg/d (ton/d) of black liquor solids.

(iv) If more than one similar process unit is operated in the chemical recovery system at the kraft or soda pulp mill, Equation 5 of this section must be used to calculate the overall PM emission rate from all similar process units in the chemical recovery system at the mill and must be used in determining the overall PM emission rate for the chemical recovery system at the mill:

$$ER_{PUtot} = ER_{PU1}(PR_{PU1} / PR_{tot}) + \ldots + (ER_{PUi} / PR_{TOT}) \qquad \text{(Eq. 5)}$$

Where:
ER_{PUtot} = overall PM emission rate from all similar process units, kg/Mg (lb/ton) of black liquor solids fired.
ER_{PU1} = PM emission rate from process unit No. 1, kg/Mg (lb/ton) of black liquor solids fired, calculated using Equation 2, 3, or 4 in paragraphs (a)(2)(i) through (iii) of this section.
PR_{PU1} = black liquor solids firing rate in Mg/d (ton/d) for process unit No. 1, if process unit is a recovery furnace or SDT. The CaO production rate in Mg/d (ton/d) for process unit No. 1, if process unit is a lime kiln.
PR_{tot} = total black liquor solids firing rate in Mg/d (ton/d) for all recovery furnaces in the chemical recovery system at the kraft or soda pulp mill if the similar process units are recovery furnaces or SDT, or the total CaO production rate in Mg/d (ton/d) for all lime kilns in the chemical recovery system at the mill if the similar process units are lime kilns.
ER_{PUi} = PM emission rate from process unit No. i, kg/Mg (lb/ton) of black liquor solids fired.

PR_{PUi} = black liquor solids firing rate in Mg/d (ton/d) for process unit No. i, if process unit is a recovery furnace or SDT. The CaO production rate in Mg/d (ton/d) for process unit No. i, if process unit is a lime kiln.
i = number of similar process units located in the chemical recovery system at the kraft or soda pulp mill.

(v) The overall PM emission rate for the chemical recovery system at the mill must be determined using Equation 6 of this section as follows:

$$ER_{tot} = ER_{RFtot} + ER_{SDT}tot + ER_{LKtot} \qquad \text{(Eq. 6)}$$

Where:
ER_{tot} = overall PM emission rate for the chemical recovery system at the mill, kg/Mg (lb/ton) of black liquor solids fired.
ER_{RFtot} = PM emission rate from all kraft or soda recovery furnaces, calculated using Equation 2 or 5 in paragraphs (a)(2)(i) and (iv) of this section, where applicable, kg/Mg (lb/ton) of black liquor solids fired.
ER_{SDTtot} = PM emission rate from all smelt dissolving tanks, calculated using Equation 3 or 5 in paragraphs (a)(2)(ii) and (iv) of this section, where applicable, kg/Mg (lb/ton) of black liquor solids fired.
ER_{LKtot} = PM emission rate from all lime kilns, calculated using Equation 4 or 5 in paragraphs (a)(2)(iii) and (iv) of this section, where applicable, kg/Mg (lb/ton) of black liquor solids fired.

(vi) After the Administrator has approved the PM emissions limits for each kraft or soda recovery furnace, smelt dissolving tank, and lime kiln, the owner or operator complying with an overall PM emission limit established in 40 CFR 63.862(a)(1)(ii) must demonstrate compliance with the HAP metals standard by demonstrating compliance with the approved PM emissions limits for each affected kraft or soda recovery furnace, smelt dissolving tank, and lime kiln, using the test methods and procedures in paragraph (b) of this section.

(b) The owner or operator seeking to determine compliance with 40 CFR 63.862(a), (b), or (d) must use the procedures in paragraphs (b)(1) through (6) of this section.

(1) For purposes of determining the concentration or mass of PM emitted from each kraft or soda recovery furnace, sulfite combustion unit, smelt dissolving tank, lime kiln, or the hog fuel dryer at Weyerhaeuser Paper Company's Cosmopolis, Washington facility (Emission Unit no. HD-14), Method 5 or 29 in Appendix A of 40 CFR 60 must be used, except that Method 17 in Appendix A of 40 CFR 60 may be used in lieu of Method 5 or Method 29 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 [deg] C (400 [deg] F). For Methods 5, 29, 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.

(2) For sources complying with 40 CFR 63.862(a) or (b), the PM concentration must be corrected to the appropriate oxygen concentration using Equation 7 of this section as follows:

$$C_{corr} = C_{meas} \times \left(1 - X\right) / \left(1 - Y\right) \qquad \text{(Eq. 7)}$$

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 for kraft or soda recovery furnaces and sulfite combustion units and 10 percent for kraft or soda lime kilns).
Y = the measured average volumetric oxygen concentration.

(3) Method 3A or 3B in Appendix A of 40 CFR 60 must be used to determine the oxygen concentration. 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.
(4) For purposes of complying with paragraph 40 CFR 63.862(a)(1)(ii)(A), the volumetric gas flow rate must be corrected to the appropriate oxygen concentration using Equation 8 of this section as follows:

$$Q_{corr} = Q_{meas} \times \left(1 - X\right) / \left(1 - Y\right) \qquad \text{(Eq. 8)}$$

Where:

Q_{corr} = the measured volumetric gas flow rate corrected for oxygen, dscm/min (dscf/min).
Q_{meas} = the measured volumetric gas flow rate uncorrected for oxygen, dscm/min (dscf/min).
X = the corrected volumetric oxygen concentration (8 percent for kraft or soda recovery furnaces and sulfite combustion units and 10 percent for kraft or soda lime kilns).
Y = the measured average volumetric oxygen concentration.

(5)
(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR 60 must 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 60 must be used;
(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR 60 must 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 60 must be used.

(6) 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.

(c) *Not Applicable*
(d) *Not Applicable*
(e)-(f) Reserved

40 CFR 63.866 - Recordkeeping requirements

(a) *Startup, shutdown, and 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 (a)(1) and (2) of this section.

(1) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under 40 CFR 63.864(j), including the procedures in paragraphs (a)(1)(i) and (ii) of this section:
(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 (a)(2)(i) and (ii) of this section:
(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 each continuous monitoring system required under 40 CFR 63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

(b) The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under 40 CFR 63.864(k)(1), and when a violation is noted under 40 CFR 63.864(k)(2).

(c) In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator must maintain records of the information in paragraphs (c)(1) through (7) of this section:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces and semichemical combustion units;

(2) Records of CaO production rates in units of Mg/d or ton/d for all lime kilns;

(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 40 CFR 63.865(a) through (d);

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

(6) Records certifying that an NDCE recovery furnace equipped with a dry ESP system is used to comply with the gaseous organic HAP standard in 40 CFR 63.862(c)(1).

(7) *Not Applicable*

40 CFR 63.867 - Reporting requirements

(a) Notifications.

(1) The owner or operator of any affected source or process unit must submit the applicable notifications from subpart A of this part.

(2) *Not Applicable*

(i) *Not Applicable*

(ii) *Not Applicable*

(3) *Not Applicable*

(b) *Additional reporting requirements for HAP metals standards.*

(1) Any owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in 40 CFR 63.862(a)(1)(ii) must submit the PM emissions limits determined in 40 CFR 63.865(a) for each affected kraft or soda recovery furnace, smelt dissolving tank, and lime kiln to the Administrator for approval. The emissions limits must be submitted as part of the notification of compliance status required under subpart A of this part.

(2) Any owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in 40 CFR 63.862(a)(1)(ii) must submit the calculations and supporting documentation used in 40 CFR 63.865(a)(1) and (2) to the Administrator as part of the notification of compliance status required under subpart A of this part.

(3) After the Administrator has approved the emissions limits for any process unit, the owner or operator of a process unit must notify the Administrator before any of the actions in paragraphs (b)(3)(i) through (iv) of this section are taken:

(i) The air pollution control system for any process unit is modified or replaced;

(ii) Any kraft or soda recovery furnace, smelt dissolving tank, or lime kiln in a chemical recovery system at a kraft or soda pulp mill complying with the PM emissions limits in 40 CFR 63.862(a)(1)(ii) is shut down for more than 60 consecutive days;

(iii) A continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit is changed; or

(iv) The black liquor solids firing rate for any kraft or soda recovery furnace during any 24-hour averaging period is increased by more than 10 percent above the level measured during the most recent performance test.

(4) An owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in 40 CFR 63.862(a)(1)(ii) and seeking to perform the actions in paragraph (b)(3)(i) or (ii) of this section must recalculate the overall PM emissions limit for the group of process units and resubmit the documentation required in paragraph (b)(2) of this section to the Administrator. All modified PM emissions limits are subject to approval by the Administrator.

(c) Excess emissions report. The owner or operator must report quarterly if measured parameters meet any of the conditions specified in paragraph (k)(1) or (2) of 40 CFR 63.864. This report must contain the information specified in 40 CFR 63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in 40 CFR 63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in 40 CFR 63.864(k)(2). Reporting excess emissions below the violation thresholds of 40 CFR 63.864(k) 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 63.868 Delegation of authority

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Clean Air Act, the authorities contained in paragraph (b) of this section must be retained by the Administrator and not transferred to a State.

(b) The authorities that will not be delegated to States are listed in paragraphs (b)(1) through (4) of this section:

(1) Approval of alternatives to standards in 40 CFR 63.862 under 40 CFR 63.6(g).

(2) Approval of major alternatives to test methods under 40 CFR 63.7(e)(2)(ii) and (f) and as defined in 40 CFR 63.90.

(3) Approval of major alternatives to monitoring under 40 CFR 63.8(f) and as defined in 40 CFR 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under 40 CFR 63.10(f) and as defined in 40 CFR 63.90.