

RockTenn CP, LLC
Fernandina Beach Mill
Facility ID No. 0890003
Nassau County

Title V Air Operation Permit Revision

Permit No. 0890003-037-AV
(Revision of Title V Air Operation Permit No. 0890003-031-AV)



Permitting & Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256-7590
Telephone: (904) 256-1700
Fax: (904) 448-4363

Title V Air Operation Permit Revision

Permit No. 0890003-037-AV

This DRAFT/PROPOSED permit will only reflect the affected Facility-wide Conditions, Subsection H, and Tables 1 and 2. The FINAL permit will be issued in its entirety.

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USEPA Region IV Condensates Alternative Compliance Plan Approval Letter dated 11/01/00
Fernandina Beach Condensate Compliance Plan, amended March 5, 2001
EPA Approval Letter dated December 11, 2000 of NCASI Method DI/HAPS-99.01
Order on Request for Alternate Procedures and Requirements, File No 01-H-AP, dated 02/05/02
Container Corporation of America Coal Sampling and Testing Procedures for Compliance Monitoring of SO₂
for #7 Power Boiler
EPA Approval Letter dated September 22, 2003 for Alternative Inspection Frequency
Smurfit Stone Alternate Procedure Request dated June 2, 2006
Department Alternate Procedure Request Approval dated August 28, 2006
FDEP Letter dated May 15, 2012
Table 1 of 40 CFR 63 Subpart S
Table 1 of 40 CFR 63 Subpart MM
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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

RICK SCOTT
GOVERNOR

JENNIFER CARROLL
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

PERMITTEE:

RockTenn CP, LLC
P.O. Box 2000
Fernandina Beach, Florida 32035

Permit No. 0890003-037-AV
Fernandina Beach Mill
Facility ID No. 0890003
Title V Air Operation Permit Revision

The purpose of this permit is to revise the terms and conditions of Title V Air Operation Permit No.: 0890003-031-AV and incorporate the terms and conditions of air construction permit No. 0890003-036-AC. The existing Fernandina Beach Mill is located in Nassau County at North 8th Street, Fernandina Beach, Nassau County; UTM Coordinates: Zone 17, 456.2 km East and 3394.1 km North; Latitude: 30°40'53" North and Longitude: 81°27'26" West.

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

Effective Date: January x, 2012
Renewal Application Due Date: March 1, 2017
Expiration Date: October 12, 2017

(DRAFT/PROPOSED)

Khalid Al-Nahdy, P.E.
District Air Program Administrator

KAA/mlp

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility is a fully integrated Kraft linerboard mill that consists of major activities areas such as: wood yard, pulp mill, recycle plant, chemical recovery, power house and paper mill. Also, it has a corrugated containers plant.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
006	#5 Power Boiler
007	#4 Recovery Boiler
011	#5 Recovery Boiler
013	#4 Smelt Dissolving Tank
014	#5 Smelt Dissolving Tank
015	#7 Power Boiler
020	Tall Oil Plant
021	#4 Lime Kiln
024	C-Line Brownstock Washer System
033	Pulping System MACT I
035	Wide-web Flexographic Printers
038	John Deere 210 BHP Diesel Engine- Model JU6H-UF50
039	Caterpillar 292 BHP Diesel Engine– Model 3406c
040	Caterpillar 292 BHP Diesel Engine – Model 3406c
<i>Unregulated Emissions Units and Activities</i>	
025	Wood yard
026	Brownstock Washing
028	Chemical Recovery Area
029	Converting Area/Warehouse
030	Facility-Wide miscellaneous
031	Secondary Fiber Pulp
032	Papermaking

SECTION I. FACILITY INFORMATION.

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received May 23, 2011, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 63, Subpart A, NESHAP General Provisions	007, 011, 013, 014, 021, 024, 033, 035
40 CFR 63, Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry	006 (<i>when NCGs regulated by Subpart S are burned in this emissions unit</i>), 021, 024, 033
40 CFR 63, Subpart KK	035
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 Mill	007, 011, 013, 014, 021
40 CFR 63, Subpart ZZZZ- National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines	038, 039, 040
40 CFR 63, Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters	006,015
40 CFR 60, Subpart A, NSPS General Provisions	011, 014, 015, 021, 024
40 CFR 60, Subpart BB- Standards of Performance for Kraft Pulp Mills	011, 014, 021, 024
40 CFR 60, Subpart D -Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971	015
40 CFR 60, Subpart Y -Standards of Performance for Coal Preparation Plants	015
40 CFR 61, Subpart A, NESHAP General Provisions	006 (<i>when wastewater wood fiber residuals are fired as fuel in this emissions unit</i>)
40 CFR 61, Subpart E-National Emission Standard for Mercury	006 (<i>when wastewater wood fiber residuals are fired as fuel in this emissions unit</i>)
Rules 62-212.300(1)(e), and 62-212.400(12), F.A.C.	015, 024
Rule 296.410, F.A.C. –Carbonaceous Fuel Burning Equipment	006
Rule 62-296.404, F.A.C. – Kraft Pulp Mills	006, 007, 011, 013, 014, 020, 021
Rule 62-296.405, F.A.C. – Fossil Fuel Steam Generators with More Than 250 Million Btu Per Hour Heat Input	006
Rule 62-296.340, F.A.C. - Best Available Retrofit Technology (BART) Exemption	006

SECTION II. FACILITY-WIDE CONDITIONS.

{Permitting Note: Strikethroughs indicate items deleted and red, double underlined font indicates items added.}

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. 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. ; AC45-141877; AC45-141873; AC45-141872; AC45-141871; AC45-141875; AC45-141874]

FW3. 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. Visible Emissions Standard – Emission Units equipped with Wet Scrubbers. Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-296.404(1)(b) F.A.C.]

FW6. 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:

The following requirements are “not federally enforceable”:

Woodyard

Chips are transported to the chip screening building and stacker/reclaimers on a covered conveyor. Sawdust and rejected chips from the screening process are transported by covered conveyor to the bark reclaimer. Sawdust and chips are removed from the conveyors and transfer points and placed onto the

SECTION II. FACILITY-WIDE CONDITIONS.

ground. The chips, sawdust, and other wood debris that escapes are collected with heavy equipment and placed in the bark reclaimer or the bark pile.

Pulping Area General

Chips are transported to the digester building on covered conveyors. Chips are transported to the Kamyra Digester in a blow line providing complete enclosure. Chips and fines that escape the transfer system are removed and then swept and carried to a chute where it is transferred to the ground or directly into a dumpster outside the digester building. The pile that is created is reclaimed into the bark system.

Chemical Recovery Area

Purchased lime is unloaded in a closed system and transferred to storage. Returned lime from the lime kiln is transferred in an enclosed elevator system to storage. Returned lime is stored in the No. 1 Lime Bin and purchased lime is stored in the No. 2 Lime Bin ~~a lime bin with a baghouse control. Purchased lime is stored in a lime bin with a baghouse control.~~ PM emissions from the Nos. 1 and 2 Lime Bins are controlled by the baghouse in the No. 1 Lime Bin. Lime piles are minimized by reclaiming as quickly as possible and hauling off-site if necessary. Water is applied when necessary to minimize fugitive dust emissions.

Facility

Particulate matter emissions ~~The particulate matter~~ from roadways and any storage piles are minimized by water application, as necessary. Paved parking areas are maintained on-site for employee parking. Internal mill roadways are generally paved and speed limits are maintained. Vegetation and trees are maintained on the north and east perimeters of the facility to minimize as practicable windblown particulate emissions from these areas.

[Rule 62-296.320(4)(c)2., F.A.C.; Rule 62-213.440, F.A.C.]

- FW7.** 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.

Note: This condition is applicable to Emissions Units 006, 007, 011, 013, 014, 021, 024, and 033.

[40 CFR 63.6(e)]

SECTION II. FACILITY-WIDE CONDITIONS.

Annual Reports and Fees

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

FW7. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year.

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

FW8. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>.

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

FW9. 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.]

FW10. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. 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.
- b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

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, double underlined font indicates items added.}

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

EU No.	Brief Description
-021	<p>No. 4 Lime Kiln with an electrostatic precipitator to control particulate matter.</p> <p>NCG (Non-Condensable Gases) from the Kamyrdigester system, batch digester system, No. 5 Multi-Effect Evaporators system and No. 6 Multi-Effect Evaporators system are combusted in this kiln as a control of the TRS (Total Reduced Sulfur) compounds in the NCG.</p> <p>Low volume, high concentration (LVHC) Noncondensable gases (NCG) from the batch digester system, continuous digester system, turpentine recovery system, evaporator systems, and foul condensate collection tank are collected and burned in the No. 4 Lime Kiln with the No. 5 Power Boiler as the back-up for compliance with 40 CFR 63, Subpart S.</p> <p><u>No. 1 Lime Bin receives lime from the No. 4 Lime Kiln (re-burned lime) via conveyor and bucket elevator. A bag fabric filter is used to control particulate matter from the Lime Bin and the bucket elevator.</u></p> <p><u>No. 2 Lime Bin receives purchased lime by railcar or truck. Exhaust gases from the No. 2 Lime Bin are vented to the bucket elevator serving the No. 1 Lime Bin, and then through the No. 1 Lime Bin and bag fabric filter.</u></p> <p>No. 1 Lime Bin receives lime from the No. 4 Lime Kiln and the slaker systems (re-burned lime). A bag fabric filter is used to control particulate matter.</p> <p>No. 2 Lime Bin receives purchased lime by railcar or truck. A bag fabric filter is used to control particulate matter during railcar and truck unloading</p>

{Permitting note(s): The No. 4 Lime Kiln, the Batch Digester System, and the Kamyrdigester System are regulated under: NSPS - 40 CFR 60, Subpart BB - Standards of Performance for Kraft Pulp Mills adopted and incorporated by reference in Rule 62-204.800, F.A.C. The Kamyrdigester system, batch digester system, No. 5 Multi-Effect Evaporators system and No. 6 Multi-Effect Evaporators system are regulated under Rule 62-296.404, F.A.C. – Kraft Pulp Mills. The No. 4 Lime Kiln is regulated under 40 CFR 63 - Subpart S, adopted and incorporated by reference in Rule 62-204.800, F.A.C. The No. 4 Lime Kiln is also regulated under 40 CFR 63-Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.;

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity. The operation rates shall not exceed the following:

Unit	Rate
No. 4 Lime Kiln	630 TPD, maximum lime production rate – corresponding to a process input rate of 46.87 tons (lime mud-CaCO ₃)/hr
No. 1 Lime Bin	26.25 tons (reburned lime-CaO)/hr input
No. 2 Lime Bin	44.0 tons (purchased lime)/hr input
Kamyr Digester System	maximum production rate of 85 tons (ADUP)/hr ^{1,2,3}
Batch Digester System	101 tons (ADUP)/hr ^{1,3} output
No. 5 Multi-Effect Evaporators System	308,359 lbs (BLS)/hr input
No. 6 Multi-Effect Evaporators System	274,089 lbs (BLS)/hr input

¹ PSD Permit restriction.

² Based on the nominal utilization rate of 300,104 lbs/hr wood chips (dry) and 1,573,191 lbs/hr black/white liquor.

³ Total production rate for both the Kamyr and the Batch digester system shall not exceed 3,210 ADTUP per day

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Construction Permit No. AC45-141877, Construction Permit No. AC45-141878; Construction Permit No. AC45-141873; Construction Permit No. AC45-190382/PSD-FL-165, Construction Permit No. AC45-141872, Construction Permit No. AC45-141871, Operation Permit No. AO45-188167; Construction Permit No. 0890003-011-AC]

H.2. Methods of Operation - This emissions unit is permitted to fire primarily No. 6 fuel oil, which may contain on-spec used oil from mill operations at a maximum of 1176.8 gallons per hour¹. The sulfur content of the No. 6 fuel oil shall not exceed 2.5% by weight. Liquefied Petroleum Gas (LPG) is fired during startups only.

¹Basis 170.63 MMBtu/hr heat input

[Rule 62-213.410, F.A.C.; Construction Permit No. AC45-141877, Construction Permit No. AC45-190382/PSD-FL-165, Construction Permit No. 0890003-003-AC]

H.3. Hours of Operation. The hours of operation shall not exceed 8736 hours/year for the following emissions units:

- No. 4 Lime Kiln
- No. 5 Multiple Effect Evaporator System
- Kaymr Digester System

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

Specific Condition H.3. Continued

The hours of operation shall not exceed 8760 hours per year for the following emissions units:

- Batch Digester system
- No. 6 Multiple Effect Evaporator System
- No. 1 Lime Bin
- No. 2 Lime Bin

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Construction Permit No. AC45-141877, Construction Permit No. AC45-141873; Construction Permit No. AC45-190382/PDS-FL-165; Construction Permit No. AC45-141871]

H.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.

[Rule 62-297.310(2), 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 times for Specific Conditions H.5. – H.12. are based on the specified averaging time of the applicable test method.}

From lime kiln stack

H.5. Particulate Matter Emissions. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen.

[40 CFR 63.862(a)(1)(i)(C); Rule 62-204.800(8)(b)36., F.A.C.; 40 CFR 60.282(a)(3)(ii); Construction Permit No. AC45-141877]

H.6. Total Reduced Sulfur (TRS). TRS Emissions shall not exceed 8 ppm by volume on a dry basis, corrected to 10% O₂, 2.63 lbs/hr and 11.5 TPY.

[Rule 62-204.800(8)(b)36., F.A.C.; 40 CFR 60.283(a)(5); Rule 62-296.404(3)(a)1., F.A.C.; Construction Permit No. AC45-141877]

H.7. Visible Emissions. Visible emissions shall not exceed 20% opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; Construction Permit No. AC45-141877]

No. 1 Lime Bin Vent

H.8. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC45-141878, Construction Permit No. 0890003-036-AC]

H.9. Particulate Matter Emissions. Particulate Matter emissions shall not exceed 0.03 gr/dscf, 1.2 lbs/hr, and 5.3 TPY.

[Construction Permit No. AC45-141878, Construction Permit No. 0890003-036-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

No. 2 Lime Bin Vent

~~H.10. Visible Emissions. Visible Emissions shall not exceed 5% opacity.~~

~~[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC45-141878]~~

~~H.11. Particulate Matter Emissions. Particulate Matter emissions shall not exceed 0.03 gr/dscf, 1.2 lbs/hr, and 5.3 TPY.~~

~~[Construction Permit No. AC45-141878]~~

Lime Handling System

H.12. The lime handling system (i.e., conveyors, shutes, elevators, storage bins, etc.) shall be enclosed to minimize PM emissions pursuant to Rule 62-296.320(c), F.A.C.

[Construction Permit No. AC45-141878]

H.13. and H.14. Reserved

Federal Excess Emissions

H.15. Operation and Maintenance Requirements. (1)(i) At all times, including periods of startup, shutdown, and malfunction, 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. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. 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 (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

[40 CFR 63.6(e)(1)]

H.16. Good Air Pollution Control Practices. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating 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, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

H.17. Lime Kiln Excess Emissions - TRS. Periods of excess emissions from this emissions unit are all 12-hour average TRS concentration above 8 ppm by volume.

[40 CFR 60.284(d)(2)]

H.18. Lime Kiln Excess Emissions – TRS - Violation. The Department will not consider periods of excess emissions reported under Condition H.37. to be indicative of a violation of 40 CFR 60.11(d) provided the Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner, which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

[40 CFR 60.284(e)(2), Rule 62-296.404(6)(c) , F.A.C.]

Continuous Monitoring Requirements

H.19. Continuous Opacity Monitoring System (COMS). The permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition.

(1) [Reserved]

(2) [Reserved]

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

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

[Rule 62-204.800(8)(b)35; 40 CFR 63.864(d)]

H.20. Total Reduced Sulfur (TRS) and O₂. The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

- a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.
- b. These systems shall be located downstream of the control device(s) and the spans of these continuous monitoring system(s) shall be set:
 - (i) At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
 - (ii) At 25 percent oxygen for the continuous oxygen monitoring system.

[40 CFR 60.284(a)(2)]

H.21. Total Reduced Sulfur (TRS). – CEM Data. The permittee shall:

- (1) Calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed pursuant to Condition H.20.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

Specific Condition H.21. Continued

- (2) Calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under Condition H.21.(1) and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed pursuant to Condition H.20.
- (3) Using the following equation, correct all 12-hour average TRS concentrations to 10 volume percent oxygen:

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

where:

C_{corr} = the concentration corrected for oxygen.

C_{meas} = the concentration uncorrected for oxygen.

X = the volumetric oxygen concentration in percentage to be corrected to (10 percent for lime kilns).

Y = the measured 12-hour average volumetric oxygen concentration.

[40 CFR 60.284(c)(1),(2), and (3); Rule 62-296.404(5)(b), F.A.C.]

H.22. Total Reduced Sulfur (TRS) and O₂. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems required by 40 CFR 60.284 (TRS and O₂). All continuous monitoring systems shall be operated in accordance with the applicable procedures under Performance Specifications 1, 3, and 5 of appendix B of Part 60.

[40 CFR 60.284(f)]

H.23. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition H.39. if the following monitoring exceedance occurs:

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

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

H.24. PM Emissions – Violations. It shall be considered a violation of the standards of Condition H.4. if the following monitoring exceedance occurs:

- when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period;

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

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.}

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

No. 4 Lime Kiln Stack

H.25. Particulate Matter. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used, except that Method 17 in Appendix A of 40 CFR Part 60 may be used in lieu of Method 5 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205 °C (400 °F). For Methods 5, and 17, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. The particulate concentration shall be corrected to the appropriate oxygen concentration according to Condition H.26. A compliance test shall be conducted annually, once each federal fiscal year.

[40 CFR 63.865(b)(1); Construction Permit No. AC45-141877; 40 CFR 60.285(b)(1), 40 CFR 60.285(f)]

H.26. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times \left(\frac{1 - X}{1 - Y} \right)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).

C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).

X = the corrected volumetric oxygen concentration (10 percent).

Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2); 40 CFR 60.285(b)(1); 40 CFR 60.284(c)(3)]

H.27. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3B in Appendix A of 40 CFR Part 60. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3); 40 CFR 60.285(b)(2)]

H.28. The Permittee shall comply with the following:

- (i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;
- (ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A of 40 CFR Part 60 shall be used;
- (iii) For purposes of conducting gas analysis, Method 3B in Appendix A of 40 CFR Part 60 shall be used; and
- (iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.
- (v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the CaO production rate.

[40 CFR 63.865(b)(5) and (6); 40 CFR 60.285(b)(2)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

H.29. Total Reduced Sulfur (TRS). EPA Method 16, EPA Method 16A, EPA Method 16B, or Method 16C shall be used to determine the TRS concentration. The TRS concentration shall be corrected to the appropriate oxygen concentration using the procedure in Condition H.21.(3). The sampling time shall be at least 3 hours, but no longer than 6 hours. A compliance test shall be conducted annually, once each federal fiscal year.

[Construction Permit No. AC45-141877; 40 CFR 60.285(d)(1); 40 CFR 60.285(f)(2); Rule 62-296.404(4)(b)3., F.A.C.(subsumed); Rule 62-204.800(8)(e)6., F.A.C.; FDEP Letter dated May 15, 2012]

H.30. Oxygen Concentration. The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the oxygen concentration. The sample shall be taken over the same time period as the TRS samples.

[Construction Permit No. AC45-141877; 40 CFR 60.285(d)(2)]

H.31. Visible Emissions The test method for Visible Emissions shall be EPA Method 9, as incorporated in Chapter 62-297. A compliance test shall be conducted annually, once each federal fiscal year.

[Construction Permit No. AC45-141877]

No. 1 Lime Bin Vent

H.32. Visible Emissions The test method for Visible Emissions shall be EPA Method 9, as incorporated in Chapter 62-297, F.A.C. A compliance test shall be conducted annually, once each federal fiscal year.

[Construction Permit No. AC45-141878, Construction Permit No. 0890003-036-AC]

H.33. Particulate Matter. Compliance shall be demonstrated by compliance with visible emissions standards specified in Condition H.8. Failure to comply with this standard shall necessitate the requirement to conduct a mass emissions compliance test for particulate matter emissions using EPA Methods 1, 2, 3, and 5 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A.

[Construction Permit No. AC45-141878, Construction Permit No. 0890003-036-AC]

No. 2 Lime Bin Vent

~~**H.34. Visible Emissions** The test method for Visible Emissions shall be EPA Method 9, as incorporated in Chapter 62-297, F.A.C. A compliance test shall be conducted annually, once each federal fiscal year.~~

~~[Construction Permit No. AC45-141878]~~

~~**H.35. Particulate Matter.** Compliance shall be demonstrated by compliance with visible emissions standards specified in Condition H.9. Failure to comply with this standard shall necessitate the requirement to conduct a mass emissions compliance test for particulate matter emissions using EPA Methods 1, 2, 3, and 5 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A.~~

~~[Construction Permit No. AC45-141878]~~

Common Testing Requirements:

H.36. 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.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

Recordkeeping and Reporting Requirements

Lime Kiln Stack

H.37. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

- (a) The report shall include the following information:
 - 1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.
 - 2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.
 - 3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
 - 4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.
- (b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(a) and (b), F.A.C.; Construction Permit No. AC45-141877]

H.38. Reserved

H.39. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

- (1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and
- (b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

Specific Condition H.39. Continued

- (2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:
- (i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and
 - (ii) An inspection schedule for the continuous monitoring system required under Condition H.19. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

H.40. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition H.23.

[40 CFR 63.866(b)]

H.41. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition H.24.

[40 CFR 63.866(b)]

H.42. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

- (1) N/A
- (2) Records of CaO production rates in units of Mg/d or ton/d (daily basis)
- (3) Records of parameter monitoring data required under § 63.864., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;
- (4) Records and documentation of supporting calculations for compliance determinations made under Conditions H.25. through H.28;
- (5) N/A;
- (6) N/A
- (7) N/A

[40 CFR 63.866(c); Construction Permit No. 0890003-013-AC- Rules 62-210.370(3), 62-4.070(3), 62-212.300(1)(e)1., 62-212.400(12)(c), F.A.C.]

H.43. Excess Emissions Report – PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition H.23. or H.24. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition H.23. and the number and duration of occurrences when the source met or exceeded the conditions in Condition H.24. Reporting excess emissions below the violation thresholds of Condition H.24. does not constitute a violation of the applicable standard.

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 021

Specific Condition H.43. Continued

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

[40 CFR 63.867(c)]

H.44. PSD Emissions Tracking – NO_x Emissions: To ensure that the addition of HCE authorized by Permit No. 0890003-013-AC will not constitute a major modification, the owner or operator shall calculate and maintain a record of NO_x emissions in tons per year, on a calendar year basis, for a period of 5 years following resumption of regular operations after the addition of HCE as authorized by Permit No. 0890003-013-AC. The owner or operator shall follow the procedures described in Appendix HCE, and provide a written report to the Department on an annual basis for this same 5-year period.

[Permit No.0890003-013-AC, Rule 62-212.400(12)(c), F.A.C.; Rule 62-212.300(3)(e)1.,F.A.C.]

H.45. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Notifications

H.46. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR 63 Subpart A, as specified in Table 1 of this 40 CFR 63 Subpart MM.

[40 CFR 63.867(a)(1)]

Common Conditions

H.47. This emissions unit is also subject to the on-spec used oil conditions in Subsection N.

Other Applicable Requirements

H.48. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in:

40 CFR Part 60, Subpart A- General Provisions

40 CFR Part 60, Subpart BB – Standards of Performance for Kraft Pulp Mills

40 CFR Part 63, Subpart A – General Provisions

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

40 CFR Part 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