Georgia-Pacific Consumer Operations LLC
Palatka Mill

Facility ID No.: 1070005
Putnam County

Title V Air Operation Permit Revision

Permit No. 1070005-085-AV
Revision of Title V Air Operation Permit No. 1070005-083-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Waste and Air Resource Management Program, Northeast District

8800 Baymeadows Way West, Suite 100
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Title V Air Operation Permit Revision
Permit No. 1070005-085-AV

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NORTHEAST DISTRICT
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JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

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SECRETARY

Permittee:
Georgia - Pacific Consumer Operations, LLC.
215 County Road 216
Palatka, Florida 32178-0919

Draft/Proposed Permit No.: 1070005-085-AV
Facility ID No.: 1070005
Palatka Mill
Project: Title V Air Operation Permit Revision

The purpose of this permit is to revise Title V air operation permit No. 1070005-083-AV to incorporate the terms and conditions of permit No. 1070005-080-AC, which authorized the replacement and removal of the existing oil burners and the installation of new burners and associated equipment that will allow the No. 4 Recovery Boiler (EU 018) to burn natural gas instead of fuel during startup, shutdown, and as supplemental fuel. This permit revision also include changes to the minimum differential pressure for the wet scrubber control device on the No. 4 Lime Kiln (EU 017), updates to No. 4 Combination Boiler (EU 016) Subsection C , Elemental Chlorine (ECF) No. 3 Bleach Plant (EU 036) Subsection K, Thermal Oxidizer with wet scrubber (EU037) Subsection L and Condensate Stripper System (EU 046) Subsection P, due to the September 11, 2012 EPA promulgated Amendments to 40 CFR 63 Subpart S, National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. Updates to the New Brown Stock Washer Lines 3,4,6,&7 (EU 047) Subsection Q and updates to the New Two-stage Oxygen Delignification System (EU 048) Subsection R and Subsection BB due to the September 11, 2012 EPA promulgated Amendments to 40 CFR 63 Subpart S, National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry to subsection BB. Updates to Subpart BB-Standards of Performance for Kraft Pulp Mills April 04, 2014 EPA promulgated Amendments and updated subpart A – General Provisions.
The existing Palatka Mill is located in Putnam County at 215 CR 216, Palatka, Florida 32177. UTM Coordinates are: Zone 17, 434.0- km East and 3283.4 km North; Latitude: 29°40’00” North and Longitude: 81°40’45” West.

This 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.

Revision Effective Date: XX/XX/XXXX
Effective Date: July 9, 2012
Renewal Application Due Date: Exp. November 26, 2016
Expiration Date: July 9, 2017

Draft/Proposed

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

RSR: yke

Subsection A. Facility Description:

This facility is a Kraft pulp and paper mill that consists of major activities areas such as: chip handling, pulping, bleaching, chemical recovery, utilities, paper machines, converting, turpentine and tall oil production.

Based on the Title V permit revision application received April 15, 2014, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Units:

EU No.	Brief Description
Regulated Emissions Units	
-014	No. 4 Power Boiler (removed)
-015	No. 5 Power Boiler
-016	No. 4 Combination Boiler
-017	No. 4 Lime Kiln
-018	No. 4 Recovery Boiler
-019	No. 4 Smelt Dissolving Tanks (2)
-031	Tall Oil Plant
-032	Noncondensible Gas System/TRS Incinerator (removed)
-034	No. 6 Boiler (removed)
-035	ClO_2 Plant and Methanol Storage Tank
-036	Elemental Chlorine Free (ECF) No. 3 Bleach Plant
-037	Thermal Oxidizer
-039	New Bark Hog & Existing Bark/Wood Chip Handling System
-044	No. 7 Package Boiler
-045	Wide-web Flexographic Printers
-046	Condensate Stripper System
-047	Brown Stock Washer Lines 3, 5, 6 & 7
-048	New Two-Stage Oxygen Delignification System
-050	Converting Department
-051	Emergency Engines
Unregulated Emissions Units and Activities	
See Appendix U-1, attached	

Subsection C. Applicable Regulations:

Based on the Title V air operation permit renewal application received May 13, 2011, this facility is a major source of hazardous air pollutants (HAP). Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ, - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. 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).
40 CFR 60, Subpart A, NSPS General Provisions	037, 044, 046
40 CFR 60, Subpart Db	044
40 CFR 60, Subpart BB	037, 046
40 CFR 60, Subpart IIII	051
40 CFR 60, Subpart JJJJ	051
40 CFR 63, Subpart A, NESHAP General Provisions	015, 016, 017, 036
40 CFR 63, Subpart S	015, 016, 017, 036, 037, 043, 046, 047, 048
40 CFR 63, Subpart KK	045
40 CFR 63, Subpart MM	017, 018, 019
40 CFR 63, Subpart RR.	037, 046
40 CFR 63, Subpart JJJJ	050
State Rule Citations 62-296.404, 62- 296.406, 62-296.410, 62-296.320, BACT, Rule 62-212.400)	015, 016, 017, 018, 019, 031, 037, 039, 044, 046
40 CFR 63, Subpart ZZZZ	051
40 CFR 63, Subpart DDDDD.	015, 016, 044

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

FW1. Appendices. The 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.]

FW3. Not federally Enforceable. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

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. Not federally Enforceable. 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 include:

(a) Conveyors that are covered or enclosed where feasible and practical.

(b) Paved roads entering and exiting the plant.

(c) Limiting vehicle speeds.

(d) Good housekeeping practices.

[Rule 62-296.320(4)(c), F.A.C.]

Annual Reports and Fees

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

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with

the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available 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. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The 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.]

FW8. 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.]

FW9. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.

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

FW10. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

FW11. Georgia Pacific will take measures to ensure that all property boundaries are properly fenced or have other physical barriers (equivalent to a fence), and/or are properly posted and routinely patrolled.

[Rules 62-4.070(3) and 62-212.400(5), F.A.C., Construction Permit No. 1070005-017-AC]

FW12. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. For purposes of this permit, an official year is defined as from January 1 through December 31, except for stack testing purposes, in which case an official year is defined as the federal fiscal year (October 1 – September 30). An official day is defined as the time period from 6 A.M. to 6 A.M.

[Rule 62-213.440, F.A.C.; Applicant Request]

FW13. Startup, Shutdown, Malfunction Plan. The Permittee shall adopt and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction. The plan shall meet the requirements of 40 CFR 63.6(e)(3) including containing a program of corrective action for malfunctioning processes and the air pollution control and monitoring equipment used to comply with the relevant standards of 40 CFR Part 63. The current SSM Plan shall be maintained at the facility and be available for inspection and copying by the Administrator upon request. If the SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), the Permittee shall maintain at the facility each previous (i.e., superseded) version of the SSM Plan, and shall make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a Part 70 or 71 permit revision. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield.

FW14. The DEP has determined that the applicable requirements in the attached Appendix SC (Specific Conditions) Applicability List, based on applicant submittal, were identified in the permit application.

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

FW15. The applicable requirements identified in the attached Appendix AR (Applicable Rules) Applicability List, based on applicant submittal, and listed in the application are included in the permit in a correct manner to the best knowledge of the DEP.

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

FW16. The non-applicable requirements identified in the attached Appendix NAR (Non-applicable Rules) Non-Applicability List based on applicant submittal, and listed in the application were specifically determined to be not applicable to this facility for the reason noted for each requirement.

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

FW17. Fuel Sulfur Content. The sulfur content of the No. 6 fuel oil used by the facility for all of the fuel sources shall not exceed 2.35% by weight, based on a 3-barge rolling average. A record of analysis of each fuel oil shipment received shall be maintained and an annual report submitted. In order to demonstrate compliance with this conditions, and **Conditions D.2**. and **E.3.,** the Permittee shall calculate and maintain a log of the rolling 3-barge average sulfur content (i.e., the average of three consecutive barge deliveries, based on the certified fuel oil analysis receipt). Fuel oil analysis shall be conducted using ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. The Annual Report is due by April 1st for the previous year.

[Rule 62-213.410, F.A.C.; Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002; Georgia-Pacific Letter dated April 1, 2003, Air Construction Permit No. 1070005-032-AC]

FW18. Semi-Annual Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. The reports shall be submitted within 60 (sixty) days after the end of each semi-annual reporting period, i.e., by March 1 and September 1 of each year. At the Permittee's option, these reports may be submitted on a calendar quarter basis.

In order to provide better customer service and enhance the permitting experience in the Draft/Proposed permit only the emission unit(s) (EU) which are changed in the revision are listed in Section III. EMISSIONS UNITS AND SPECIFIC CONDITIONS. {*Permitting Note: Strikethroughs indicate items deleted and red font double underlined indicates items added.}*

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

E.U. No.	Brief Description
016	No. 4 Combination Boiler with a centrifugal collector and an electrostatic precipitator (formerly the ESP for the No. 5 Power Boiler) in series to control particulate matter emissions**.** Air Construction Permit No. 1070005-070-AC authorized the replacement of approximately 1,400 air preheater tubes out of a total of 2,320 tubes in the No. 4 Combination Boiler. Approval has been incorporated into this Title V Air Operation permit.

This boiler serves as a backup destruction device for noncondensable gases (NCGs) and condensate stripper off-gases (EU 046) from the sources required to be controlled by 40 CFR Part 63, Subpart S (MACT I) and State TRS regulations. The primary destruction device is the Thermal Oxidizer (EU 037). When utilized in this mode, a spray tower pre-scrubber is used to remove sulfur from the batch (Batch Digesting system) streams and a separate, spray tower pre-scrubber is used to remove sulfur from the continuous (MEE System) streams prior to destruction in the boiler. NCGs from the Turpentine Condensing system and stripper off-gases (SOGs) from the Condensate Stripper System are vented directly to the boiler for destruction. The boiler is permitted to operate as the backup destruction device for a maximum uptime of 20 percent which is equivalent to an annual maximum total of 548.7 tons of Sulfur Dioxide from the burning of NCGs and SOGs in the #4 Combination Boiler.

This emissions unit is regulated under Rule 62-296.404, F.A.C. – Kraft Pulp Mills, Rule 62-296.410, F.A.C. – Carbonaceous Fuel Burning Equipment and 40 CFR 63 Subpart S - National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C, PCP Exclusion dated March 14, 2002.

On September 13, 2004, EPA promulgated national emission standards for hazardous air pollutants (NESHAP) for industrial, commercial, and institutional boilers and process heaters.

On June 19, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the standards.

On March 21, 2011, EPA promulgated 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This final rule became effective on May 20, 2011.

On May 18, 2011, EPA published a notice delaying the effective dates of the March 21, 2011 final rule until such time as judicial review is no longer pending or until EPA completes its reconsideration of the rules, whichever is earlier.

On December 23, 2011, EPA published the reconsideration proposal (40 CFR 63, subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters). The EPA intends to finalize the reconsideration in the spring of 2012.

On January 9, 2012, the United States Court of Appeals for the District of Columbia Circuit issued a decision vacating and remanding the EPA May 18, 2011delay notice. As such, the March 21, 2011 promulgated 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters is now effective. <u>The EPA finalized the reconsideration by publication in the Federal Register on January 31, 2013.</u>

In accordance with 40 CFR 63.7545(b), the initial notification submittal was received January 25, 2012. The compliance date for existing sources is January 31, 2016.

No. 4 Combination Boiler is a front-fired spreader stoker type furnace manufactured by Babcock and Wilcox in 1965.

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

OPERATIONAL PARAMETERS

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

Heat Input Rate	Fuel Source
512.7 MMBtu/hr[1], 24-hr average	Carbonaceous fuel only or in combination with other fuels.
427.0 MMBtu/hr[2], 24-hr average	Natural gas only.

[1]Based on 57 tons per hour carbonaceous fuel (bark/wood chips) with an average heating value of 4500 Btu/lb on a wet, as fired basis (AP-42: Subsection 1.6. Wood Waste Combustion In Boilers).

[2]Based on 427,000 cubic feet (cf) per hour of natural gas with an average heating value of 1000 Btu/cf

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit #AC54-163040, Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002; 1070005-024-AC, Construction Permit No. 1070005-028-AC, Construction Permit No. 1070005-038-AC, and Construction Permit No. 1070005-066-AC]

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

- Carbonaceous fuel such as tree bark and wood fuel.
- Natural gas
- Dilute non-condensable gases (DNCGs), non-condensable gases (NCGs), and/or Stripper Off-Gas (SOG) during periods when the boiler is being utilized for their destruction[1].

[1] When firing DNCGs, NCGs and/or SOGs, SO_2 emissions shall be determined as stated in **Specific Condition C.16.**

[Rule 62-213.410, F.A.C.; Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002, Construction Permit No. 1070005-024-AC, and Construction Permit No. 1070005-066-AC]

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

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

EMISSION LIMITATIONS AND STANDARDS

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

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

C.4. **Now and through January 30, 2016**, the Particulate Matter Emissions shall not exceed the following when firing carbonaceous fuel only or in combination with fossil fuel:

- 0.3 lb/MMBtu carbonaceous fuel, 125.6 lbs/hr and 550.1 TPY, plus 0.1 lb/MMBtu fossil fuel, 41.9 lbs/hr and 183.5 TPY, based on the average of three (3) test runs conducted in accordance with EPA referenced Method 5, 40 CFR 60, Appendix A.

On and after January 31, 2016, Subsection CC shall also apply to this EU.

{Permitting Note: Compliance with the above limits ensures compliance with the applicable limits in Rule 62-296.410(1)(b)2., F.A.C. of 0.3 lb/MMBtu (Carbonaceous fuel only)}

[Rule 62-296.410(1)(b)2., F.A.C.; Construction Permit No. AC54-163040; Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002, and Construction Permit No. 1070005-066-AC]

C.5. **Sulfur Dioxide Emission:.** Sulfur Dioxide emissions from the burning of dilute non-condensable gases (DNCGs), non-condensable gases (NCGs), and/or stripper off-gas (SOG) shall be limited to 709 lb/hr and 785 TPY.[1, 2, 3, 4]

[1] Includes SO_2 emissions due to dilute NCG (DNCG) burning of 82.6 lbs/hr and 236.3 TPY[3]. The burning of DNCGs shall cease when the sum of the SO2 emissions reaches the yearly allowable limitation of 236.3 tons.

[2] Includes additional SO_2 emissions due to NCG burning and SOG burning of 626.4 lbs/hr and 548.7 TPY. The burning of NCGs and/or SOGs shall cease when the sum of the SO2 emissions reaches the yearly allowable limitation of 548.7 tons.

[3] The yearly allowable limitation of 236.3 TPY is applicable to DNCG burning in either the No. 5 Power Boiler or the No. 4 Combination Boiler, or the No. 5 Power Boiler and the No. 4 Combination Boiler combined for a total of 236.3 TPY.

[4] When firing DNCG, NCGs and/or SOGs, SO_2 emissions shall be determined as stated in **Specific Condition C.15.**

[Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002; PCP Exclusion dated April 23, 2004, Construction Permit No. 1070005-024-AC, and Construction Permit No. 1070005-066-AC]

C.6. **Total Reduced Sulfur (TRS) Emissions:** When the No. 4 Combination Boiler is used to burn DNCGs, NCGs and/or SOGs, TRS emissions shall not exceed 5 ppm by volume on a dry basis at standard conditions corrected to 10 percent oxygen as a 12-hour average; and 3.6 lbs/hr and 15.7 TPY.

[Rule 62-296.404(3)(f)1., F.A.C.; and, Construction Permit No. 1070005-017-AC and Construction Permit No. 1070005-024-AC]

C.7. **Visible Emissions – Carbonaceous Fuel:** Visible emissions shall not exceed 30% opacity except for 40% opacity for no more than 2 minutes/hr, based on one (1) test run conducted in accordance with DEP referenced Methods 9, 40 CFR 60, Appendix A.

[Rule 62-296.410(1)(b)1., F.A.C.; Construction Permit No. AC54-163040, and Construction Permit No. 1070005-066-AC]

TEST METHODS AND PROCEDURES

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

C.8. **Particulate Matter Emissions:** The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C. The test shall be performed once each federal fiscal year.

[Rule 62-297.310(7)(a)4.b., F.A.C.; Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002 and Title V Permit No. 1070005-023-AV]

C.9.a. **TRS Emissions:** It is assumed that compliance with the TRS emissions limit stated in **Condition No. C.6.** is achieved by maintaining the minimum temperature of 1200°F and the 0.5-second residence time.

[Construction Permit No. AC54-266676/PSD-FL-226 –S.C. No. 3; Construction Permit No. 1070005-007-AC – S.C. No. 4.d; Rule 62-296.404(3)(a)1. F.A.C.; 40 CFR 60.283(a)(1)(iii); Construction Permit No. 1070005-017-AC, PCP Exclusion dated March 14, 2002, letter dated June 30, 2004 from Golder Associates to FDEP ~~David Buff to Rita Felton-Smith~~ and Construction Permit No. 1070005-024-AC]

C.9.b. **TRS Emissions:** When routing TRS gases to this boiler for thermal destruction, the gases shall be introduced with the primary fuel or into the flame zone, or with the combustion air. The TRS gases shall be subject to a minimum temperature of 1200^0 F for at least 0.5 second.

[Rules 62-296.404(3)(a)1., and, 62-296.404(5)(d), F.A.C.; 40 CFR 60.283(a)(1)(iii) and Construction Permit No. 1070005-024-AC]

C.10. **Visible Emissions:** The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C and shall be performed once each federal fiscal year

[Rule 62-297.310(7)(a)4.a., F.A.C.; Construction permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002 and Title V Permit No. 1070005-023-AV]

MONITORING REQUIREMENTS

C.11. The steam production rate in lbs/hr including the pressure in psig, the steam temperature in ^oF, and the feedwater temperature in ^oF shall be continuously monitored and recorded.

[Construction Permit No. AC54-163040, and Construction Permit No. 1070005-066-AC]

EXCESS EMISSIONS

C.12. **Excess Emissions – Startup/Shutdown:** Excess Emissions due to startup and shutdown are conditionally allowed for up to 8 hours in any 24-hour period unless specifically authorized by the Department for longer duration.

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

[Rule 62-210.700, F.A.C.]

C.13. Periods of excess emissions reported under 40 CFR Part 63, Subpart A) shall not be a violation of Conditions **L.4. and L.8**, provided that the total time of excess emissions (~~excluding periods of startup, shutdown, or malfunction~~) divided by the total process operating time in a semi-annual reporting period does not exceed 1% for the Thermal Oxidizer and No. 4 Combination Boiler combined.

[40 CFR 63.443(e)1; Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002]

C.14. **Excess Emissions:** This emissions unit is also subject to applicable Excess Emissions requirements in Subsection X.

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

RECORDKEEPING

C.15. **Sulfur Dioxide Emissions:** For purposes of this condition, SO_2 emissions due to burning of NCGs will be determined as follows:

- Duration of NCG burning (minutes) ÷ 60 min/hr x 302.4 lbs/hr = lbs SO_2

For purposes of this condition, SO_2 emissions due to burning of SOGs will be determined as follows:

- Duration of SOG burning (minutes) ÷ 60 min/hr x 324.0 lbs/hr = lbs SO_2

For purposes of this condition, daily SO_2 emissions from the #4CB due to burning of DNCGs will be determined as follows:

- (Daily production in Tons ADUP x 0.35 lbs-S /ton ADUP x 2 lbs SO2/1lb-S) x Minutes DNCG's burned in #4CB/1440 minutes/day = lbs SO2 / day from #4CB

A record shall be maintained for at least five years of the following:

- The date, time, and duration DNCGs/NCGs/SOGs are fired in the boiler, [1]

[1] The mill shall obtain this information from the plant data process information system or the Operators' DNCG Diversion log as backup to the plant data process information system.

The total SO_2 emissions, in tons, attributed to any NCG, SOG and/or DNCG burning, shall be the sum of the previous NCG, SOG and/or DNCG burning in either the No. 4 Combination Boiler or the No. 5 Power Boiler conducted during the year to date.

A SO_2 emissions report of the above data shall be submitted to the Compliance Section of the Northeast District Office on an annual basis (by April 1 for the previous year).

[Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 12, 2002; PCP Exclusion dated April 23, 2004, Construction Permit No. 1070005-024-AC, and Construction Permit No. 1070005-066-AC]

REPORTING

C.16. **Sulfur Dioxide Emissions:** A Sulfur Dioxide emissions report of the data required in **Specific Condition C.15.** shall be submitted to the Compliance Section of the Northeast District Office on an annual basis (by April 1 for the previous year).

[Construction Permit No. 1070005-017-AC; PCP Exclusion dated March 14, 2002]

C.17. **Actual Emissions Reporting**: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

(a) The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following

resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

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

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

(2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

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

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

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

For this project, the permit requires the annual reporting of actual *NO_X, SO_2, CO, VOC, and PM* emissions for the following unit: *Emissions Unit 016 - No. 4 Combination Boiler.*

[Application 1070005-066-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

COMMON CONDITIONS - EXCESS EMISSIONS

C.17. This emissions unit is also subject to applicable Excess Emissions requirements in Subsection BB.

C.18. This emissions unit is also subject to applicable Excess Emissions requirements in Subsection X.

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

C.19. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection Y.

COMMON CONDITIONS - PERIODIC MONITORING

C.20. This emissions unit is also subject to applicable Periodic Monitoring Requirements in Subsection AA.

GENERAL PROVISIONS

C.21. This emissions unit is also subject to the applicable requirements in 40 CFR Part 63, Subpart A.

C.22. The permittee shall comply with the requirements of 40 CFR 63, Subpart A- General Provisions as indicated in Table 1 of 40 CFR 63, Subpart S.

[40 CFR 63.440(g)]

COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

C.23. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of

a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

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

C.24. This emissions unit is also subject to applicable 40 CFR 63, Subpart DDDDD Provisions in Subsection CC.

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

EU No.	Brief Description
017	No. 4 Lime Kiln: This unit recalcines the spent lime cake (calcium carbonate) to produce the quicklime (calcium oxide), which is used to convert the green liquor to cooking liquor. The kiln fires natural gas and residual fuel oil. The unit has a maximum processing rate of 41.5 tons of lime mud solids per hour based on a 24-hour average. Particulate matter emissions are controlled by a cyclonic dust collector followed by a wet venturi scrubber. Total Reduced Sulfur (TRS) emissions, scrubber pressure drop, and scrubber flow rate are continuously monitored and recorded. At permitted capacity, the exhaust gas flow rate is 54,200 dscfm at 10% oxygen with an exit temperature of 161° F. The combination natural gas/fuel oil burner has a maximum burner capacity of 130 MMBTU/hour. Exhaust gases exit a stack that is 4.4 feet in diameter and 131 feet tall. The nitrogen oxides emissions will be monitored with a continuous emissions monitoring system (CEMS).

This emissions unit is regulated under Rule 62-296.404, F.A.C. – Kraft Pulp Mills, Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit(s) No(s). PSD-FL-171; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated June 5, 1991 and 40 CFR 63, Subpart MM-National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills.

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

OPERATIONAL PARAMETERS

D.1. **Permitted Capacity:** The maximum processing rate of the No. 4 Lime Kiln is 41.5 tons of lime mud solids per hour based on a 24-hour average. This corresponds to a maximum production rate of 19.4 tons per hour of quicklime.

[Construction Permit No. 1070005-038-AC; Rule 62-210.200 (PTE), F.A.C.]

D.2. **Authorized Fuels:** The No. 4 Lime Kiln is authorized to fire natural gas or residual fuel oil with a maximum fuel sulfur content of 2.35% by weight. On-specification used oil meeting the requirements in Subsection W of this permit may be blended with the residual oil and fired at a rate of no more than 10% of the fuel consumed. The maximum heat input rate is 130 MMBtu/hours base on a 24- hour average. *{Permitting note: this is equivalent to approximately 867 gallons per hour of residual oil (base on a heating value of 150,000 Btu per gallon), or 130, 000 cubic ft of natural gas per hour (base on heating value of 1,000 Btu/gallon).}*

[Construction Permit No. 1070005-038-AC; Construction Permit No. 1070005-067-AC and, Rule 62-210.200 (PTE), F.A.C.]

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

[Rule 62-213.410, F.A.C.; PCP Exclusion dated March 14, 2002]

D.3. **Hours of Operation:** The hours of operation are not limited (8760 hours per year).

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

EMISSION LIMITATIONS AND STANDARDS

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

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

D.4a. **PM Emissions:** PM emissions from the No. 4 Lime Kiln shall not exceed 0.55 lb per ton of lime mud solids processed and 22.9 lb/hour based on the average of three (3) test runs conducted in accordance with EPA Methods 1 through 5 to determine the mass emission rate and EPA Method 3A or 3B for oxygen concentration to calculate the corrected particulate matter concentration.

{Permitting Note: The venturi scrubber causes a wet plume, which interferes with the determination of opacity. The scrubber monitoring provisions will be used to ensure proper operation of the venturi scrubber.}

[Rule 62-212.400 (BACT), F.A.C., and Construction Permit No. 1070005-038-AC]

D.4b. **Particulate Matter:** The owner or operator of each existing Kraft or soda lime kiln shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen.

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

D.5. **TRS Standard:** As determined by the existing CEMS, TRS emissions shall not exceed 25.1 tons per year based on a 12-month rolling CEMS total.

[Rule 62-212.400(12), F.A.C.; and Construction Permit No. 1070005-038-AC]

D.6. **Visible Emissions**: Visible Emissions standard of "less than 20% opacity" is not applicable due to moisture interference in accordance with BACT. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C., as follows:

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

[BACT; Permit #AC54-192551; PSD-FL-171; Rule 62-296.404(2)(b), F.A.C.; Rule 62-297.310(7)(b), F.A.C.]

D.7. **Sulfur Dioxide Emissions:** Sulfur Dioxide Emissions shall not exceed 16.9 ppmvd at 10% O_2 and 9.1 lb/hr, based on the average of three (3) test runs conducted in accordance with EPA Method 8 to measure the SO_2

concentration and Methods 1 through 4 to measure the volumetric flow rate, (based on AP-42 factor of 0.3 lb/ton ADUP; 72.9 TPH ADUP; 638,604 TPY ADUP). This ADUP is for SO2 emissions calculations and is not a mill production limitation.

[Rule 62-212.400(12), F.A.C.; Construction Permit No. 1070005-038-AC]

D.8. **Nitrogen Oxides (NOx) Emissions:** When firing any authorized fuel, NOx emissions shall not exceed:

- *114 ppmvd* corrected to 10% oxygen based on a 30-day rolling average determined by CEMS data.

  This standard supersedes all previous BACT standards for NOx emissions from the No. 4 Lime Kiln

  [Construction Permit No. 1070005-067-AC, Rule 62-212.400 (BACT), F.A.C.]

D.9. **Carbon Monoxide Emissions**: Carbon Monoxide shall not exceed 69 ppmvd, corrected to 10% O_2, 16.3 lb/hr, based on the average of three (3) test runs conducted in accordance with EPA Method 10 shall be used to measure the CO concentration, EPA Methods 1 through 4 shall be used to measure the volumetric flow rate, and EPA Method 3A or 3B shall be used to measure the oxygen concentration to correct the CO concentration.

[Construction Permit No. 1070005-038-AC]

D.10. **VOC (Volatile Organic Compounds) Emissions**: VOC shall not exceed 70.0 ppmvd corrected to 10% O_2 and 9.4 lb/hour (total hydrocarbons determined as methane), based on the average of three (3) test runs conducted in accordance with EPA Method 25A to measure the total hydrocarbon concentration, EPA Methods 1 through 4 to measure the volumetric flow rate, and EPA Method 3A or 3B to measure the oxygen concentration to correct the VOC concentration.

[Construction Permit No. 1070005-038-AC]

TEST METHODS AND PROCEDURES

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

EPA Method 19-Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)

D.11. **Particulate Matter Emissions:** Particulate Matter emissions stack testing shall comply with the applicable requirements in Rule 62-297.401(5), F.A.C. (EPA Methods 1 through 5 to determine the mass emission rate and EPA Method 3A or 3B for oxygen concentration to calculate the corrected particulate matter concentration, incorporated and adopted by reference in Chapter 62-297, F.A.C.) and be performed once each federal fiscal year.

[Permit #AC54-192551; PSD-FL-171]

D.12. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (21 - X) / (21 - Y)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (10 percent).
Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2)]

D.13. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3A or 3B in Appendix A of 40 CFR Part 60. The voluntary consensus standard ANSI/ASME PTC 19.10-1981—Part 10 (incorporated by reference—see §63.14) may be used as an alternative to using Method 3B. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3)]

D.14. The Permittee shall comply with the following:

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

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

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

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

Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the CaO production rate.

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

D.~~12~~15. Visible Emissions Testing: (see SC D.6).

[Permit #AC54-192551; PSD-FL-171]

D.~~13~~16.Sulfur Dioxide Emissions Testing: Sulfur Dioxide emissions testing shall comply with Rule 62-297.401(8), F.A.C. (EPA Method 8 to measure the SO_2 concentration and Methods 1 through 4 to measure the volumetric flow rate, incorporated and adopted by reference in Chapter 62-297, F.A.C.). The test shall be performed once each federal fiscal year.

[Permit #AC54-192551; PSD-FL-171]

D.~~14~~ 17.Carbon Monoxide Emissions Testing: Carbon Monoxide Emissions testing shall comply with Rule 62-297.401(10), F.A.C. (EPA Method 10 shall be used to measure the CO concentration, EPA Methods 1 through 4 shall be used to measure the volumetric flow rate, and EPA Method 3A or 3B shall be used to measure the oxygen concentration to correct the CO concentration, incorporated and adopted by reference in Chapter 62-297, F.A.C.). These tests shall be performed once each federal fiscal year.

If consecutive annual tests for CO emissions show compliance at 50% of the standard or less, the test frequency for that pollutant is reduced to testing prior to renewal of the operation permit. Annual testing shall resume for any subsequent failure to demonstrate compliance at renewal.

[Permit #AC54-192551; PSD-FL-171; Rules 62-297.310(7)(a)4 and 62-212.400 (BACT), F.A.C.]

D.~~15~~. 18VOC (Volatile Organic Compounds) Emissions Testing: VOC emissions testing shall comply with Rule 62-297.401(25)(a), F.A.C. (EPA Method 25A to measure the total hydrocarbon concentration, EPA Methods 1 through 4 to measure the volumetric flow rate, and EPA Method 3A or 3B to measure the oxygen concentration to correct the VOC concentration, incorporated and adopted by reference in Chapter 62-297, F.A.C.). These tests shall be performed once each federal fiscal year.

If consecutive annual tests for VOC emissions show compliance at 50% of the standard or less, the test frequency for that pollutant is reduced to testing prior to renewal of the operation permit. Annual testing shall resume for any subsequent failure to demonstrate compliance at renewal.

[Permit #AC54-192551; PSD-FL-171, 3/11/93 Alternate Procedures and Requirements Order; Rules 62-297.310(7)(a)4 and 62-212.400 (BACT), F.A.C.]

D.~~16~~19.NOx Data Exclusion Procedures: As specified in Specific Condition 18, limited amounts of CEMS emissions data may be excluded from the NOx BACT standard (30-day rolling average), provided that best operational practices to minimize emissions are adhered to and the duration of data excluded is minimized. As provided by the authority in Rule 62-210.700(5), F.A.C., these conditions replace the provisions in Rule 62-210.700(1), F.A.C.

(a) *Limiting Data Exclusion.* If the 30-day rolling average using all valid CEMS emissions data indicates that the emissions unit is in compliance, then no CEMS data shall be excluded from the compliance average.

(b) *Event Driven Exclusion.* There must be an underlying event (startup, shutdown, malfunction, or fuel switching) that causes excess emissions in order to exclude data. If there is no underlying event, then no data may be excluded.

(c) *Continuous Data.* If an authorized underlying event causes emissions in excess of the NOx standard **(30-day rolling average), then the data collected during the** authorized underlying event may be excluded to demonstrate compliance. The duration of the event shall be identifiable and data shall be excluded for the continuous period.

[Permit No. 1070005-067-AC/PSD- 380C and Rule 62-210.700, F.A.C.]

D.~~17~~20 Allowable NOx Data Exclusion: In accordance with the NOx Data Exclusion Procedures of Specific Condition 17 and for each of the events listed below, the following data may be excluded from the NOx BACT standard (30-day rolling average):

(a) *Startup and shutdown:* Up to eight hours of NOx CEMS data may be excluded due to each startup and each shutdown of the lime kiln.

(b) *Malfunction*: In any calendar day, up to two hours of NOx CEMS data may be excluded due to a malfunction.

(c) *Fuel Switching*: Up to one hour of CEMS data may be excluded due to a fuel switch.

Only those minutes attributable to an authorized event shall be excluded. All valid emissions data (including data collected during startup, shutdown, malfunction, and fuel switching) shall be used to report annual emissions for the Annual Operating Report (Rule 62-210.370(3), F.A.C.) and the report comparing Actual Emissions to Baseline Actual Emissions (Rule 62-212.300(1)(e), F.A.C.)

[Permit No. 1070005-067-AC/PSD- 380C, Rule 62-210.200 (BACT), Rule 62-210.370, and Rule 62-210.700 F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

D.~~18~~.21 TRS Continuous Monitoring: TRS continuous monitoring system shall comply with the applicable requirements in Rule 62-296.404(5), (6), F.A.C.

[Permit No. 1070005-068-AV]

D.~~19~~.22 The total lime mud input to the kiln in lbs/hr shall be monitored and recorded on a daily basis. Using the operating time for the day, the 24-hr average of lime mud input to the kiln in lbs/hr shall be calculated and recorded. If process instruments are malfunctioning, the permittee may use laboratory data and/or best engineering judgments to estimate this rate. However, upon malfunction GP shall in writing, document what equipment is down, when it went down and how it was fixed. The letter must also document when the equipment came back online. This method is only for a limited time frame. This information shall be reported as part of the facility's routine quarterly air report.

D.~~20~~. 23 The liquid flow rate to the scrubber shall be monitored continuously. This parameter value may be reset by performing additional compliance tests and upon Department approval.

[Permit No. 1070005-068-AV]

D.~~21~~24. Scrubber Monitoring: The permittee shall install, operate, and maintain equipment to continuously monitor and record the venturi scrubber pressure drop and flow rate. In accordance with the monitoring requirements specified in NESHAP Subpart MM, minimum operating levels shall be determined for these parameters; at least once every successive 15-minute period using the procedures in §63.8(c), as well as the procedures in paragraphs (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.

However, the operating levels shall be selected to ensure compliance with the BACT standard specified in this permit. If monitors show operation below the minimum operating levels, the permittee shall take appropriate corrective actions to regain proper operation of the control system.

[Rules 62-4.070(3), 62-212.400 (BACT), F.A.C. and NESHAP Subpart MM Monitoring Requirements]

D.~~22~~. 25 Fuel Records**:** On a monthly basis, the permittee shall document the amount of oil fired during each calendar month and the 12-month rolling total.

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

D.~~23~~.26Continuous Compliance: The permittee shall demonstrate continuous compliance with the (30-day NOx standard with data collected from the required CEMS.

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

D.~~24~~27**.**Quality Assurance: The owner or operator shall follow the quality assurance procedures of Appendix F in 40 CFR Part 60. For NOx monitors, the required Relative Accuracy Test Audit (RATA) shall be performed using EPA Method 7E Appendix A of 40 CFR Part 60. NOx shall be expressed as "NO_2".

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

D.~~25~~28.Moisture Correction: If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).

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

D.~~26~~29~~.~~Gas Flow Rate: The permittee shall submit to the Department for review a development plan for determining the F–Factor for the gas flow rate from the NO. 4 Lime Kiln. Once approved by the Department, the Permitee shall implement the development plan to determine the F-Factor. If the methodology in the development plan cannot be confirmed to be within 20% of the mean value of the reference method test data in terms of the units of the emission standard, or 10% of the applicable standard as compared to actual stack flow measurement, whichever is greater, the permitee shall either use actual stack flow data gathered during the most recent compliance test or install an approved gas flow meter in the lime kiln exhaust stack.

[Rules 62-4.070 (3), F.A.C. and 40 CFR 60 Appendix B]

CONTINUOUS EMISSIONS MONITORING SYSTEMS (CMS)

D. ~~27~~30**.**CEMS Data Requirements:

(a) Data Collection: Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions shall be monitored and recorded during all operations including startup, shutdown and malfunction.

(b) Operating Hours and Operating Days: An hour is the 60- minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15- minutes is an operating hour for that emissions unit. A day is a 24- hour period from midnight to midnight. Any day with at least one operating hour for an emissions unit is an operating day for that emissions unit.

(c) Valid Hour: Each CEMS shall be designed and operated to sample, analyze and record data evenly spaced over the hour at a minimum of one measurement for each 15- minute period. All valid

measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.

(1) Hours that are not operating hours are not valid hours.

(2) For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15-minutes. If less than two such data points are available, there is insufficient data and the 1-hour block average is not valid.

(3) During fuel switching, any hour in which fuel oil is fired is attributed towards compliance with the permit standard for oil firing.

(4) All valid measurements shall be in accordance with CFR 60.13.

(5) The 30-day rolling average shall be determined using 30 consecutive 24-hour block averages for operating days. The 24-hour block average shall begin at midnight of each operating day and shall be calculated from the valid hourly average concentration values. If a unit operates less than 24 hours during the block, or there are less than 24 valid hourly averages available, the 24-hour block average shall be the average of all available valid hourly average concentration values.

(d) Data Exclusion: Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction and fuel switches. Limited amounts of the CEMS emissions data recorded during these authorized events may be excluded from the NOx BACT emissions standard subject to the provisions of Specific Conditions 11 and 12 of this subsection.

(e) Availability: The quarterly excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter in which the unit operated for more than 760 hours. In the event the applicable availability is not achieved, the permitee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% availability. The permitee shall implement the reported corrective actions within the next calendar quarter.

[Permit No. 1070005-067-AC/PSD-FL-380C and Rules 63-4.070(3) F.A.C.]

D. ~~28~~31. CEMS Annual Emissions Requirement: The owner or operator shall use data from the NOx CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rule 62-210.370(3), F.A.C. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

[Rules 62-210.200, and 62-210.370(3), F.A.C.]

D.~~29~~32. Continuous Emissions Monitoring Systems (CMS) will be used to track compliance with MACT II Standards: The scrubber flow rate at a minimum of 634 gpm and differential pressure at a minimum of ~~26~~ 24 inches of water with both parameters measured as three-hour rolling averages.

[40 CFR 63.864(j) and Georgia Pacific Corporation Bubble Demonstration date October 22, 2004, June 25, 2013 and February 18, 2014 compliance tests]

REPORTING AND RECORD KEEPING REQUIREMENTS

D. ~~30~~33. Malfunction Notification: If emissions in excess of a standard (subject to the specified averaging period) occur due to malfunction (data exclusion) the permitee shall notify the Compliance Authority within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess

emissions, and the actions taken to correct the problem. In addition, the Department may request a written summary report of the accident.

[Rules 62 -4.130, 62-210.700(6) and 62 – 212.400(BACT), F.A.C.]

~~**D. 31**. Annual Operating Report: The permitee shall submit an annual report that summarizes the actual operating hours and emissions from this facility in accordance with 62-210.370. Annual operating report shall be submitted to the Compliance Authority by April 1st of each year.~~

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

D. ~~32~~.34 Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

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

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

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

(2) The annual emissions as calculated pursuant to the provisions of Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit;

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

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

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

For this project, the Department requires the annual reporting of actual CO, NOx, PM and VOC emissions for the No. 4 Lime Kiln (EU-017).

[Application 1070005-067-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

COMMON CONDITIONS - ON-SPEC USED OIL

D.~~33~~35. This emissions unit is also subject to the On-Spec Used Oil requirements in Subsection W

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

D.~~34~~36. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection Y.

COMMON CONDITIONS - KRAFT (SULFATE) PULP MILLS

D.~~35~~37. This emissions unit is also subject to applicable Kraft (Sulfate) Pulp Mills Requirements in Subsection Z.

COMMON CONDITIONS - PERIODIC MONITORING

D.~~36~~38. This emissions unit is also subject to applicable Periodic Monitoring Requirements in Subsection AA.

COMMON CONDITIONS – EXCESS EMISSIONS

D.~~37~~39. This emissions unit is also subject to the applicable Excess Emissions requirements in Subsection X.

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

EU No.	Brief Description
018	#4 Recovery Boiler with an electrostatic precipitator to control particulate matter emissions is a low odor design boiler. Total Reduced Sulfur emissions are reduced by low odor design.

As part of the recovery process at the mill, this unit fires black liquor solids (BLS) as the primary fuel to facilitate the recovery of the cooking liquor. The total maximum operating capacity of this emissions unit is 210,000 lbs Black Liquor Solids/hr based on a 24-hour average (equivalent to 5.04×10^6 lb/day BLS and equivalent to 1345 MMBtu/hour based on the permitted capacity and an average heating value of 6410 Btu/lb of BLS) This is also equivalent to approximately 27,984 gallons/hour of black liquor. Natural gas ~~Residual fuel oil~~ is fired as a startup, shutdown and supplemental fuel.

Particulate matter emissions are controlled by an electrostatic precipitator (ESP) with automatic voltage control, 2-chambers, and 6 electric fields per chamber. Total reduced sulfur (TRS) emissions are controlled by the low-odor boiler design. Emissions of nitrogen oxides (NO_X) are controlled by a four-level overfire air system. Emissions of carbon monoxide (CO) and volatile organic compounds (VOC) are controlled by the combustion design and good operating practices.

The following pollutants are monitored with continuous emissions monitoring systems (CEMS): CO, NO_X, SO_2, and TRS. Visible Emissions are monitored with a continuous opacity monitoring system (COMS). At permitted BLS capacity, the exhaust gas flow rate is 294,000 dscfm at 8% oxygen with an exit temperature of 400° F. Exhaust gases exit a stack that is 12 feet in diameter and 230 feet tall.

{Permitting Note: This emissions unit is regulated under Rule 62-296.404, F.A.C. – Kraft Pulp Mills, Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit(s) No(s). PSD-FL-171, PSD-FL-226; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated June 7, 1991 and September 18, 1995 and 40 CFR 63, Subpart MM- National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills}.

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

OPERATIONAL PARAMETERS

E.1. Permitted Capacity:

a. Black Liquor Solids: The operation rate shall not exceed 210,000 lb (BLS)/hr where BLS is Black Liquor Solids as a 24-hr average, (equivalent to 27,984 gallons/hour of black liquor).

{ Permitting Note: The maximum heat input from firing BLS is 1,345MMBtu/hr. based on the permitted capacity and an average heating value of 6,410 MMBtu/lbs of BLS.}

b. Natural Gas Burners:

(1) The total heat input from the combustion of natural gas in the startup and load burners combined shall not exceed 664 MMbtu/hour.

(2) The annual heat input rate to the No. 4 Recovery Boiler shall not exceed 1,178,220 MMBtu during any consecutive 12 months (equivalent to 10% of the total permitted annual heat input to the boiler).

{ Permitting Note: The average heating value of natural gas is approximately 1,000 MMBtu/million cubic feet of gas.}

[Rules 62-4.070(3), 62-4.160, 62-210.200(Definitions - PTE), Construction Permit No. 1070005-038-AC; and Construction Permit No. 1070005-080-AC]

E.2. Reserved

E.3.~~(a)~~. Authorized Fuels: The No. 4 Recovery Boiler is authorized to fire only the listed fuels as specified below:

- Black Liquor Solids (Black Liquor at approximately 66% BLS content and 11.37 lb/gallon density) is the primary fuel for the recovery process.
- Natural gas shall be used during startup, shutdown and as a supplemental fuel.
- ~~No. 6 Fuel Oil with a maximum sulfur content not to exceed 2.35% by weight (with or without any prior blending with on-specification used oil as stated in E.3.(b)(iii) below). This fuel shall be fired as a startup, shutdown, and supplemental fuel (e.g. maintain the flame stability of the boiler);~~
- ~~Subject to the requirements of Appendix G of Construction Permit No. 1070005-038-AC, limited amounts of on-specification used oil may be blended and fired with the No. 6 fuel oil.~~

Excess Emissions due to startup and shutdown are conditionally allowed for up to 8 hours in any 24-hour period unless specifically authorized by the Department for longer duration.

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

[Rule 62-213.410, F.A.C.; Rule 62-210.700, F.A.C.; Construction Permit No. 1070005-017-AC Construction Permit No. 1070005-080-AC; PCP Exclusion dated March 14, 2002]

~~**E.3.(b) Capacity & Fuel Restrictions:**~~

~~(i) Black Liquor Solids: The maximum operating capacity is 210,000 lb/hour of BLS based on a 24-hour average, which is equivalent to a heat input rate of 1345 MMBtu per hour based on a fuel heating value of 6,410 Btu/lb of BLS. This is also equivalent to approximately 27,984 gallons per hour of black liquor.~~

~~(ii) **Oil Burner Capacity:** The following table specifies the physical design capacities of the oil firing system designed by Combustion Engineering:~~

~~Burner Type~~	~~Quantity~~	~~Oil Pressure~~	~~Maximum Design Capacities~~			
			~~Oil Firing Rate (gph)~~		~~Heat Input Rates (MMBtu/hour)*~~	
			~~Each Burner~~	~~Total~~	~~Each Burner~~	~~Total~~
~~Startup Burners~~	~~4~~	~~88 psig~~	~~375~~	~~1500~~	~~56.25~~	~~225~~

~~Load Burners~~	~~8~~	~~80 psig~~	~~925~~	~~7400~~	~~138.75~~	~~1110~~

~~* For No. 6 fuel oil, assumes a heating value of 150,000 Btu/gallon and a density of 8.2 lb/gallon.~~

~~Any changes to the design or operation of the oil firing system shall require a modification of this permit and a corresponding PSD applicability determination.~~

~~(iii) No. 6 Fuel Oil: The maximum firing rate shall not exceed 67,680 gallons of No. 6 fuel oil (including that blended with on-spec used oil) during any consecutive rolling 24 hours.[1]~~

~~(iv) On-spec Used Oil. The on-specification used oil shall be blended with residual oil (No. 6 Fuel Oil), and shall not exceed 10% of the oil consumed.~~

~~(v). All Fuel Oil. The maximum consumption of all fuel oil (No. 6 residual oil, and on-specification used oil) shall not exceed 7,860,640 gallons during any consecutive 12-month period[4].~~

~~(vi). Annual Heat Input. The heat input rate to the No. 4 Recovery Boiler from firing oil shall be less than 1,178,220 MMBtu during any consecutive 12 months[2].~~

~~[1] This is equivalent to a 24-hour average of 47 gpm, which was the basis of the air quality analysis for ensuring compliance with the Ambient Air Quality Standards as stated in Construction Permit No. 1070005-050-AC. See oil burner design capacity in E.3.(b)(ii) above.~~

~~[2] As stated in Construction Permit Nos. 1070005-038-AC and 1070005-050-AC, the oil firing restriction and maximum annual heat input rate maintains an annual capacity factor of less than 10% for fossil fuel firing at the emissions unit.~~

~~[Rules 62-4.070(3), 62-4.160, Design and Rule 62-210.200(Definitions - PTE); 62-212.400(12)(c), F.A.C., Construction Permit No. 1070005-038-AC; Construction Permit No. 1070005-050-AC; FINAL Title V Permit No. 1070005-054-AV, Construction Permit No. 1070005-059-AC, and Applicant's Request in Application No. 1070005-076-AV/079-AC]~~

~~[Rules 62-4.070(3), 62-4.160, 62-210.200(Definitions - PTE), Construction Permit No. 1070005-038-AC; Construction Permit No. 1070005-050-AC; FINAL Title V Permit No. 1070005-054-AV~~

E.4. Hours of Operation: The hours of operation are not limited.

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

EMISSION LIMITATIONS AND STANDARDS

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

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

E.5.a. PM Standard: As determined by EPA Method 5 or 29, PM emissions shall not exceed 0.030 grains per dscf @ 8% O_2 and 75.6 lb/hour based on the average of three test runs.

[Rule 62-212.400(BACT), F.A.C., and Construction Permit No. 1070005-038-AC]

E.5.b Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen.

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

E.5.c. Particulate Matter Emissions: Particulate Matter Emissions shall not exceed 3 lbs/3000 lbs BLS fed. lbs/hr and 360.69 TPY. The amount of BLS fired in this recovery boiler shall be continuously monitored and recorded.

[Rule 62-296.404(2), F.A.C]

E.6. TRS Standard: As determined by data collected from the existing CEMS, TRS emissions shall not exceed 34.2 tons per year based on a 12-month rolling CEMS total.

[Rule 62-212.400(12), F.A.C.; and Construction Permit No. 1070005-038-AC]

E.7. Visible Emissions: Once the ESP is placed in service during startup of the recovery boiler, visible emissions shall not exceed 20% opacity based on a 6-minute average as determined by the existing COMS and EPA Method 9. The COMS must be operated and maintained according to the provisions in §§63.6(h) and 63.8 and paragraphs (1) through (4) of this condition.

(1)-(2) [Reserved]

(3) As specified in §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 §63.8(g)(2).

[Rule 62-212.400 (BACT), F.A.C.; Construction Permit No. 1070005-038-AC and 40. CFR 63.864(d)]

E.8. SO2 Emissions Standards: As determined by CEMS, SO_2 emissions from the No. 4 Recovery Boiler shall not exceed 100 ppmvd at 8% O_2 based on a 24-hour rolling average. This emissions standard includes all valid SO_2 CEMS data collected except during periods of boiler startup and shutdown.

{Permitting Note: The limit of 100 ppmvd corrected to 8% oxygen is equivalent to 292.8 lb/hour. This limit is based on the PSD modeling analysis for PSD-FL-380 and PSD-FL-393.}

[Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(12), F.A.C.; and Construction Permit No. 1070005-050-AC]

E.9. SO2 Emissions Cap: As determined by all valid CEMS data, SO_2 emissions from the No. 4 Recovery Boiler shall not exceed 153.9 tons during any consecutive 12 months. This emissions cap includes valid SO_2 CEMS data collected including all periods of startup, shutdown, and malfunction. ~~and oil firing.~~

{Permitting Note: The purpose of this emissions cap is to avoid PSD preconstruction review for PSD-FL-380 and PSD-FL-393.}

[Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(12), F.A.C.; and Construction Permit No. 1070005-050-AC]

E.10. CO Emissions: CO emissions shall not exceed 400.0 ppmvd @ 8% O_2 and 512.7 lb/hour based on a 30-day rolling CEMS average, excluding periods of startup and shutdown.

[Rule 62-212.400 (BACT), F.A.C. ; Permit No. 1070005-038-AC]

E.11. VOC (Volatile Organic Compounds) Emissions: VOC (Volatile Organic Compounds) Emissions shall not exceed 0.20 lb/ton of BLS and 21.0 lb/hour (THC determined as methane) based on the average of three test runs.

[Rule 62-212.400 (BACT), F.A.C.; Permit No. 1070005-038-AC]

Emissions based on the average of three (3) test runs conducted in accordance with EPA Method 25A to measure the total hydrocarbon concentration, EPA Methods 1 through 4 to measure the volumetric flow rate, and EPA Method 3A or 3B to measure the oxygen concentration to correct the VOC concentration.

[BACT; Permit #AC54-266676; PSD-FL-226]

E.12. Sulfuric Acid Mist (SAM) Emissions: Sulfuric Acid Mist (SAM) Emissions shall not exceed 0.81 ppmvd; 3.6 lb/hr and 15.9 TPY, based on the average of three (3) test runs conducted in accordance with EPA Method 8, incorporated and adopted by reference in Chapter 62-297, F.A.C.) or NCASI Method 106 (8A).

[BACT; Permit #AC54-266676; PSD-FL-226]

E.13. Beryllium Emissions: Beryllium Emissions shall not exceed 0.5 lb/E+12 Btu; 6.4E-4 lb/hr and 2.8E-3 TPY, based on the average of three (3) test runs conducted in accordance with EPA Method 104.

[BACT; Permit #AC54-266676; PSD-FL-226]

E.14. NO_X Emissions: As determined by data collected from the required CEMS, NO_X emissions shall not exceed 80.0 ppmvd @ 8% O_2 and 168.5 lb/hour based on a 30-day rolling CEMS average, excluding periods of startup and shutdown.

[Rule 62-212.400 (BACT), F.A.C.]

TEST METHODS AND PROCEDURES

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

E.15. VOC (Volatile Organic Compounds): VOC (Volatile Organic Compounds) Emissions testing shall comply with Rule 62-297.401(25)(a), F.A.C. (EPA Method 25A to measure the total hydrocarbon concentration, EPA Methods 1 through 4 to measure the volumetric flow rate, and EPA Method 3A or 3B to measure the oxygen concentration to correct the VOC concentration, incorporated and adopted by reference in Chapter 62-297, F.A.C.). These tests shall be performed prior to renewal of operation permit or when the Department requests a special test pursuant to Rule 62-297.310(7)(b), F.A.C.

[Permit #AC54-266676; PSD-FL-226, 3/11/93 Alternate Procedures and Requirements Order, and Construction Permit No. 1070005-038-AC]

E.16. SAM (Sulfuric Acid Mist): SAM (Sulfuric Acid Mist) Emissions testing shall comply with Rule 62-297.401(8), F.A.C. (EPA Method 8, incorporated and adopted by reference in Chapter 62-297, F.A.C.) or NCASI Method 106 (8A) and be performed once each federal fiscal year.

[Permit #AC54-266676; PSD-FL-226, Applicant Request dated March 23, 2004]

E.17. Beryllium Emissions: Beryllium Emissions testing shall comply with Rule 62-297.401(35), F.A.C. (EPA Method 104, incorporated and adopted by reference in Chapter 62-297, F.A.C.) and be performed every 5 years

[Permit #AC54-266676; PSD-FL-226]

E.18. Compliance Tests: In accordance with the following requirements, the permittee shall have stack tests conducted to demonstrate compliance with the emissions standards specified in this permit for PM and VOC.

- During each federal fiscal year (October 1st to September 30th), compliance tests shall be conducted to determine PM emissions. Because VOC emissions are expected to be low and the CO CEMS will ensure efficient combustion, subsequent VOC tests shall be conducted prior to renewal of the operation permit or when the Department requests a special test pursuant to Rule 62-297.310(7)(b), F.A.C.
- Test Fuel: Compliance tests shall be conducted when firing BLS at permitted capacity. [Rules 62-4.070(3), 62-212.400 (BACT) and 62-297.310, F.A.C.]

  Operational Data for Tests: For each test run, the permittee shall monitor and record the following information: fuel feed rate; the secondary power input to the ESP; the flue gas oxygen content (%); CO, NO_X, SO_2 and TRS CEMS data; and opacity COMS data.

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

[Rules 62-297.310 and 62-4.070(3), F.A.C.40 CFR 63.865(b)(6)]

E.19. Particulate Matter (PM) Concentration Correction: The PM concentration must be corrected to the appropriate oxygen concentration as stated in **Specific Condition E.5.b** using the following Equation:

$$C_{corr} = C_{meas} \times \frac{(21 - X)}{(21 - Y)} \qquad \text{(Eq. 7)}$$

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); and

Y = The measured average volumetric oxygen concentration.

[40 CCFR 63.865(b)(2)]

E.20. Oxygen Concentration: Method 3A or 3B in appendix A of 40 CFR part 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 §63.14) may be used as an alternative to using Method 3B. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3)]

CONTINUOUS MONITORING REQUIREMENTS

E.~~19~~21. Total Reduced Sulfur (TRS): Total Reduced Sulfur (TRS) continuous emissions monitoring shall comply with the applicable requirements in Rule 62-296.404(5)(b)1.a., F.A.C. and compliance with the 12-month rolling average for TRS shall be based on the CEM data.

[PSD-FL-226]

E.~~20~~22. Fuel Monitoring: The permittee shall continuously monitor and record the flow/firing rate of each authorized fuel stated in **Specific Condition No. E.3. (a)** ~~**& (b)**~~ for the No. 4 Recovery Boiler including the fuel firing and heat input rate restrictions.

This may consist of fuel flow meters with integrators to monitor each flow rate.

[Rules 62-4.070(3); 62-212.400 (PSD), F.A.C.; Construction Permit No. 1070005-038-AC and Construction Permit No. 1070005-059-AC]

E.21~~22~~23. CEMS: To demonstrate compliance with the emissions standards for the No. 4 Recovery Boiler, the permittee shall calibrate, operate and maintain continuous emissions monitoring systems (CEMS) to measure and record CO,TRS, SO2 and NO_X emissions in the terms of the applicable standard. The systems shall include continuous monitors to determine the flue gas oxygen content and exhaust flow rate. Each CEMS shall have been installed such that representative measurements of emissions or process parameters from the facility are obtained.

As an alternative to a continuous flow monitor, the permittee has developed a site specific F-factor for BLS.

[Rules 62-4.070(3) and 62-212.400 (PSD), F.A.C.; and Construction Permit No. 1070005-038-AC]

E.~~22~~24. Compliance by CEMS: Compliance with the opacity and TRS standards shall be demonstrated with data collected from the existing COMS and CEMS. Compliance with the CO and NO_X standards shall be demonstrated with data collected from the CEMS required by Construction Permit No. 1070005-038-AC. The permittee shall comply with **Specific Conditions E.~~30~~ 31.** of this permit.

[Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.; and Construction Permit No. 1070005-038-AC]

E.~~23~~25. SO2 CEMS: The permittee shall calibrate, operate and maintain a CEMS to measure and record SO_2 emissions to demonstrate compliance with the standards specified in this permit. The CEMS shall include the measurement of oxygen (or carbon monoxide) for correction of SO_2 emission concentrations to 8% oxygen. The CEMS shall comply with the applicable requirements of Performance Specification 2 in Appendix B of 40 CFR Part 60 and the quality assurance procedures in Appendix F of 40 CFR Part 60. The permittee shall comply with **Specific Conditions E.~~30~~ 31. .** of this permit.

[Rule 62-4.070(3), F.A.C.; and Construction Permit No. 1070005-050-AC]

E.~~24~~ 26. SO2 CEMS Data Substitution: The following procedures shall be used for missing data.

(a) SO_2 24-hour Rolling Average. No data shall be substituted for the missing data to determine compliance with the standard based on 24-hour rolling average. The next valid 1-hour emissions average shall be used to complete the 24-hour rolling average.

(b) SO_2 Emissions Cap. All valid CEMS data shall be used to determine compliance with the SO_2 emissions cap. This includes periods of startup, shutdown, malfunction, oil firing and operation while firing BLS. For periods of missing data, the permittee shall calculate the maximum 24-hour rolling average for each method of operation (e.g., startup, shutdown, malfunction, oil firing and operation while firing BLS). For the 12-month period, this average shall be substituted for each missing 1-hour emissions average under the given method of operation.

[Rule 62-4.070(3), F.A.C.; and Construction Permit No. 1070005-050-AC]

E.~~25~~27. ESP Operation: The permittee shall operate and maintain the ESP to minimize PM emissions. The permittee is authorized to operate the ESP with fields removed from service, under the operating conditions that demonstrated compliance during testing, when conducting repairs or maintenance on the ESP.

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

RECORDKEEPING AND REPORTING REQUIREMENTS

E.~~26~~28. Total Reduced Sulfur (TRS) continuous emissions monitoring quarterly report shall comply with the applicable requirements in Rule 62-296.404(6), F.A.C.

E.~~27~~29.(a). Semiannual Monitoring Reports: The permittee shall submit a written report to the Compliance Authority summarizing the following for each calendar quarter: CO, NO_X, SO_2, and TRS emissions; opacity; CEMS monitor availability; gallons of oil fired; and total hours of operation. The reports shall identify any exceedance of an emissions or performance limitation. The reports are due within 30 days following the second and fourth calendar quarters.

[Rule 62-4.070(3), F.A.C.; and Construction Permit No. 1070005-038-AC]

E.~~27~~29.(b). Semiannual Monitoring Reports: The permittee shall submit a written report to the Northeast District Office (Compliance Authority) summarizing the following for each calendar quarter:

- Gallons of Black Liquor fired (including percent solids, estimated density);
- Total Hours of operation;
- Demonstration that the fuel firing and heat input rate limitations of **Specific Condition E.3.** have been met;

The reports shall identify any exceedance of an emissions or performance limitation. The reports shall be submitted no later than 30 days following the second and fourth calendar quarters.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1070005-038-AC, and Applicant's Request in Application No. 1070005-076-AV/079-AC]

E.~~28~~30. CEMS Required for Reporting Annual Emissions: The permittee shall use SO_2 data from the CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rules 62-210.370(3) and 62-212.300(1)(e), F.A.C. The permittee shall comply with **Specific Conditions E.~~30~~31. Calculating and Reporting Annual Emissions, Condition. 14.** of this permit.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 1070005-050-AC]

~~**E.29. Fuel Oil Firing Records:** The permittee shall operate and maintain an oil flow monitoring system to determine compliance with the oil firing limitations for the No. 4 Recovery Boiler (gallons per consecutive rolling 24-hour period and MMBtu per consecutive rolling 12-month period).~~

~~[Rules 62-4.160(15) and 62-4.070(3), F.A.C.; and Construction Permit No. 1070005-050-AC]~~

STANDARD CONTINUOUS MONITORING REQUIREMENTS

The No. 4 Recovery Boiler (EU-018) is subject to the following requirements for the new continuous emissions monitoring systems (CEMS) required for CO and NO_X emissions.

E.~~30~~31. CEMS Operation Plan: The permittee shall implement a plan for the proper calibration, maintenance, and operation of each CEMS required by this permit

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

Monitors, Performance Specifications and Quality Assurance

1. Span Values and Dual Range Monitors: The permittee shall set appropriate span values for the CEMS based on the emissions standards and range of operation. If necessary, the permittee shall install dual range monitors in accordance with the CEMS Operation Plan.

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

2. Diluent Monitor: If required by permit to correct the CEMS output to the oxygen concentrations specified in the applicable emissions standard, the permittee shall either install an oxygen monitor or install a CO_2 monitor and use an appropriate F-Factor computational approach.

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

3. Moisture Correction: If necessary, the permittee shall install a system to determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).

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

4. Continuous Flow Monitor: For compliance with mass emission flow rate standards, the permittee shall install a continuous flow monitor to determine the stack exhaust flow rate. The flow monitor shall be certified pursuant to 40 CFR Part 60, Appendix B, Performance Specification 6. Alternatively, the permittee may install a fuel flow monitor and use an appropriate F-Factor computational approach to calculate stack exhaust flow rate.

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

5. Performance Specifications: The permittee shall evaluate the "acceptability" of each CEMS by conducting the appropriate performance specification. For CO monitors, the permittee shall conduct Performance Specification 4 of 40 CFR Part 60, Appendix B. For NO_X monitors, the permittee shall conduct Performance Specification 2 of 40 CFR Part 60, Appendix B.

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

6. Quality Assurance: The permittee shall follow the quality assurance procedures of 40 CFR Part 60, Appendix F. For CO, the required relative accuracy test audit (RATA) tests shall be performed using EPA Method 10 in Appendix A of 40 CFR Part 60. For NO_X, the RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR Part 60. [Rule 62-4.070(3), F.A.C.]

CALCULATION APPROACH FOR SIP COMPLIANCE

7. CEMS for Compliance: The permittee shall use the CEMS to demonstrate compliance with the applicable emission standards as specified by this permit.

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

8. CEMS Data: Each CEMS shall monitor and record emissions during all operations and whenever emissions are being generated, including during episodes of startups, shutdowns, and malfunctions. All data shall be used, except for invalid measurements taken during monitor system breakdowns, repairs, calibration checks, zero adjustments, and span adjustments. [Rule 62-4.070(3), F.A.C.]

9. Operating Hours and Operating Days: For purposes of this Specific Condition, the following definitions shall apply. An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24-hour period from 6:00 am to 6:00 am. Any day with at least one operating hour for an emissions unit is an operating day for that emission unit.

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

10. Valid Hourly Averages*:* Each CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.

    Hours that are not operating hours are not valid hours.

    For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data, the 1-hour block average is not valid, and the hour is considered as "monitor unavailable."

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

11. Calculation Approaches: The permittee shall implement the calculation approach specified by this permit for each CEMS, as follows:

    Daily Averages: A daily average shall be calculated and recorded for each operating day as the arithmetic average of all valid hourly averages occurring from midnight to midnight.

    Rolling 30-day Average. Compliance with the 30-day rolling average shall be determined after each operating day by calculating and recording the arithmetic average of all valid hourly averages for the previous 30 operating days (compliance period).

    Rolling 12-month Average:

    Rolling 12-month Totals:

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

12. Minimum Valid Hours: At least one valid hourly average shall be used to calculate the emissions over any averaging period specified by this permit. One valid hourly average shall be sufficient to calculate the emissions over any averaging period.

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

MONITOR AVAILABILITY

13. Monitor Availability: Monitor availability shall be calculated on a quarterly basis for each emission unit as the number of valid hourly averages obtained by the CEMS, divided by the number of operating hours, times 100%. The monitor availability calculation shall not include periods of time where the monitor was functioning properly, but was unable to collect data while conducting a mandated quality assurance/quality control activity such as calibration error tests, RATA, calibration gas audit, or relative accuracy audits (RAA). Monitor availability for each CEMS shall be 95% or greater in any calendar quarter.

    Monitor availability shall be reported in the quarterly excess emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

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

CALCULATING AND REPORTING ANNUAL EMISSIONS

14. a. CEMS for Calculating Annual Emissions: As defined by this Specific Condition, all valid data shall be used when calculating annual emissions.

    Annual emissions shall include data collected during startup, shutdown, and malfunction periods.

    Annual emissions shall include data collected during periods when the emission unit is not operating, but emissions are being generated (for example, firing fuel to warm up a process for some period of time prior to the emission unit's "official" startup).

    Annual emissions shall not include data from periods of time where the monitor was functioning properly but was unable to collect data while conducting a mandated quality assurance/quality control activity such as calibration error tests, RATA, calibration gas audit, or RAA. These periods of time shall be considered "missing data" for purposes of calculating annual emissions.

    Annual emissions shall not include data from periods of time when emissions are in excess of the calibrated span of the CEMS. These periods of time shall be considered "missing data" for purposes of calculating annual emissions.

    Accounting for Missing Data: All valid measurements collected during each hour shall be used to calculate a 1-hour block average that begins at the top of each hour. For each hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the permittee shall account for emissions during that hour using site-specific data to generate a reasonable estimate of the 1-hour block average.

    Emissions Calculation: Annual emissions shall be calculated as the sum of all valid emissions occurring during the year.

    Reporting Annual Emissions: The permittee shall use data from each required CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rules 62-210.370(3) and 62-212.300(1)(e), F.A.C.

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

b. Actual Emissions Reporting: Permit No. 1070005-072-ACis based on an analysis that compared baseline actual emissions with projected actual emissions and the project avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

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

1) The name, address and telephone number of the owner or operator of the major stationary source;

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

(d) The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual emissions for the No. 4 Recovery Boiler to show compliance with the established BACT emission limits included in the previous permit PSD-FL-380 (1070005-038-AC):

1) The permittee shall use data collected from the CEMS to determine and report the actual annual emissions of CO, NO_X, SO_2, and TRS.

2) The permittee shall use the data collected from the required stack tests to determine and report the actual annual emissions of filterable PM/PM_{10}. The permittee shall follow the stack test methods, test procedures and test frequencies specified in the current Title V air operation permit.

3) The permittee shall use the data collected from the required stack tests to determine and report the actual emissions of VOC in accordance with the stack test methods, test procedures and test frequencies specified in the current Title V air operation permit.

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

[Project No. 1070005-076-AV AND 1070005-080-AC, Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

c. Actual Emissions Reporting: Permit No. 1070005-080-AC is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

(a) The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could

be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

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

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

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

(d). The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use data collected from the CEMS to determine and report the actual annual emissions of NO_X, for the No. 4 Recovery Boiler to show compliance with the established BACT emission limit included in the previous permit PSD-FL-380 (1070005-038-AC) and that the significant emission rate increase of 40 tons per year for NO_X, with respect to the PSD program is not exceeded.

[Permitting Note: For purposes of this project, baseline emissions of NO_X, were determined to be 472.18 ton/year}.

[Permit No. 1070005-080-AC]

~~**COMMON CONDITIONS - ON-SPEC USED OIL**~~

~~**E.31.** This emissions unit is also subject to the On-Spec Used Oil requirements in Subsection W.~~

COMMON CONDITIONS - EXCESS EMISSIONS

E.32. This emissions unit is also subject to applicable Excess Emissions requirements in Subsection X.

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

E.33. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection Y.

COMMON CONDITIONS - KRAFT (SULFATE) PULP MILLS

E.34. This emissions unit is also subject to applicable Kraft (Sulfate) Pulp Mills Requirements in Subsection Z.

COMMON CONDITIONS - PERIODIC MONITORING

E.35. This emissions unit is also subject to applicable Periodic Monitoring Requirements in Subsection AA.

Subsection K. This section addresses the following emissions unit.

EU No.	Brief Description
036	Elemental Chlorine Free (ECF) No. 3 Bleach Plant

Emissions Unit 036 consists of an ECF bleach plant. This plant uses chlorine dioxide in the bleaching process. Emissions are controlled by a wet scrubber. This emissions unit is regulated under 40 CFR 63 Subpart S - National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit(s) No. PSD-FL-264; PSD-FL-264A; Rule 62-212.400(6), F.A.C., and Best Available Control Technology (BACT) Determination, dated June 30, 1999.

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

OPERATIONAL PARAMETERS

K.1. Permitted Capacity: The production rate of this emissions unit shall not exceed 1,350 tons per day (TPD) of air-dried bleached pulp (ADBP) as a maximum monthly average, nor 1,440 TPD ADBP as a daily maximum.

[Rule 62-210.200, F.A.C.; Construction Permit No. 1070005-019-AC/PSD-FL-264A]

K.2. Hours of Operation: The hours of operation are not restricted, i.e. 8,760 hours per year.

[Rules 62-4.1610(2) and 62-210.200(PTE), F.A.C., Construction Permit No. 1070005-006-AC/PSD-FL-264]

OPERATING STANDARDS

K.3. Bleaching Stage Equipment: The equipment at each bleaching stage, of the No. 3 Bleach Plant, where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to the wet scrubber stack for control. The enclosures and closed-vent system shall meet the requirements specified in **Specific Condition K.5**.

[40 CFR 63.445(b)]

K.4. Chloroform Air Emissions: To reduce chloroform air emissions to the atmosphere from the No. 3 Bleach Plant, the Permittee shall meet the applicable effluent limitation guidelines and standards specified in 40 CFR 63, ~~Sub~~part ~~445~~, 430, and shall not use hypochlorite or chlorine for bleaching in the bleaching system or line.

[40 CFR 63.445(d)(2), Construction Permit No. 1070005-006-AC/PSD-FL-264]

K.5. Enclosures and Closed-Vent Systems: The enclosure and closed-vent system specified in **Specific Condition K.3** for capturing and transporting vent streams that contain HAP shall meet the following requirements:

(a) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in **Specific Condition K.14.** Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed

position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(b) Each component of the closed-vent system used to comply with **Specific Condition K.3.** that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in **Specific Condition K.13**.

(c) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.445, **Specific Condition K.7.**

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.

[40 CFR 63.450; 40 CFR 63.454(e)]

EMISSION LIMITATIONS AND STANDARDS

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

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

K.6. **Carbon Monoxide:** Carbon monoxide emissions from the wet scrubber shall not exceed 100 lbs/hr and 324 tons per year, based on the average of three (3) test runs conducted in accordance with EPA Method 10 to measure the CO concentration, EPA Methods 1 through 4 to measure the volumetric flow rate, and EPA Method 3A or 3B to measure the oxygen concentration to correct the CO concentration. Carbon monoxide emissions from this emissions unit shall be minimized to the extent practicable by efficient bleaching operations.

[Rule 62-212.400(5)(c)., F.A.C. (BACT); Construction Permit No. 1070005-019-AC/PSD-FL-264A,]

K.7. **Total Chlorinated HAPs:** The concentration of total chlorinated HAPs at the outlet of the control device shall not exceed 10 parts per million by volume, based on the average of three (3) test runs conducted in accordance with EPA Method 26A.

[63.445(c)(2); Construction Permit No. 1070005-006-AC/PSD-FL-264]

K.8. Visible Emissions: Visible Emissions from this emissions unit shall not exceed 20% opacity based on one (1) test run conducted in accordance with be EPA Method 9. The visible emissions limit shall only be effective if the visible emission measurement can be made without being substantially affected by plume mixing or moisture condensation.

[Rule 62-296.320, F.A.C.; Rule 62-296.404(2)(b), F.A.C.; Construction Permit No. 1070005-006-AC/PSD-FL-264]

TEST METHODS AND PROCEDURES

K.9. **Carbon Monoxide:** The test method for carbon monoxide emissions shall be EPA Method 10 to measure the CO concentration, EPA Methods 1 through 4 to measure the volumetric flow rate, and EPA Method 3A or 3B to measure the oxygen concentration to correct the CO concentration, as incorporated in 40 CFR 60, Appendix A. The performance test shall be conducted while processing 100 percent softwood. For the duration of all tests the emissions units shall be operating at permitted capacity. Permitted capacity is defined as at least 90 percent of the maximum operation rate (1,440 TPD ADBP) allowed by the permit. If it is impractible to test at permitted capacity, then the emissions unit may be tested at less than permittee capacity (i.e. 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. If additional physical modification is required to attain 1,440 TPD ADBP, the permittee shall submit an application for Department approval. The compliance testing shall be conducted once each federal fiscal year.

[Construction Permit No. 1070005-019-AC/PSD-FL-264A, Rule 62-204.800, F.A.C., Rules 62-212.400 and 62-297.310, F.A.C.]

K.10. **Total Chlorinated HAPs:** The test method for total chlorinated HAPs (chlorine) shall be EPA Method 26A as incorporated in 40 CFR 60, Appendix A except as modified by 40 CFR Part 63.457(b)(5)(ii).

a. The compliance testing shall be conducted once each federal fiscal year.

b. Five Year Repeat Performance Test: A performance test shall be conducted at five-year intervals for all emissions sources subject to the limitations in 40 CFR 63.445 (**Specific Conditions K.3, K4. And K.7**). The first of the five-year repeat test must be conducted by September 7, 2015, and thereafter within 60 months from the date of the previous performance test.

[Construction Permit No. 1070005-006-AC/PSD-FL-264; Rule 62-297.310(7)(a)4.c., F.A.C.; 40 CFR 63.457(a) (2)(b)]

K.11. **Visible Emissions:** The test method for visible emissions shall be EPA Method 9 as incorporated in 40 CFR 60, Appendix A. The compliance testing shall be conducted once each federal fiscal year.

[Construction Permit No. 1070005-006-AC/PSD-FL-264, Rule 62-204.800, F.A.C.]

K.12. **Vent sampling port locations and gas stream properties:** For purposes of selecting vent sampling port locations and determining vent gas stream properties, the owner or operator shall comply with the procedures in 40 CFR 63.445 [1, 2].

[1] As an alternative to the requirement in 40 CFR 63.457(b)(5)(ii)(F)(4), for additional testing over longer sampling times if the neutral titer is less than 0.5 milliliter (mL), the facility's sample will be acidified and titrated to the acid endpoint. If the acid titer is greater than 0.1 mL, the neutral titer will be assumed to be 0.1 mL, and the chlorine concentration will be reported as less than the calculated value. If the acid titer is less than 0.1 mL, the results will be calculated using 0.1 mL for both the neutral and acid titer.

[2] As an Alternative to Method 308 for measuring methanol, NCASI Method CI/SG/PULP-94.03 to measure methanol in air emission stream may be used. The mill analyzes only the chilled impinger samples and not the silica gel adsorbent tubes. This modified method, may only be used to measure methanol and does not apply to any of the other HAPs that can be measured by NCASI Method CI/SG/PULP-94-02.

[40 CFR63.457(b); EPA Approved Alternative Titration procedure for Method 26A dated May 6, 2003; EPA Approved Alterative Method to Method 308 (NCASI Method CI/SG/PULP-94.03) dated October 15, 2003.]

K.13. Detectable Leak Procedures: To measure detectable leaks for closed-vent systems as specified in **Specific Condition K.5**., the owner or operator shall comply with the following:

(1) Method 21, of Part 60, Appendix A-7; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d)]

K.14. Negative Pressure Procedures: To demonstrate negative pressure at process equipment enclosure openings as specified in **Specific Condition K.5(a).,** the owner or operator shall use one of the following procedures:

(1) An anemometer to demonstrate flow into the enclosure opening;

(2) Measure the static pressure across the opening;

(3) Smoke tubes to demonstrate flow into the enclosure opening; or

(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

[40 CFR 63.457(e)]

K.15. 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 HAPs or as chlorine.

[40 CFR 63.457(h)]

K.16. 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 owner or operator shall comply use the following procedures:

(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:

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

Where:

R=Efficiency of control device, percent.

Ei=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.

[40 CFR 63.457(i)]

K.17. Performance Test: Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[40 CFR 63.457(o)]

K.18. 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.]

CONTINUOUS MONITORING REQUIREMENTS

K.~~16~~19.Continuous Monitoring System (CMS): The permittee 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) as specified in **Specific Condition K.~~17~~20**. The CMS shall include a continuous recorder.

[40 CFR 63.453(a), Construction Permit No. 1070005-006-AC/PSD-FL-264]

K.~~17~~20.Continuous Monitoring System (CMS) Operation: A CMS shall be operated to measure the following parameters:

(1) The pH or the oxidation/reduction potential of the gas scrubber effluent;

(2) Fan amperage of the bleaching system vent gas fan*; and

(3) The gas scrubber liquid influent flow rate.

*EPA Approved Alternative Monitoring Parameter dated December 22, 2000. EPA Alternative Monitoring Parameter dated March 3, 2003 approved monitoring the differential pressure across the fan as a backup monitoring parameter to the fan loading.

[40 CFR 63.453(c), Construction Permit No. 1070005-006-AC/PSD-FL-264]

K.~~18~~21.Enclosure and Closed-Vent System: The enclosure and closed-vent system shall comply with the following requirements:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in **Specific Condition K.5.(a)** shall be performed during each calendar month, with at least 14 days elapsed time between inspections, to ensure the opening is maintained in the closed position and sealed.

(2) The closed-vent system shall be visually inspected once during each calendar month, with at least 14 days elapsed time between inspections, and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in **Specific Condition K.5.(b)** measured initially and annually by the procedures in **Condition K.13.**

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in **Specific Condition K.14.**

(5) The valve or closure mechanism specified in **Specific Condition K.5.(c)(2)** shall be inspected at least once during each calendar month, with at least 14 days elapsed time between inspections, to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by paragraphs (1) through (5) of this Condition identifies visible defects in ductwork, piping, enclosures or connections to covers required by **Specific Condition K.5**., or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

[40 CFR 63.453(k); EPA Approved Alternative received October 20, 2003]

K.~~19~~22.Wet Scrubber Operating Parameters: The wet scrubber shall be operated in a manner consistent with the minimum pH of the scrubbing medium effluent at 8.7 s.u., the minimum fan amperage of 5.5 amps and the maximum fan amperage of 17.0 amps (or backup monitoring of fan differential pressure with the minimum of 11.1 inches of water), and the minimum scrubber recirculation flow rate of 1,085 gpm. Operation of the wet scrubber below these minimum operating parameter values (unless reestablished pursuant to the procedures of **Specific Condition K.~~20~~ 23**.) or failure to perform procedures required by 40 CFR 63 Subpart S shall constitute a violation of **Specific Condition K.7**. and be reported as a period of excess emissions. All parameters are to be reported as 3-hour rolling average.

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

[40 CFR 63.453(o), Applicant Request dated 6/20/05, EPA Region 4 Letters dated 12/22/00 and 03/03/03 and GP comments dated August 15, 2006.]

K.~~20~~23.Wet Scrubber Operating Parameters – Reestablishment: To reestablish the value for each operating parameter required to be monitored under **Specific Condition K.~~17~~ 20** and as stated in **Specific Condition K.~~19~~ 22.,** (minimum pH of scrubbing medium effluent, minimum fan amperage, and minimum scrubber recirculation flow rate), the following procedures shall be used:

(1) During subsequent performance tests, continuously record the operating parameter;

(2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

[40 CFR 63.453(n)]

K. 24. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.453(q)]

RECORDKEEPING REQUIREMENTS

K.~~21~~ 25. Record Keeping: The permittee shall maintain daily records of the following information in order to document continuous compliance with **Specific Condition Nos. K.1., K.6., K.7., and K.~~17~~ 20.**:

- Quantity of pulp processed through the No. 3 Bleach Plant in air-dried bleach tons.
- Scrubber parameters monitored per **Specific Condition K.17 20**.

[Construction Permit No. 1070005-019-AC/PSD-FL-264A]

K.~~22~~ 26. The permittee shall comply with the recordkeeping requirements of 40 CFR 63.10, as shown in Table 1 of 40 CFR Part 63 Subpart S and the requirements specified in **Specific Conditions K.27 through K.29** for the monitoring parameters specified in **Specific Conditions K.19 through K. 24.**

[40 CFR 63.454(a)]

K.~~23~~ 27.Enclosure Opening, Closed-Vent System and Closed Collection System: For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;

(2) The equipment type and identification;

(3) Results of negative pressure tests for enclosures;

(4) Results of leak detection tests;

(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);

(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

(7) Repair methods applied in each attempt to repair the defect or leak;

(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;

(10) The date of successful repair of the defect or leak;

(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and

(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b)]

K.~~24~~ 28.New affected Process Equipment: The permittee shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in **Specific Condition K.~~22~~ 26,** for any new affected process equipment that becomes subject to the standards of 40 CFR Part 63 Subpart S due to a process change or modification.

[40 CFR 63.454(d)]

K.29. Recordkeeping of malfunctions: The owner or operator must maintain the following records of malfunctions:

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.453(q) **Specific Condition K. 24**., including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.454(g)]

REPORTING REQUIREMENTS

K.~~25~~ 30.The permittee shall comply with the reporting requirements of 40 CFR Part 63, Subpart A as specified in Table 1 of Subpart S and all the requirements as stated in 40 CFR 63.455.

[40 CFR 63.455(a)]

K.31. The owner or operator shall meet the requirements specified in **Specific Condition K.30**. upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of 40 CFR 63 Subpart S due to a process change or modification.

[40 CFR 63.455(d)]

K.32. Malfunction Reporting Requirements*:* If a malfunction occurred during the reporting period, the report must include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.453(q) **Specific Condition K.24**, including actions taken to correct a malfunction.

[40 CFR 63.455(g)]

K. 33 Performance Test Reports: The owner or operator must submit performance test reports as specified in paragraphs (1) through (4) of this Condition.

(1) The owner or operator of an affected source shall report the results of the performance test before the close of business on the 60th day following the completion of the performance test, unless approved otherwise in writing by the Administrator. A performance test is "completed" when field sample collection is terminated. Unless otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions and raw data. A complete test report must include the purpose of the test; a brief process description; a complete unit description, including a description of feed streams and control devices; sampling site description; pollutants measured; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions, including operating parameters for which limits are being set, during the test; record of preparation of standards; record of

calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; chain-of-custody documentation; explanation of laboratory data qualifiers; example calculations of all applicable stack gas parameters, emission rates, percent reduction rates, and analytical results, as applicable; and any other information required by the test method and the Administrator.

(2) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart, the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the owner or operator must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

(3) Within 60 days after the date of completing each CEMS performance evaluation test as defined in §63.2, the owner or operator must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (2) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(4) All reports required by this subpart not subject to the requirements in paragraphs (2) and (3) of this section must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs (2) and (3) of this Condition in paper format

[40 CFR 63.455(h)]

§63.456 Affirmative defense for violation of emission standards during malfunction.

K.34. In response to an action to enforce the standards set forth in §§63.445(b) and (c) (Condition K.3. and K.7.), or §63.450(d) (Condition K.5.(c)), the owner or operator may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report*. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[40 CFR 63.456]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

K.~~26~~ 35. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection Y.

COMMON CONDITIONS - PERIODIC MONITORING

K.~~27~~ 36. This emissions unit is also subject to applicable Periodic Monitoring Requirements in Subsection AA.

~~**COMMON CONDITIONS – EXCESS EMISSIONS**~~

~~**K. 28** .This emissions unit is also subject to applicable SSM requirements in Section II, Condition 9.~~

Subsection L. This section addresses the following emissions units:

EU No.	Brief Description
037	Thermal Oxidizer with a wet SO_2 Scrubber followed by a Candle Mist Eliminator Filter for SAM reduction. Thermal Oxidizer handling the Non-condensable Gas System from the No. 4 Multiple Effect Evaporator (MEE) Set

Sulfur from the LVHC NCG streams from the batch NCG system (NCGs from the Batch Digester System) is removed via a spray tower pre-scrubber prior to destruction in the Thermal Oxidizer or the backup control device, the No. 4 Combination Boiler. A second, spray tower pre-scrubber is used to remove sulfur from the LVHC NCG streams from the continuous NCG System (NCGs from the MEE system) prior to destruction in the Thermal Oxidizer or the backup control device, the No. 4 Combination Boiler.

NCGs from the Turpentine Condensing system and the Condensate Stripper System are vented directly to the Thermal Oxidizer for destruction, or to the backup control device, the No. 4 Combination Boiler.

This emissions unit is subject to the requirements of 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; 40 CFR 60, Subpart BB – Standards of Performance for Kraft Pulp Mills; Rule 62-212.400(2)(a)2.b., F.A.C., - PCP Exemptions, and Rule 62-296.404, F.A.C. – Kraft Pulp Mills.

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

OPERATIONAL PARAMETERS

L.0. **Permitted Capacity- Digester System:** The pulp production rate for the digester system shall not exceed 118 TPH and 1850 TPD ADUP (Air Dried Unbleached Pulp) as a monthly average. The facility must document that the thermal oxidizer is receiving all of the NCGs and SOGs generated for destruction. Regular record keeping is required to account for all periods that NCGs and/or SOGs are being delivered to the thermal oxidizer. The owner or operator is expected to determine the mill's operating rate whenever emission testing is required.

[Rule 62-4.070(3) and 62-297.310(2), F.A.C.; Construction Permit No. 1070005-017-AC; Construction Permit No. AC54-266676; PSD-FL-226]

L.1. **Method of Operation:** This emissions unit is designed to incinerate NCGs and SOGs and to utilize their fuel value. Natural gas shall be the startup fuel and as a makeup fuel to maintain the minimum destruction temperature.

Alternate Method of Operation:

(a) Georgia-Pacific is allowed to take the TO's pre-scrubbers out of service during periods of essential maintenance for purposes of preventing plugging, adjusting pumps to release entrained air, repairing of pumps and piping, and repairing of leaks at flanges and connectors;

(b) Georgia-Pacific is allowed to take the TO's pre-scrubbers out of service for essential maintenance **only** when the TO is operating to treat the LVHC NCGs and the SO_2 post-scrubber is properly operating;

(c) The permitting authority (Northeast District Office (NED)) and EPA must be notified at least 7 days in writing prior to implementation of the operating change;

(d) After the proper 7-day written notification has been submitted to the permitting authority (NED) and EPA, then a phone call, Fax or e-mail to the permitting authority (NED) shall be required at the time of implementation of the operating change; and,

(e) The date(s) and time(s) of and reason(s) for any essential maintenance on the TO's pre-scrubbers shall be recorded and maintained for a five-year period and made available upon request.

[Construction Permit No. 1070005-017-AC, DEP letter dated July 20, 2004 and GP's comments dated March 13, 2006]

L.2.<u>Hours of Operation:</u> The hours of operation for these emissions units are not limited.

[Construction Permit No. 1070005-017-AC]

L.3.<u>Total HAP Emissions:</u> Each equipment system listed below[1] shall be enclosed and vented (as specified in **Specific Condition No. L.4**.) into a closed-vent system and routed to the Thermal Oxidizer (primary control device) or the No. 4 Combination Boiler (secondary control device) for total HAP emission reduction.

Batch Digester System

Nos. 1 –4 MEE System

Turpentine Condensing System

Condensate Stripper System

[1] In accordance with 40 CFR 63.443(a), the facility is required to control the total HAP emissions from the LVHC system as defined as the collection of equipment including the digester, turpentine recovery (condensers, decanters, turpentine storage tanks), evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

[40 CFR 63.443(c), 40 CFR 63.443(d)(1); 40 CFR 63.443(d)(2)]

OPERATING STANDARDS

L.4. <u>Enclosures and Closed-Vent Systems Requirements:</u> Each enclosure and closed-vent system specified in **Condition No. L.3**. for capturing and transporting vent streams that contain HAP shall meet the following requirements.

(a) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in **Specific Condition No. L.~~17~~ <u>18</u>.** Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(b) Each component of the closed-vent system used to comply with **Specific Condition No. L.~~.4~~ 3.** that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in **Specific Condition No. L.~~16~~ 17**

(c) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in **Conditions L.~~.4~~ 3. and L.8**. shall comply with either of the following requirements:

(1) On each bypass line, the permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

(2) For bypass line valves that are not computer controlled, the permittee shall maintain the bypass line valve in the closed position with a 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.

[40 CFR 63.450; 40 CFR 63.454(e)]

EMISSION LIMITATIONS AND STANDARDS

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

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

L.5. **Total Reduced Sulfur (TRS) Emissions:** TRS emissions shall not exceed 5 ppm by volume on a dry basis at standard conditions corrected to 10 percent oxygen as a 12-hour block average; and 0.20 lb/hr and 0.89 TPY.

[Rule 62-296.404(3)(a)1., F.A.C.; Rule 62-296.404(3)(f)1., F.A.C.; Construction Permit No. 1070005-017-AC]

L.6. **Sulfur Dioxide Emissions:** SO2 emissions shall not exceed 31.3 lb/hr and 137.2 TPY, based on the average of three (3) test runs conducted in accordance with EPA Method 6C to measure the SO_2 concentration and Methods 1 through 4 to measure the volumetric flow rate.

[Construction Permit No. 1070005-017-AC]

L.7. **Visible Emissions:** Visible Emissions shall be not exceed 20% Opacity, based on the average of three (3) test runs conducted in accordance with EPA Method 9. A visible emissions limit shall be effective only if the visible emissions measurement can be made without being substantially affected by plume mixing or moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b),F.A.C.; as follows:

When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard

contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said test to the Department.

[Construction Permit No. 1070005-017-AC; Rule 62-296.404(2)(b); Rule 62-297.310(7)(b)]

L.8. Total HAP Reduction: The Thermal Oxidizer shall reduce the total HAP concentration at the outlet of the Thermal Oxidizer to 20 parts per million by volume or less corrected to 10 percent oxygen on a dry basis.

[40 CFR 63.443(d)(2); Construction Permit No. 1070005-017-AC]

TEST METHODS AND PROCEDURES

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

L.9. Total Reduced Sulfur (TRS) Emissions: It is assumed that compliance with the TRS emissions limit in **Condition L.5.** is achieved by maintaining the minimum temperature of 1200°F and the 0.5 second residence time.

[40 CFR 60.283(a)(1)(iii); ~~40 CFR 63.443(d)(4) ,~~ Construction Permit No. 1070005-017-AC; Attachment GP-EU1-J3 of the November 2001 PSD Application]

L.10. Sulfur Dioxide Emissions: The test method for Sulfur dioxide shall be EPA Method 6C to measure the SO_2 concentration and Methods 1 through 4 to measure the volumetric flow rate, incorporated and adopted by reference in Chapter 62-297, F.A.C. This test shall be conducted once each federal fiscal year.

[Rule 62-297.401(6)(c), F.A.C; Construction Permit No. 1070005-017-AC]

L.11. Visible Emissions: The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. This test shall be conducted once each federal fiscal year. See **Specific Condition. No. L.7.**

[Rule 62-297.401(9), F.A.C.; Construction Permit No. 1070005-017-AC]

L.12. Total HAP Concentration Measurements: The owner or operator shall measure the total HAP concentration as methanol. ~~An annual performance test is required pursuant to Rule 62-297.310(7)(a)4.c., F.A.C. once every federal fiscal year.~~

[~~Rule 62-297.310(7)(a)4.c., F.A.C.;~~ 40 CFR 63.457(f)(2)]

L.13. Total HAP Concentration Measurements:

a. Annual Performance Test: An annual performance test is required pursuant to Rule 62-297.310(7)(a)4.c., F.A.C. once every federal fiscal year.

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

b. Five Year Repeat Performance Test: A performance test shall be conducted at five-year intervals for all emissions sources subject to the limitations in 40 CFR 63.443 (**Specific Conditions L.3**). The first of the

five-year repeat test must be conducted by September 7, 2015, and thereafter within 60 months from the date of the previous performance test.

[40 CFR 63.457(a) (2)]

L.~~13~~ 14 . Vent Sampling Port Locations and Gas Stream Properties: For purposes of selecting vent sampling port locations and determining vent gas stream properties, the owner or operator shall comply with the procedures in 40 CFR 63.445 [1,2]

[1] As an alternative to the requirement in 40 CFR 63.457(b)(5)(ii)(F)(4), for additional testing over longer sampling times if the neutral titer is less than 0.5 milliliter (mL), the facility's sample will be acidified and titrated to the acid endpoint. If the acid titer is greater than 0.1 mL, the neutral titer will be assumed to be 0.1 mL, and the chlorine concentration will be reported as less than the calculated value. If the acid titer is less than 0.1 mL, the results will be calculated using 0.1 mL for both the neutral and acid titer.

[2] As an Alternative to Method 308 for measuring methanol, NCASI Method CI/SG/PULP-94.03 to measure methanol in air emission stream may be used. The mill analyzes only the chilled impinger samples and not the silica gel adsorbent tubes. This modified method, may only be used to measure methanol and does not apply to any of the other HAPs that can be measured by NCASI Method CI/SG/PULP-94-02.

[63.457(b); EPA Approved Alternative Titration procedure for Method 26A dated May 6, 2003; EPA Approved Alternative to Method 308 (NCASI Method CI/SG/PULP-94.03) dated October 15, 2003]

L.~~14~~15~~-~~.Oxygen Concentration Correction Procedures: To demonstrate compliance with the total HAP concentration limit of 20 ppmv in **Condition L. 8.** the concentration measured using the methods specified in **Specific Condition L.~~13(5)~~ 14** 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 Part 60, Appendix A-2 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.

[40 CFR 63.457(k)]

L.1~~5~~16. Enclosure and Closed-Vent System – Inspections: Each enclosure and closed-vent system used to comply with **Specific Condition L.~~3~~ 4.** shall comply with the following requirements:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in **Specific Condition L.~~3~~ 4.(a)** shall be performed once during each calendar moth, with at least 14 days elapsed time between inspections, to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system shall be visually inspected least 14 days elapsed time between inspections, and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in **Specific Condition L.~~3~~ 4.(b)** measured initially and annually by the procedures in **Specific Condition L.~~16~~ 17**.

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in **Specific Condition L.~~17~~ 18**.

(5) The valve or closure mechanism specified in **Specific Condition L.~~3~~ 4.(c)(2)** shall be inspected at least once during each calendar month, with at least 14 days elapsed time between inspections, to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by **Specific Condition No. L.~~16~~ 17.(1) through L.~~16~~17.(5)** identifies visible defects in ductwork, piping, enclosures or connections to covers required in **Specific Condition No. L.~~3~~. 4,** or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

[40 CFR 63.453(k), EPA Approved Alterative received October 20, 2003]

L.~~16~~17. Detectable Leak Procedures: To measure detectable leaks for closed-vent systems as specified in **Specific Condition L.~~3~~ 4.** the owner or operator shall comply with the following:

(1) Method 21, of Part 60, Appendix A-7; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d)]

L.~~17~~18. Negative Pressure Procedures: To demonstrate negative pressure at process equipment enclosure openings as specified in **Specific Condition L.3.(a)**, the owner or operator shall use one of the following procedures:

(1) An anemometer to demonstrate flow into the enclosure opening;

(2) Measure the static pressure across the opening;

(3) Smoke tubes to demonstrate flow into the enclosure opening; or

(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

[40 CFR 63.457(e)]

L.19 Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[40 CFR 63.457(o)]

L.20. 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 as specified in 40 CFR 63. 443, **(Specific Condition L.3 and Specific Condition L.8**)the owner or operator shall use the following:

(1) The total HAP mass emission rate shall be calculated using the following equation:

$$E = K_2 \left(\sum_{j=1}^{n} C_j M_j \right) Q_s$$

where:

E = Mass emission rate of total HAP from the sampled vent, kilograms per hour.
K_2 = Constant, 2.494 x 10^{-6} (parts per million by volume)-1 (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.
C_j = Concentration on a dry basis of pollutant j in parts per million by volume as measured by the test methods specified in paragraph (b) of this section.
M_j = Molecular weight of pollutant j, gram/gram-mole.
Q_s = Vent gas stream flow rate (dry standard cubic meter per minute) at a temperature of 20 °C as indicated in paragraph (b) of this section.
n = Number of individual pollutants, i, summed to calculate total HAP.

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

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

where:

F = Mass emission rate of total HAP from the sampled vent, in kilograms per megagram of ODP.

E = Mass emission rate of total HAP from the sampled vent, in kilograms per hour determined as specified in paragraph (i)(1) of this section.

P = The production rate of pulp during the sampling period, in megagrams of ODP per hour.

(3) The total HAP percent reduction shall be calculated using the following equation:

$$R = \frac{E_i - E_o}{E_i} \times 100$$

where:

R = Efficiency of control device, percent.

E_i = Inlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.

E_o = Outlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this Condition.

[40 CFR 63.457(i)]

L.21. 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.]

MONITORING REQUIREMENTS

L.22. Continuous Monitoring System (CMS): The permittee 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). The CMS shall include a continuous recorder.

[40 CFR 63.453(a)]

L.~~18~~23. Batch Pre-Scrubber: The Batch Pre-Scrubber shall be equipped with devices to continuously monitor the scrubber liquid flow rate. The minimum flow rate shall be 50 gallons per minute.

{Permitting Note: The averaging time for this condition is based on the specified averaging time of the applicable test method, i.e. a 3-hour block average. Monitoring frequency shall be every 15 minutes.}

[November 26, 2002 Performance Testing Results and Renewal Title V Application dated May 13, 2011]

L.~~19~~24. Continuous Pre-Scrubber: The Continuous Pre-Scrubber shall be equipped with devices to continuously monitor the scrubber liquid flow rate. The minimum flow rate shall be 50 gallons per minute.

{Permitting Note: The averaging time for this condition is based on the specified averaging time of the applicable test method, i.e. a 3-hour block average. Monitoring frequency shall be every 15 minutes.}

[November 26, 2002 Performance Testing Results and Renewal Title V Application dated May 13, 2011]

L.~~20~~25. Thermal Oxidizer – Temperature/Oxygen: The Thermal Oxidizer shall be equipped with devices to continuously monitor temperature at the back end of the first pass of the unit. The Thermal Oxidizer shall also be equipped with devices to continuously monitor oxygen at the point of combustion. The temperature device shall be certified by the manufacturer to be accurate within ±1 percent of the temperature being measured. The oxygen monitors shall be certified by the manufacturer to be accurate to within 0.1 percent oxygen by volume.

[Rule 62-296.404(5)(c), F.A.C.; 40 CFR 60.284(b)(1); 40 CFR 63.453(b); Construction Permit No. 1070005-017-AC; EPA Region IV letter dated 03/03/03]

L.~~21~~26. SO2 Scrubber: The SO2 Scrubber shall be equipped with devices to continuously monitor the scrubber recirculation flow rate and the scrubber medium effluent pH. The minimum flow rate shall be 294 gallons per minute and minimum pH shall be 6.7 s.u.

{Permitting Note: The averaging time for this condition is based on the specified averaging time of the applicable test method, i.e. a 3-hour block average. Monitoring frequency shall be every 15 minutes.}

[November 26, 2002 Performance Testing Results]

L.~~22~~27. Operating Parameters – Thermal Oxidizer - Minimum/Maximum: The Thermal Oxidizer shall be operated in a manner consistent with the minimum temperature of 1200°F. Except as provided in **Specific Condition L.~~23~~ 28.,** operation of the Thermal Oxidizer below this minimum operating parameter value or failure to perform procedures required by 40 CFR 63 Subpart S shall constitute a violation of **Specific Condition L.8.** and be reported as a period of excess emissions.

[40 CFR 63.453(o)]

L.~~23~~28. Operating Parameters – Reestablishment/Establishment: To reestablish the value for each operating parameter required to be monitored under **Specific Condition L.~~20~~ 25** and as stated in **Specific Condition L.~~22~~ 27.,** the permittee shall use the following procedures:

(1) During subsequent performance tests, continuously record the operating parameter;

(2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

[40 CFR 63.453(n)]

L. 29. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.453(q)]

EXCESS EMISSIONS

L.24 30. Periods of excess emissions reported under 40 CFR Part 63, Subpart A shall not be a violation of **Specific Conditions L.4. AND Specific Conditions L.8**., 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 1% for the Thermal Oxidizer and No. 4 Combination Boiler combined.

[40 CFR 63.443(e)1; Construction Permit No. 1070005-017-AC]

L.25 . ~~This emissions unit is subject to the SSM requirements in Condition II.9.~~

RECORDKEEPING REQUIREMENTS

L.26 31. The Permittee shall comply with the recordkeeping requirements of 40 CFR Part 63.10, as shown in 40 CFR Part 63, Subpart S, Table 1 and the requirements in paragraphs (b) through (g) of 40 CFR 63.454 for the monitoring parameters specified in § 63.453**.**

[40 CFR 63.454(a)]

L.27 32. For each applicable enclosure opening, closed-vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;

(2) The equipment type and identification;

(3) Results of negative pressure tests for enclosures;

(4) Results of leak detection tests;

(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);

(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

(7) Repair methods applied in each attempt to repair the defect or leak;

(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days

(10) The date of successful repair of the defect or leak;

(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and

(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b)]

L.28 33. The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in Specific **Condition L.26 31** for any new affected process equipment or pulping process condensate stream that becomes subject to the 40 CFR 63 Subpart S standards due to a process change or modification.

[40 CFR 63.454(d)]

L. 34. The owner or operator shall set the flow indicator on each bypass line in **Specific Condition .L.4 (c) (1)** to provide a record of the presence of a gas stream flow in the bypass line at least once every 15 minutes.

[40 CFR 63.454(e)]

L. 35. Recordkeeping of malfunctions: The owner or operator must maintain the following records of malfunctions:

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.453(q) **Specific Condition L.29** , including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.454(g)]

REPORTING REQUIREMENTS

L.29 36. The Permittee shall comply with the reporting requirements of 40 CFR 63 Subpart A as specified as specified in Table 1 of Subpart S and all the requirements as stated in 40 CFR § 63.455 **.**

[40 CFR 63.455(a)]

~~**L.30.** The permittee shall submit, with the initial notification report specified under 40 CFR 63.9(b)(2) of subpart A of this part and paragraph (a) of this section and update on a two- year basis (from the date of the initial notification report submittal), a non-binding control strategy report containing, at a minimum, the information specified in paragraphs (b)(1) through (b)(3) of this section in addition to the information required in 40 CFR 63.9(b)(2) of subpart A of this Part 63.~~

~~(1) A description of the emission controls or process modifications selected for compliance with the control requirements in this standard.~~

~~(2) A compliance schedule, including the dates by which each step toward compliance will be reached for each emission point or sets of emission points. At a minimum, the list of dates shall include:~~

~~(i) The date by which the major study(s) for determining the compliance strategy will be completed;~~

~~(ii) The date by which contracts for emission controls or process modifications will be awarded, or the date by which orders will be issued for the purchase of major components to accomplish emission controls or process changes;~~

~~(iii) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;~~

~~(iv) The date by which on-site construction, installation of emissions control equipment, or a process change is to be completed;~~

~~(v) The date by which final compliance is to be achieved;~~

~~(vi) For compliance with paragraph 40 CFR 63.440(d)(3)(ii), the tentative dates by which compliance with effluent limitation guidelines and standards intermediate pollutant load effluent reductions and as available, all the dates for the best available technology's milestones reported in the National Pollutant Discharge Elimination System authorized under section 402 of the Clean Water Act and for the best professional milestones in the Voluntary Advanced Technology Incentives Program under 40 CFR 430.24 (b)(2); and~~

~~(vii) The date by which the final compliance tests will be performed.~~

~~(3) Until compliance is achieved, revisions or updates shall be made to the control strategy report required by paragraph (b) of this section indicating the progress made towards completing the installation of the emission controls or process modifications during the 2-year period.~~

~~[40 CFR 63.455(b)]~~

L.37. Malfunction reporting requirements. If a malfunction occurred during the reporting period, the report must include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.453(q) **Specific Condition L.29.**, including actions taken to correct a malfunction.

[40 CFR 63.455(g)]

L.38. The owner or operator must submit performance test reports as specified in paragraphs (1) through (4) of this Condition.

(1) The owner or operator of an affected source shall report the results of the performance test before the close of business on the 60th day following the completion of the performance test, unless approved otherwise in writing by the Administrator. A performance test is "completed" when field sample collection is terminated. Unless otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions and raw data. A complete test report must include the purpose of the test; a brief process description; a complete unit description, including a description of feed streams and control devices; sampling site description; pollutants measured; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions, including operating parameters for which limits are being set, during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; chain-of-custody documentation; explanation of laboratory data qualifiers; example calculations of all

applicable stack gas parameters, emission rates, percent reduction rates, and analytical results, as applicable; and any other information required by the test method and the Administrator.

(2) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart, the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the owner or operator must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

3) Within 60 days after the date of completing each CEMS performance evaluation test as defined in §63.2, the owner or operator must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (2) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(4) All reports required by this subpart not subject to the requirements in paragraphs (2) and (3) of this section must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs (2) and (3) of this Condition in paper format

[40 CFR 63.455(h)]

§63.456 Affirmative defense for violation of emission standards during malfunction.

L.39. In response to an action to enforce the standards set forth in Specific Condition L.3. , or §63.450(d) Specific Condition L.4, the owner or operator may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report.* The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation

report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[40 CFR 63.456]

L.~~31~~ 40. New Affected Process Equipment: The owner or operator shall comply with the reporting requirements of 40 CFR 63, Subpart A as specified in Table 1 upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.

[40 CFR 63.455(d)]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

L.~~32~~ 41. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection Y.

COMMON CONDITIONS - PERIODIC MONITORING

L.~~33~~42. This emissions unit is also subject to applicable Periodic Monitoring Requirements in Subsection AA.

COMMON CONDITIONS - KRAFT (SULFATE) PULP MILLS

L.~~34~~43. This emissions unit is also subject to applicable Kraft (Sulfate) Pulp Mills Requirements in Subsection Z.

GENERAL PROVISIONS

L.~~35~~44. This emissions unit is also subject to the applicable requirements of 40 CFR Part 63 Subpart A as specified in 40 CFR Part 63, Subpart S, Table 1.

[40 CFR 63.440(g)]

L.~~36~~45. This emissions unit is also subject to the applicable requirements of 40 CFR Part 60, Subpart A.

L.~~37~~46. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

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

Subsection P. This section addresses the following emissions unit:

EU No.	Brief Description
046	Condensate Stripper System.

The Condensate Stripper System consists of a stripper, which removes HAPS from collected mill condensates.

NCGs from the Digesters, Multiple Effect evaporators, and Turpentine Condensing system and the stripper off-gases (SOGs) from the Condensate Stripper System are vented directly to the Thermal Oxidizer for destruction or the backup control device, the No. 4 Combination Boiler.

This emissions unit is subject to the requirements of 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants for Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; 40 CFR 60, Subpart BB – Standards of Performance for Kraft Pulp Mills; Rule 62-212.400(2)(a)2.b., F.A.C., - PCP Exemptions, and Rule 62-296.404, F.A.C. – Kraft Pulp Mills.

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

OPERATIONAL PARAMETERS

P.1. **Permitted Capacity – Condensate Steam Stripper:** The condensate flow rate to the condensate steam stripper shall not exceed 800 gallons per minute.

[Construction Permit No. 1070005-017-AC]

P.2. **Hours of Operation.** The hours of operation for these emissions units are not limited.

[Construction Permit No. 1070005-017-AC]

EMISSION LIMITATIONS AND STANDARDS

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

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

P.3. **Total Reduced Sulfur (TRS) Emissions – Condensate Steam Stripper:** The gaseous emissions from this emissions unit shall be collected and incinerated in either the Thermal Oxidizer (EU 037) or the No. 4 Combination Boiler (EU 016).

[Construction Permit No. 1070005-017-AC; 40 CFR 63.446(f)]

P.4. **Pulping Process Condensate:** The pulping process condensates from the following equipment systems[1] shall be treated to the extent necessary to meet the requirements specified in **Specific Conditions P.5, and P.9.:**

- Turpentine Decanter Underflow
- Blow Heat Secondary Condenser
- Pre-evaporator 1st and 2nd Effect Foul Condensate Pumps

- Pre-Evaporator Hotwell Pump
- NCG Condensate Tank
- Boiler Condensate Return Pump
- Pre-evaporator 3rd Effect Foul Condensate Pump
- Pre-evaporator 1st and 2nd Effect Contaminated Condensate Pump
- Condensate Pre-Heaters
- Reflux Condenser
- Each LVHC collection system
- Each HVLC collection system

[1] Pursuant to 40 CFR 63.446(b), equipment systems for the purpose of this condition shall include: each digester system, each turpentine recovery system, each evaporator system condensate from: a) the vapors from each stage where weak liquor is introduced (feed stages) and b) each evaporator vacuum system for each stage where weak liquor is introduced (feed stages), each HVLC collection system; and each LVHC collection system.

[40 CFR 63.446(b); FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.5. **Pulping Process Condensates – Collection:** The pulping process condensates generated, produced, or associated with the equipment systems listed in **Specific Condition P.4.** that in total contain a total HAP mass of 7.2 pounds or more of total HAP per ton of ODP for unbleached production and 11.1 pounds or more of total HAP per ton of ODP for bleached production shall be treated to the extent necessary to meet the requirements of **Specific Conditions P. 6.- P.10.** [1]

[1] For purposes of meeting this requirement, the permittee may meet a prorated mass standard that is calculated by prorating the applicable mass standard for bleached and unbleached pulp products (11.1 lb/Ton ODP and 7.2 lb/Ton ODP, respectively) by the ratio of tons of bleached and unbleached ODP based on a 15-day rolling average.

[40 CFR 63.446(c)(3); 40 CFR 63.446(i); Georgia Pacific letter dated November 12, 2002; Initial Performance Test Report dated November 18, 2002; FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.6. **Pulping Process Condensates – Closed Collection System:** The pulping process condensates collected pursuant to **Specific Condition P.5.,** shall be conveyed in a closed collection system that is designed and operated to meet the individual drain system requirements specified in **Specific Conditions Nos. U.1., U.2, and U.3.** (40 CFR Part 63, Subpart RR, §§63.960, 63.961, and 63.962), except the closed vent systems shall be routed to the Thermal Oxidizer (primary control device) or the No. 4 Combination Boiler (secondary control device) and the enclosures and closed-vent systems requirements specified in **Specific Condition W.4**. shall be met instead of in accordance with § 63.693 as specified in **Specific Condition U.3.(**a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii).

[40 CFR 63.446(d)(1); FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.7. **Closed Collection System - Foul Condensate Tank – Detectable Leaks:** The fixed roof and all openings (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 **Specific Condition No. L.4**. and routed to the Thermal Oxidizer or the No. 4 Combination Boiler as a backup control device.

[40 CFR 63.446(d)(2)(i); FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.8. **Closed Collection System - Foul Condensate Tank – Openings:** 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.

[40 CFR 63.446(d)(2)(ii); FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.9. **Pulping Process Condensates – Treatment:** Each pulping process condensate collected pursuant to **Specific Condition No. P.5.** shall be treated to the extent necessary in the Condensate Steam Stripper (EU 046) to reduce or destroy the total HAPs by at least 92 percent or more by weight.

[40 CFR 63.446(e)~~(5)~~ (3); 40 CFR 63.446(i); Georgia Pacific Letter dated November 12, 2002; Initial Performance Test Report dated November 18, 2002]

P.10. **Pulping Process Condensates – HAP emissions.** Each HAPs removed from a pulping process condensate stream during treatment and handling under either **Specific Conditions P. 5. through P.9.**, shall be enclosed and vented (as specified in **Specific Condition No. L.4**.) into a closed-vent system and routed to the Thermal Oxidizer (primary control device) or the No. 4 Combination Boiler (secondary control device) for total HAP emission reduction.

[40 CFR 63.446(f); FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.11. For each steam stripper system used to treat the pulping process condensates to reduce or destroy the total HAPs by at least 92 percent or more by weight, periods of excess emissions reported under §63.455 shall not be a violation of **Specific Conditions P 3- P 10** provided that the time of excess emissions ~~(including periods of startup, shutdown, or malfunction)~~ divided by the total process operating time in a semi-annual reporting period does not exceed 10 percent.

[40 CFR 63.446(g)]

P.12. The owner or operator of a new or existing pulping process condensate shall evaluate all new or modified pulping process condensates or changes in the annual bleached or unbleached ODP used to comply with Specific Condition P.5 to determine if they meet the applicable requirements of 40 CFR 63.446.

[40 CFR 63.446(h)]

CONTINUOUS MONITORING REQUIREMENTS

P.~~11~~13. Condensate Steam Stripper: A CMS shall be operated to measure the following parameters

(1) The steam feed to stripper/condensate feed to stripper ratio; and

(2) The process wastewater column feed temperature.

The CMS shall include a continuous recorder.

[40 CFR 63.453(a); 40 CFR 63.453(g); EPA Region IV letter dated 03/03/03; FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.~~12~~14. Parameters – Condensate Steam Stripper - Minimum/Maximum: The Condensate Steam Stripper shall be operated in a manner consistent with the minimum steam-to-condensate ratio of 0.17and a minimum temperature of the condensate feed of 143°F. Operation of the Condensate Steam Stripper below these minimum operating parameter values or failure to perform procedures required by 40 CFR 63 Subpart S shall constitute a violation of **Specific Condition P.9.** and be reported as a period of excess emissions. The monitoring frequency and averaging time for both parameters shall be every 15 minutes and 3-hour block averages, respectively.

[40 CFR 63.453(o); Condensate Treatment data dated September/October 2002; FINAL Title V Operation Permit No. 1070005-023-AV, Air Construction Permit No. 1070005-024-AC and 1070005-031-AV]

P.~~13~~.15 Operating Parameters –Condensate Steam Stripper– Reestablishment/Establishment: To establish or reestablish the value for each operating parameter required to be monitored under **Specific Conditions P.12.** and stated in **P.~~13~~ 14.,** the permittee shall use the following procedures:

(1) During subsequent performance tests, continuously record the operating parameter;

(2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

[40 CFR 63.453(n); FINAL Title V Operation Permit No. 1070005-023-AV and Air Construction Permit No. 1070005-024-AC]

P.~~14~~16. Condensate Collection: A CMS shall be operated to measure the condensate collected pursuant to **Specific Condition P.5.** as follows:

Flow Meter K20	▪ Pre-evaporator 1st and 2nd Effect foul Condensate Pump ▪ Pre-evaporator Hotwell pump ▪ NCG Condensate Tank ▪ Boiler Condensate Tank Return Pump ▪ Pre-evaporator 3rd Effect Foul Condensate Pump
Flow Meter K21	▪ Turpentine Decanter Underflow ▪ Blow Heat Secondary Condenser
Flow Meter K03	▪ Pre-evaporator 1st and 2nd Effect Contaminated Condensate Pump

The permittee shall determine the actual collection of condensate in pounds per oven-dried tons of unbleached pulp on a daily basis and averaged over a 15-day period (rolling average) using the flow data from the meters identified above, the bleach grade pulp production (daily), the unbleached grade pulp production (daily), and the methanol concentration factors specified in **Condition P.~~15~~ 17.**

[40 CFR 63.453(i), FINAL Title V Operation Permit No. 1070005-023-AV and 1070005-024-AC]

P.~~15~~17. Operating Parameters – Condensate Collection: The methanol concentration factors used to determine the actual condensate collection in pounds per oven-dried tons of unbleached pulp are as follows: 3274 ppm for the streams monitored by flow meter K20, 1531 ppm for the streams monitored by flow meter K03, and 3171 ppm for the streams monitored by flow meter K21.

The methanol concentration factors may be reestablished based on the results of additional performance tests. Should the mill make a significant change to the system, performance testing will be conducted following the changes to either confirm the current concentration factors or to reestablish them.

[Condensate Collection Characterization Study & Performance Test dated September 26 /October 10, 2002; FINAL Title V Operation Permit No. 1070005-023-AV and 1070005-024-AC]

P.~~16~~18. Pulping Process Condensate Closed Collection System- Inspections: Each pulping process condensate closed collection system used to comply with **Specific Conditions P.6. through P.8.,** shall comply with the following:

(1) Each pulping process condensate closed collection system shall be visually inspected once during each calendar month, with at least 14 days elapsed time between inspections, and shall comply with the inspection and monitoring requirements specified in **Condition U.4.** (40 CFR 63.964 of Subpart RR), except:

(i) Owners or operators shall comply with the recordkeeping requirements of 40 CFR 63.454 ~~**Specific Conditions P.15. through P.17**~~ **Specific Conditions P.28.through P.32** instead of the requirements specified in **Specific Condition U.4.** (a)(1)(vi) and (b)(3) [40 CFR 63.964(a)(1)(vi) and (b)(3) of Subpart RR].

(ii)Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in **Specific Conditions W.12 and W.17** instead of the requirements specified in **Condition U.4**.(a)(2) [40 CFR 63.964(a)(2) of Subpart RR].

(2) Each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in **Specific Condition P.7.** measured initially and annually by the procedures specified in **Specific Condition P. 32.**

(3) If an inspection required by this condition identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in **Specific Condition U.4.(b)** [40 CFR 63.964(b) of Subpart RR] shall be taken.

[40 CFR 63.453(l), EPA Approved Alternative received October 20, 2003; FINAL Title V Operation Permit No. 1070005-023-AV and 1070005-024-AC]

P.19. 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.

[40 CFR 453 (m)]

P.20. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.453(q)]

RECORDKEEPING

~~**P.17**~~ **21.** This emissions unit is subject to the recordkeeping requirements as stated in Subsection L.

P.22. The Permittee shall comply with the recordkeeping requirements of 40 CFR Part 63.10, as shown in 40 CFR Part 63, Subpart S, Table 1 and the requirements in paragraphs (b) through (g) of 40 CFR 63.454 [Specific Condition P. 23 through Specific Conditions P.25] for the monitoring parameters specified in § 63.453.

[40 CFR 63.454(a)]

P.~~18~~23. CMS Parameters: The owner or operator shall record the CMS parameters described in **Specific Conditions P.~~11~~. 13, P.~~12~~. 14, P.~~14~~ 16. and P.~~15~~. 17,** and comply with the recordkeeping requirements of 40 CFR Part 63.10, as shown in 40 CFR Part 63, Subpart S, Table 1, for any new pulping process condensate stream that becomes subject to the 40 CFR 63 Subpart S standards in this subpart due to a process change or modification.

[40 CFR 63.454(d); and Air Construction Permit No. 1070005-024-AC]

P.~~19~~24. For each applicable enclosure opening, closed-vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;

(2) The equipment type and identification;

(3) Results of negative pressure tests for enclosures;

(4) Results of leak detection tests;

(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);

(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

(7) Repair methods applied in each attempt to repair the defect or leak;

(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;

(10) The date of successful repair of the defect or leak;

(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and

(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b); and Air Construction Permit No. 1070005-024-AC]

P.25. Recordkeeping of malfunctions: The owner or operator must maintain the following records of malfunctions:

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.453(q) **Specific Condition P. 20** , including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.454(g)]

REPORTING REQUIREMENTS

P.~~20~~26. The Permittee shall comply with the reporting requirements of 40 CFR 63, Subpart A, as shown in Table 1 of 40 CFR 63, Subpart S, and the requirements stated in **Specific Conditions P.27 through P.29.**

[40 CFR 63.455(a); and Air Construction Permit No. 1070005-024-AC]

~~P.21. [RESERVED]~~

P.22~~27~~. The Permittee shall meet the requirements stated in **Specific Condition P.~~20~~ 26.,** upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.

[40 CFR 63.455(d); and Air Construction Permit No. 1070005-024-AC]

P.28. Malfunction reporting requirements: If a malfunction occurred during the reporting period, the report must include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.453(q) (**Condition P.20.**), including actions taken to correct a malfunction.

[40 CFR 63.455(g)]

P.29. The owner or operator must submit performance test reports as specified in paragraphs (1) through (4) of this Condition.

(1) The owner or operator of an affected source shall report the results of the performance test before the close of business on the 60th day following the completion of the performance test, unless approved otherwise in writing by the Administrator. A performance test is "completed" when field sample collection is terminated. Unless otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions and raw data. A complete test report must include the purpose of the test; a brief process description; a complete unit description, including a description of feed streams and control devices; sampling site description; pollutants measured; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions, including operating parameters for which limits are being set, during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; chain-of-custody documentation; explanation of laboratory data qualifiers; example calculations of all applicable stack gas parameters, emission rates, percent reduction rates, and analytical results, as applicable; and any other information required by the test method and the Administrator.

(2) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart, the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see

http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the owner or operator must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

3) Within 60 days after the date of completing each CEMS performance evaluation test as defined in §63.2, the owner or operator must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (2) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(4) All reports required by this subpart not subject to the requirements in paragraphs (2) and (3) of this section must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs (2) and (3) of this Condition in paper format

[40 CFR 63.455(h)]

TEST METHODS AND PROCEDURES

P.~~23~~30. Annual Test Requirements: An annual performance test is required for all emission sources subject to the limitations in 40 CFR 63.446.

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

P.~~24~~31. 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 63.446, the owner or operator shall comply with the following procedures ~~in 40 CFR 63.457(c).~~

(1) Samples shall be collected using the sampling procedures of the test method listed in paragraph (3) of this Condition selected to determine liquid stream HAP concentrations;

(i) Where feasible, samples shall be taken from an enclosed pipe prior to the liquid stream being exposed to the atmosphere; and

(ii) When sampling from an enclosed pipe is not feasible, samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of HAP compounds prior to sampling.

(2) The volumetric flow rate of the entering and exiting liquid streams shall be determined using the inlet and outlet flow meters or other methods demonstrated to the Administrator's satisfaction. The volumetric flow rate measurements to determine actual mass removal shall be taken at the same time as the concentration measurements.

(3) The owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations The minimum sampling time for each test run shall be 1 hour and the grab or composite samples shall be taken at approximately equally spaced intervals over the 1-hour test run period. The owner or operator shall use one of the following procedures to determine total HAP or methanol concentration:

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

$$\overline{C} = \sum_{i=1}^{n} \frac{C_i}{fm_i}$$

where:

C = Pollutant concentration for the liquid stream, parts per million by weight.
C_i = Measured concentration of pollutant i in the liquid stream sample determined using Method 305, parts per million by weight.
fm_i = Pollutant-specific constant that adjusts concentration measured by Method 305 to actual liquid concentration; the fm for methanol is 0.85. Additional pollutant fm values can be found in table 34, subpart G of this part.
n = Number of individual pollutants, i, summed to calculate total HAP.

(ii) For determining methanol concentrations, NCASI Method DI/MEOH-94.0 This test method is incorporated by reference in Sec. 63.14(f)(1) of subpart A of Part 63.

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

(4) If the test method used to determine HAP concentration indicates that a specific HAP is not detectable, the value determined as the minimum measurement level (MML) of the selected test method for the specific HAP shall be used in the compliance demonstration calculations. To determine the MML for a specific HAP using one of the test methods specified in paragraph (3) of this Condition, one of the procedures specified in paragraphs (4)(i) and (ii) of this Condition shall be performed. The MML for a particular HAP must be determined only if the HAP is not detected in the normal working range of the method.

(i) To determine the MML for a specific HAP, the following procedures shall be performed each time the method is set up. Set up is defined as the first time the analytical apparatus is placed in operation, after any shut down of 6 months or more, or any time a major component of the analytical apparatus is replaced.

(A) Select a concentration value for the specific HAP in question to represent the MML. The value of the MML selected shall not be below the calibration standard of the selected test method.

(B) Measure the concentration of the specific HAP in a minimum of three replicate samples using the selected test method. All replicate samples shall be run through the entire analytical procedure. The samples must contain the specific HAP at the selected MML concentration and should be representative of the liquid streams to be analyzed in the compliance demonstration. Spiking of the liquid samples with a known concentration of the target HAP may be necessary to ensure that the HAP concentration in the three replicate samples is at the selected MML.

The concentration of the HAP in the spiked sample must be within 50 percent of the proposed MML for the demonstration to be valid. As an alternative to spiking, a field sample above the MML may be diluted to produce a HAP concentration at the MML. To be a valid demonstration, the diluted sample must have a HAP concentration within 20 percent of the proposed MML, and the field sample must not be diluted by more than a factor of five.

(C) Calculate the relative standard deviation (RSD) and the upper confidence limit at the 95 percent confidence level using the measured HAP concentrations determined in paragraph (4)(i)(B) of this Condition. If the upper confidence limit of the RSD is less than 30 percent, then the selected MML is acceptable. If the upper confidence limit of the RSD is greater than or equal to 30 percent, then the selected MML is too low, and the procedures specified in paragraphs (4)(i)(A) through (C) of this Condition must be repeated.

(ii) Provide for the Administrator's approval the selected value of the MML for a specific HAP and the rationale for selecting the MML including all data and calculations used to determine the MML. The approved MML must be used in all applicable compliance demonstration calculations.

(5) When using the MML determined using the procedures in paragraph (4)(ii) of this Condition or when using the MML determined using the procedures in paragraph (4)(i), except during set up, the analytical laboratory conducting the analysis must perform and meet the following quality assurance procedures each time a set of samples is analyzed to determine compliance.

(i) Using the selected test method, analyze in triplicate the concentration of the specific HAP in a representative sample. The sample must contain the specific HAP at a concentration that is within a factor of two of the MML. If there are no samples in the set being analyzed that contain the specific HAP at an appropriate concentration, then a sample below the MML may be spiked to produce the appropriate concentration, or a sample at a higher level may be diluted. After spiking, the sample must contain the specific HAP within 50 percent of the MML. If dilution is used instead, the diluted sample must contain the specific HAP within 20 percent of the MML and must not be diluted by more than a factor of five.

(ii) Calculate the RSD using the measured HAP concentrations determined in paragraph (5)(i) of this Condition. If the RSD is less than 20 percent, then the laboratory is performing acceptably

[40 CFR 63.457(c); and Air Construction Permit No. 1070005-024-AC]

P.~~25~~32. Detectable Leak Procedures: To measure detectable leaks for pulping process wastewater collection systems as specified in **Specific Condition P.7.,** the owner or operator shall comply with the following:

(1) Method 21, of Part 60, Appendix A-7; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d); FINAL Title V Operation Permit No. 1070005-023-AV; and Air Construction Permit No. 1070005-024-AC]

P.26~~33~~. Condensate HAP concentration measurement: The owner or operator shall measure the total HAP concentration as methanol.

[40 CFR 63.457(g)]

P.~~27~~34. 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 §63.446.(**Specific Conditions P.5 through P.10**) the owner or operator shall use the following procedures: ~~in 40 CFR 63.457(j).~~

(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 **Specific Condition P.31.**

V_{ai} = Volumetric flow rate of liquid stream exiting the treatment process during each run i, cubic meters per hour, determined as specified in **Specific Condition P.31.**

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 **Specific Condition P.31.**

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 **Specific Condition P.31.**

n = Number of runs.

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

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

where:

F = Mass loading of total HAP or methanol in the sample, in kilograms per megagram of ODP.

E_a = Mass flow rate of total HAP or methanol in the wastewater stream in kilograms per hour as determined using the procedures in paragraph (1) of this Condition.

P = The production rate of pulp during the sampling period in megagrams of ODP per hour.

(3) The percent reduction of total HAP across the applicable treatment process shall be calculated using the following equation:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

where:

R = Control efficiency of the treatment process, percent.

E_b = Mass flow rate of total HAP in the stream entering the treatment process, kilograms per hour, as determined in paragraph (1) of this Condition.

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

(4) Compounds that meet the requirements specified in paragraphs (4)(i) or (ii) of this Condition are not required to be included in the mass flow rate, mass per megagram of ODP, or the mass percent reduction determinations.

(i) Compounds with concentrations at the point of determination that are below 1 part per million by weight; or

(ii) Compounds with concentrations at the point of determination that are below the lower detection limit where the lower detection limit is greater than 1 part per million by weight.

[40 CFR 63.457(j); and Air Construction Permit No. 1070005-024-AC]

~~P.28~~ 35 Condensate segregation procedures: The following procedures shall be used to demonstrate compliance with the condensate segregation requirements specified in §63.446(c).

~~(1) To demonstrate compliance with the percent mass requirements specified in §63.446(c)(2), the procedures specified in paragraphs (m)(1)(i) through (iii) of this section shall be performed.~~

~~(i) Determine the total HAP mass of all condensates from each equipment system listed in §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 determined in paragraph (1)(i) of this Condition 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 §63.446(c)(2) is demonstrated if the condensate stream or streams from each equipment system listed in §63.446(b)(1) through (3) being treated as specified in §63.446(e) contain at least as much total HAP mass as the target total HAP mass determined in paragraph (1)(ii) of this Condition.~~

(2) To demonstrate compliance with the percent mass requirements specified in §63.446(c)(3) **Specific Condition P.5.** , the procedures specified in paragraphs (2)(i) through (ii) of this Condition shall be performed.

(i) Determine the total HAP mass contained in the high-HAP fraction condensates from each equipment system listed in §63.446(b)(1) through (b)(3) and the total condensates streams from the equipment systems listed in §63.446(b)(4) and (b)(5) **Specific Condition P.4.**, using the procedures specified in **Specific Condition P.31** and P.34. ~~paragraphs (c) and (j) of this section.~~

(ii) Compliance with the segregation requirements specified in § 63.446(c)(3) **Specific Condition P.5.** is demonstrated if the total HAP mass determined in paragraph (2)(i) of this Condition is equal to or greater than the appropriate mass requirements specified in § 63.446(c)(3) **Specific Condition P.5.**.

[40 CFR 63.457(m)]

P.36. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[40 CFR 63.457(o)]

P.~~29~~37. Excess Emissions: Periods of excess emissions reported under **Specific Condition O.4.** shall not be a violation of **Specific Conditions P.6. through P.10**. provided that the time of excess emissions ~~(including periods of startup, shutdown, or malfunction)~~ divided by the total process operating time in a semi-annual reporting period does not exceed 10 percent.

[40 CFR 63.446(g)]

~~**P.30. Enclosure and Closed Vent System:** The enclosure and closed-vent system shall comply with the following requirements:~~

~~(1) For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed once during each calendar month with at least 14 days elapsed time between inspections 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 once during each calendar month with at least 14 days elapsed time between inspections and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.~~

~~(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in 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 during each calendar month with at least 14 days elapsed time between inspections to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.~~

~~(6) If an inspection required by paragraph **Specific Conditions P.27. (1) through (5)** 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. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.~~

~~[40 CFR 63.453(k); EPA Approved Alternative received October 20, 2003; 40 CFR 63.450(b); and Air Construction Permit No. 1070005-024-AC]~~

§63.456 Affirmative defense for violation of emission standards during malfunction.

P.38. In response to an action to enforce the standards set forth in §63.446(c) (d) and (e), the owner or operator may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report*. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[40 CFR 63.456]

GENERAL PROVISIONS

P.~~31~~ 9. This emissions unit is also subject to the applicable requirements of 40 CFR Part 63 Subpart A as specified in 40 CFR Part 63, Subpart S, Table 1.

[40 CFR 63.440(g)]

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P.~~32~~ 40. This emissions unit is also subject to the applicable requirements of 40 CFR Part 60, Subpart A.

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

P.~~33~~ 41. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection Y.

COMMON CONDITIONS - PERIODIC MONITORING

P.~~34~~ 42. This emissions unit is also subject to applicable Periodic Monitoring Requirements in Subsection AA.

~~**P.35.** This emissions unit is also subject to the SSM requirements~~

Subsection Q. This section addresses the following emissions unit:

EU No.	Brief Description
047	New Brown Stock Washer Lines 3, 4, 6 & 7

This emissions unit is regulated under 40 CFR 63, Subpart S- National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry, adopted and incorporated by reference in Rule 62-204.800, F.A.C. 40 CFR 60, Subpart BB - Standards of Performance for Kraft Pulp Mills adopted and incorporated by reference in Rule 62-204.800, F.A.C. and Rule 62-296.404, F.A.C. – Kraft Pulp Mills;

OPERATIONAL PARAMETERS

Q.1. Permitted Capacity: ~~Upon installation of the replacement Brown Stock Washing System,~~ The maximum capacity of this emissions unit shall not exceed 118 tons of air-dried unbleached pulp (ADUP) per hour; 2,300 tons of ADUP per day; 1,850 tons ADUP per day as a monthly average; and 675,250 tons ADUP per year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. Construction Permit No. 1070005-024-AC]

Q.2. Hours of Operation: The hours of operation for this emissions unit are not restricted.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. Construction Permit No. 1070005-024-AC]

~~**Q.3.** This emissions unit shall comply with the applicable requirements of 40 CFR 63, Subpart S.~~

~~[Construction Permit Application received November 11, 2003; 40 CFR 63.440(d)(1)]~~

Q.3. Total HAP Emissions. Each equipment system listed below shall be enclosed and vented (as specified in **Condition No. Q.~~54~~**.) into a closed-vent system and routed to the No. 4 Combination Boiler (primary control device) or the No. 5 Power Boiler (secondary control device) for total HAP emission reduction. The HAP emission stream shall be introduced with the primary fuel or into the flame zone or by introducing the HAP emission stream with the combustion air.

Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in paragraphs (a) or (b) of this Condition or the combined rate specified in paragraph (c) of this Condition.

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).

- Each pulp washing system;
- Each decker system that:

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

(2) Uses any process water with a total HAP concentration greater than 400 parts per million by weight.

~~Total HAP emissions from the each knotter, screening, decker, and pulp washer system, as required by 40 CFR 63, Subpart S, shall be controlled and treated pursuant to the requirements of that Subpart.~~

~~[40 CFR 63.441; 40 CFR 63.443(a)(ii)-(v)]~~

[40 CFR 63.443(a)(1)(ii)-(iv); 40 CFR 63.443(c), 40 CFR 63.443(d)(4)(i) and (ii);]

Q.4. The Permittee shall comply with the requirements of 40 CFR 60, Subpart BB.

[40 CFR 60.280]

Q.5 The Permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A – General Provisions.

[40 CFR 60.1(a)]

Q.6. The Permittee shall comply with the applicable requirements of 40 CFR 63, Subpart S Provisions in Subsection BB.

Q.~~7~~ 7. The Permittee shall comply with the requirements of 40 CFR Part 63, Subpart A – General Provisions as indicated in Table 1 of Subpart S.

[40 CFR 63.440(g)]

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

EU No.	Brief Description
048	New Two Stage Oxygen Delignification System

This emissions unit is regulated under 40 CFR 63, Subpart S- National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry, adopted and incorporated by reference in Rule 62-204.800, F.A.C. and Rule 62-296.404, F.A.C. – Kraft Pulp Mills;

OPERATIONAL PARAMETERS

R.1. **Permitted Capacity:** The maximum capacity of this unit shall not exceed 1,552 tons of air-dried unbleached pulp (ADUP) per day.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 1070005-024-AC]

R.2. **Total HAP Emissions**. The Oxygen Delignification System shall be enclosed and vented (as specified in **Condition No. R.3**.) into a closed-vent system and routed to the No. 4 Combination Boiler (primary control device) or the No. 5 Power Boiler (secondary control device) for total HAP emission reduction. The HAP emission stream shall be introduced with the primary fuel or into the flame zone or with the combustion air.

[40 CFR 63.443(a)(1)(v); 40 CFR 63.443(c), 40 CFR 63.443(d)(4)(i) and (ii);]

R.3. **Hours of Operation:** The hours of operation for this emissions unit are not restricted.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. Construction Permit No. 1070005-024-AC]

R.4. The Permittee shall comply with the requirements of 40 CFR 63, Subpart A – General Provisions as indicated in Table 1 of Subpart S.

[40 CFR 63.440(g)]

R.5. **Control Equipment:** GP shall route the emissions from the White Liquor Oxidation System portion of the Oxygen Delignification System to the Bleach Plant scrubber.

[EPA Determination received on January 27, 2006.]

R.6. The Permittee shall comply with the applicable requirements of 40 CFR 63, Subpart S Provisions in Subsection BB.

Subsection BB: 40 CFR Part 63, Applicable Subpart S (MACT I) Common Conditions for HV LC Sources.

EU No.	Sub-section	Brief Description
015	B	No. 5 Power Boiler
016	C	No 4 Combination Boiler
047	Q	Brown Stock Washer Lines 3, 5, 6 & 7
048	R	New Two – Stage Oxygen Delignification System

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

BB.1. The permittee shall comply with the requirements of 40 CFR 63, Subpart A- General Provisions as indicated in Table 1 of 40 CFR 63, Subpart S.

[40 CFR 63.440(g)].

BB.2. Total HAP emissions from the following equipment systems shall be controlled as specified in **Specific Condition No. BB.3.:**

a) Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in paragraphs (1) or (2) or the combined rate specified in paragraph (3) of this section.

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

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

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

b) Each pulp washing system;

c) Each decker system that:

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

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

d) Each oxygen delignification system.

Knotter system means equipment where knots, oversized material, or pieces of uncooked wood are removed from the pulp slurry after the digester system and prior to the pulp washing system. The knotter system equipment includes the knotter, knot drainer tanks, ancillary tanks, and any other equipment serving the same function as those previously listed.

Pulp washing system means all equipment used to wash pulp and separate spent cooking chemicals following the digester system and prior to the bleaching system, oxygen delignification system, or paper machine system (at unbleached mills). The pulp washing system equipment includes vacuum drum washers, diffusion washers, rotary pressure washers, horizontal belt filters, intermediate stock chests, and their associated vacuum pumps, filtrate tanks, foam breakers or tanks, and any other equipment serving the same function as those previously listed.

Screen system means equipment in which oversized particles are removed from the pulp slurry prior to the bleaching or papermaking system washed stock storage.

BB.2. Continued

Decker system means all equipment used to thicken the pulp slurry or reduce its liquid content after the pulp washing system and prior to high-density pulp storage. The decker system includes decker vents, filtrate tanks, associated vacuum pumps, and any other equipment serving the same function as those previously listed. This includes the Bleach Plant Pre-Washer (Decker). [Applicant Request dated March 23, 2004]

Oxygen Delignification System means the equipment that uses oxygen to remove lignin from pulp after high-density stock storage and prior to the bleaching system. The oxygen delignification system equipment includes the blow tank, washers, filtrate tanks, any interstage pulp storage tanks, and any other equipment serving the same function as those previously listed.

[40 CFR 63.441 and 40 CFR 63.443(a)(1)(ii)-(v)]

BB.3. Each equipment system listed in **Specific Condition No. BB.2** ~~was~~ shall be enclosed and vented into a closed-vent system and routed to the No. 5 Power Boiler or the No. 4 Combination Boiler for total HAP emission reduction. The enclosures and closed-vent system shall meet the requirements specified in **Specific Condition No. BB. 5.** During periods when the No. 5 Power Boiler or No. 4 Combination Boiler is used to destroy DNCGs/NCGs/SOGs, the HAP emission stream shall be introduced with the primary fuel or into the flame zone, or with the combustion air.

[40 CFR 63.443(c), and 40 CFR 63.443(d)(4)]

BB.4. **Periods of Excess Emissions**: Periods of excess emissions reported under **Specific Condition No. BB.1.** shall not be a violation of **Specific Condition No. BB.3.** 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:

a) 4% for the No. 5 Power Boiler and the No. 4 Combination Boiler combined when used to reduce the total HAP emissions from the HVLC system ~~when the boiler burned HVLC NCGs~~ and ;

b) 4% for the No. 4 Combination Boiler when it is used to reduce the total HAP emissions from both the LVHC and HVLC systems ~~the boiler burned both LVHC and HVLC NCGs; or~~

~~c) 1% for the No. 4 Combination Boiler when the boiler burned only LVHC NCGs;~~

[40 CFR 63.443(e)]

Standards for enclosures and closed-vent systems:

BB.4~~1~~5. (a) Each enclosure and closed-vent system specified in **Specific Condition No. BB.3.** for capturing and transporting vent streams that contain HAP shall meet the requirements paragraph (b) – (d) of this condition:

(b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures stated in **Specific Condition BB.1~~2~~ 21.** 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.

BB.5. Continued

(c) Each component of the closed-vent system used to comply with **Specific Condition No. BB.3.** that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures stated in **Specific Condition BB.1~~1~~ 20.**

(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 , **Specific Condition BB.3.** shall comply with either of the following requirements:

(1) On each bypass line, the permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

(2) For bypass line valves that are not computer controlled, the permittee shall maintain the bypass line valve in the closed position with a 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.

[40 CFR 63.450(a), (b), (c), & (d) and 40 CFR 63.454(e)]

Monitoring Requirements

BB.6. Continuous Monitoring System: The Owner or operator, shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in § 63.2). The CMS shall include a continuous recorder.

[40 CFR 63.453(a)]

BB.~~5~~7. Each enclosure and closed-vent system used to comply with **Specific Condition BB.4 5.** shall comply with the following requirements:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in **Specific Condition BB.4 5.** shall be performed once during each calendar month with at least 14 days elapsed time between inspections to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system shall be visually inspected once during each calendar month with at least 14 days elapsed time between inspections and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in **Specific Condition BB.45.(c)** measured initially and annually by the procedures in **Specific Condition BB.1~~1~~ 20.**

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in **Specific Condition BB.1~~2~~ 21.**

(5) The valve or closure mechanism specified in **Specific Condition BB.45.(d)(2)** shall be inspected at least once during each calendar month with at least 14 days elapsed time between inspections to

ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by **Specific Conditions BB.5 7. (1) through (5)** identifies visible defects in ductwork, piping, enclosures or connections to covers required in **Specific Condition BB.45.,** or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

[40 CFR 63.453(k); EPA Approved Alternative received October 20, 2003]

BB.8. 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, §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.

[40 CFR 63.453 (o)]

BB.9. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.453(q)]

Recordkeeping Requirements

BB.~~6~~10. The Permittee shall comply with the recordkeeping requirements of 40 CFR 63.10, as shown in Table 1 of 40 CFR 63, Subpart S, and the requirements stated in **Specific Condition BB.~~7~~ 11.**

[40 CFR 63.454(a)]

BB.~~7~~11. For each applicable enclosure opening, closed-vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;

(2) The equipment type and identification;

(3) Results of negative pressure tests for enclosures;

(4) Results of leak detection tests;

(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);

(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

(7) Repair methods applied in each attempt to repair the defect or leak;

(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;

(10) The date of successful repair of the defect or leak;

(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and

(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b)]

BB.12. The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in Specific Condition BB.3. for any new affected process equipment that becomes subject to the 40 CFR 63 Subpart S standards due to a process change or modification.

[40 CFR 63.454(d)]

BB.13. The owner or operator shall set the flow indicator on each bypass line in **Specific Condition BB.4** to provide a record of the presence of a gas stream flow in the bypass line at least once every 15 minutes.

[40 CFR 63.454(e)]

BB.14 Recordkeeping of malfunctions: The owner or operator must maintain the following records of malfunctions:

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.453(q) **Specific Condition BB.8** , including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.454(g)]

Reporting Requirements

BB.~~8~~ 15. The Permittee shall comply with the reporting requirements of 40 CFR 63, Subpart A, as shown in Table 1 of 40 CFR 63, Subpart S.

[40 CFR 63.455(a)]

~~**BB.9.**The Permittee shall submit on a 2-year basis from April 14, 2003, an updated non-binding control strategy report. The report shall contain, at a minimum, the information specified below, in addition to the information required in 40 CFR 63.9(b)(2) of 40 CFR 63, Subpart A.~~

~~(1) A description of the emission controls or process modifications selected for compliance with the control requirements in this standard.~~

~~(2) A compliance schedule, including the dates by which each step toward compliance will be reached for each emission point or sets of emission points. At a minimum, the list of dates shall include:~~

~~(i) The date by which the major study(s) for determining the compliance strategy will be completed;~~

~~(ii) The date by which contracts for emission controls or process modifications will be awarded, or the date by which orders will be issued for the purchase of major components to accomplish emission controls or process changes;~~

~~(iii) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;~~

~~(iv) The date by which on-site construction, installation of emissions control equipment, or a process change is to be completed;~~

~~(v) The date by which final compliance is to be achieved;~~

~~(vi) For compliance with paragraph 40 CFR 63.440(d)(3)(ii), the tentative dates by which compliance with effluent limitation guidelines and standards intermediate pollutant load effluent reductions and as available, all the dates for the best available technology's milestones reported in the National Pollutant Discharge Elimination System authorized under section 402 of the Clean Water Act and for the best professional milestones in the Voluntary Advanced Technology Incentives Program under 40 CFR 430.24(b)(2); and~~

~~(vii) The date by which the final compliance tests will be performed.~~

~~[40 CFR 63.455(b)]~~

BB.16.The Permittee shall meet the requirements stated in **Condition BB. 15.,** upon startup of any new affected process equipment that becomes subject to the standards of this subpart due to a process change or modification.

[40 CFR 63.455(d)]

BB.17.Malfunction reporting requirements: If a malfunction occurred during the reporting period, the report must include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.453(q) (Specific **Condition BB.8.**), including actions taken to correct a malfunction.

[40 CFR 63.455(g)]

BB.18. The owner or operator must submit performance test reports as specified in paragraphs (1) through (4) of this Condition.

(1) The owner or operator of an affected source shall report the results of the performance test before the close of business on the 60th day following the completion of the performance test, unless approved otherwise in writing by the Administrator. A performance test is "completed" when field sample collection is terminated. Unless otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions and raw data. A complete test report must include the purpose of the test; a brief process description; a complete unit description, including a description of feed streams and control devices; sampling site description; pollutants measured; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions, including operating parameters for which limits are being set, during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; chain-of-custody documentation; explanation of laboratory data qualifiers; example calculations of all applicable stack gas parameters, emission rates, percent reduction rates, and analytical results, as applicable; and any other information required by the test method and the Administrator.

(2) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart, the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the owner or operator must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

3) Within 60 days after the date of completing each CEMS performance evaluation test as defined in §63.2, the owner or operator must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (2) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(4) All reports required by this subpart not subject to the requirements in paragraphs (2) and (3) of this section must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs (2) and (3) of this Condition in paper format

[40 CFR 63.455(h)]

§63.456 Affirmative defense for violation of emission standards during malfunction.

BB.19.. In response to an action to enforce the standards set forth in §§63.443(c) and (d) (Condition BB.3. , or §63.450(d) (Condition BB.4), the owner or operator may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report*. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[40 CFR 63.456]

Test Methods and Procedures

BB.1~~0~~20. 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 (**Specific Condition BB.3**), the permittee shall comply with the applicable procedures in paragraphs (1) through (6) of this condition: ~~specified in 40 CFR 63.457(b~~).

(1) Method 1 or 1A of part 60, appendix A-1, 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 part 60, appendix A-1, as appropriate.

(4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A-3.

(5) To determine vent gas concentrations, the owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

(i) Method 308 in Appendix A of this part; Method 320 in Appendix A of this part; Method 18 in appendix A-6 of part 60; ASTM D6420-99 (Reapproved 2004) (incorporated by reference in § 63.14(b)(28) of subpart A of this part); or ASTM D6348-03 (incorporated by reference in § 63.14(b)(54) of subpart A of this part) shall be used to determine the methanol concentration. If ASTM D6348-03 is used, the conditions specified in paragraphs (b)(5)(i)(A) though (b)(5)(i)(B) must be met.

(A) The test plan preparation and implementation in the Annexes to ASTM D6348-03, sections A1 through A8 are required.

(B) In ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (Equation A5.5 of ASTM D6348-03). In order for the test data to be acceptable for a compound, %R must be between 70 and 130 percent. If the %R value does not meet this criterion for a target compound, the test data is not acceptable for that compound and the test must be repeated for that analyte following adjustment of the sampling or analytical procedure before the retest. The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound using the following equation: Reported Result = Measured Concentration in the Stack × 100)/%R.

(ii) Except for the modifications specified in paragraphs (b)(5)(ii)(A) through (b)(5)(ii)(K) of this section, Method 26A of part 60, appendix A-8 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 protect 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:

$$\text{Normality of } \textit{Sodium Thiosulfate} = \frac{1}{\text{ml Sodium Thiosulfate Consumed}}$$

(*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:

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

Where:

S_C =Corrected (dry standard) sampling flow rate, liters per minute;

S_U =Uncorrected sampling flow rate, L/min;

BP=Barometric pressure at time of sampling;

PW=Saturated partial pressure of water vapor, mm Hg at temperature; and

t=Ambient temperature, °C.

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

$$Cl_2 Moles = 1/8000\left(5\,T_N - T_A\right) \times N_{Thio}$$

Where:

T_N =Volume neutral titer, ml;

T_A =Volume acid titer (total), ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

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

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

Where:

S_C =Corrected (dry standard) sampling flow rate, liters per minute;

t_S =Time sampled, minutes;

T_N =Volume neutral titer, ml;

T_A =Volume acid titer (total), ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

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

$$ClO_2 Moles = 1/4000\left(T_A - T_N\right) \times N_{Thio}$$

Where:

T_A =Volume acid titer (total), ml;

T_N =Volume neutral titer, ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

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

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

Where:

S_C =Corrected (dry standard) sampling flow rate, liters per minute;

t_S =Time sampled, minutes;

T_A =Volume acid titer (total), ml;

T_N =Volume neutral titer, ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

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

(6) The minimum sampling time for each of the three test runs shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the test run.

[40 CFR 63.457(b)]

BB.11~~1~~21. Detectable Leak Procedures: To measure detectable leaks for closed-vent systems as required in **Specific Condition BB.4 5.**, the owner or operator shall comply with the following requirements:~~permittee shall comply with the requirements of 40 CFR 63.457(d~~

(1) Method 21, of Part 60, Appendix A-7; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d)]

BB.12~~1~~22 Negative Pressure Procedures: To demonstrate negative pressure as required in **Specific Condition BB.4 5.(b)** at process equipment enclosure openings, the owner or operator shall use one of the following procedures: ~~permittee shall comply with the requirements of 40 CFR 63.457(e).~~

(1) An anemometer to demonstrate flow into the enclosure opening;

(2) Measure the static pressure across the opening;

(3) Smoke tubes to demonstrate flow into the enclosure opening; or

(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

[40 CFR 63.457(e)]

BB.1~~3~~23. HAP Concentration Measurements: For purposes of complying with the requirements in 40 CFR 63.443(**Specific Condition BB.3)**, the permittee shall measure the total HAP concentration as methanol.

[40 CFR 63.457(f)(2); ~~FINAL Title V Operation Permit No. 1070005-023-AV]~~

BB.14 24. 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(**Specific Condition BB.3)**, the owner or operator shall comply with the following requirements ~~Permittee shall comply with requirements of 40 CFR 63.457(i).~~

(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:

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

Where:

R=Efficiency of control device, percent.

Ei=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.

[40 CFR 63.457(i)]

BB25. Performance Test: Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[40 CFR 63.457(o)]

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Subsection L. This section addresses the following emissions

Appendix A, Glossary.
Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 9, 1997).
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, Subpart S.
Appendix NESHAP, Subpart KK.
Appendix NESHAP, Subpart MM.
Appendix NESHAP, Subpart RR.
Appendix NESHAP, Subpart JJJJ.
Appendix NESHAP, Subpart ZZZZ.
Appendix NESHAP, Subpart DDDDD.
Appendix NESHAP, Subpart S.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart Db.
Appendix NSPS, Subpart BB.
Appendix NSPS, Subpart IIII.
Appendix NSPS, Subpart JJJJ.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.
Etc.