Florida Department of Environmental Protection

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PERMITTEE

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

Authorized Representative:
Mr. Gary Frost, Vice-President Manufacturing

Air Permit No. 1070005-072-AC
Permit Expires: May 1, 2013
Minor Air Construction Permit

Palatka Mill, No. 4 Recovery Boiler
Tube Replacement Project

PROJECT

This is the final air construction permit, which authorizes the replacement of the horizontally oriented floor, including tubes, on the No. 4 Recovery Boiler with an inclined floor including new, single-piece, corrosion-resistant tubes. The proposed work will be conducted at the existing Palatka Mill, which is a Kraft pulp and paper mill categorized under Standard Industrial Classification Nos. 2611 and 2621. The existing facility is located in Putnam County at 215 County Road 216 in Palatka, Florida. The UTM coordinates are Zone 17, 434.0 kilometers (km) East, and 3283.4 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

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

Executed in Tallahassee, Florida
Electronic Signature

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Gary Frost, Georgia-Pacific Consumer Operations LLC: gary.frost@gapac.com
Mr. Ron Reynolds, Georgia-Pacific Consumer Operations LLC: ron.reynolds@gapac.com
Mr. Mark Aguilar, P.E. Georgia-Pacific Consumer Operations LLC: mjaguila@gapac.com
Mr. Khalid AlNahdy, DEP Northeast District Office: khalid.alnahdy@dep.state.fl.us
Ms. Heather Ceron, US EPA Region 4: ceron.heather@epa.gov
Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us
Ms. Lynn Scearce, DEP OPC: lynn.scearce@dep.state.fl.us

Clerk Stamp

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

FACILITY DESCRIPTION

The Palatka Mill is an existing Kraft pulp and paper mill that consists of major activity areas such as: chip handling, pulping, bleaching, chemical recovery, utilities, paper machines, converting, and turpentine and tall oil production. The mill includes the No. 4 Recovery Boiler, which fires black liquor solids (BLS) as the primary fuel to facilitate the recovery of the cooking liquor. The black liquor is a by-product from the digestion of wood chips. Weak black liquor is concentrated and introduced into a special boiler known as a black liquor recovery boiler. The organic fraction is burned in stages and the energy is recovered for steam production. Particulate matter (PM) emissions are controlled by an electrostatic precipitator (ESP).

PROPOSED PROJECT

The applicant is requesting to replace the horizontally oriented floor, including tubes, on the No. 4 Recovery Boiler with an inclined floor including new, single-piece, corrosion-resistant tubes. There will be no increase in the boiler design black liquor solids input rate or steam capacity. The project will minimize the possibility of explosive contact between smelt (chemicals) recovered on the boiler floor and possible hot steam/water leaks from the underlying tubes.

The applicant seeks concurrence by the Department with the claim that the proposed project constitutes routine maintenance, repair and replacement (RMRR) and, for that reason, is exempt from permitting. In the absence of such concurrence, the applicant requests a minor modification air construction permit to perform the work on the basis that emission increases will not trigger another Prevention of Significant Deterioration (PSD) review.

According to the applicant, the purpose and primary result of this project is preventative in nature to maintain and assure reliable and safe function of the boiler at its current capacity. The proposed work is not intended to correct any current pattern of reduced reliability or lost production. The work is planned to coincide with the 23-day annual outage for the No. 4 Recovery Boiler beginning April 2012 and will cost approximately $3.45 million.

This project will modify the following emissions units.

EU No.	Emission Unit Description
018	No. 4 Recovery Boiler

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention PSD of Air Quality.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office at: 7825 Baymeadows Way, Suite 200 B, Jacksonville, Florida 32256-7590.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

B. No. 4 Recovery Boiler (EU 018)

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
018	No. 4 Recovery Boiler

This unit fires BLS as the primary fuel to facilitate the recovery of the cooking liquor. Residual fuel oil is fired as a startup, shutdown and supplemental fuel. The maximum operating capacity of BLS is 210,000 pound (lb)/hour based on a 24-hour average, which is equivalent to a heat input rate of 1,345 million British thermal units (MMBtu)/hour based on a fuel heating value of 6,410 Btu/lb of BLS. This is also equivalent to approximately 27,984 gallons/hour of black liquor. This boiler also fires a continuous addition of virgin, ultra low sulfur diesel fuel (ULSD) (No. 2 fuel oil) into the piping that feeds black liquor into the No. 4 Recovery Boiler. The maximum fuel oil consumption of No. 6 fuel oil, on-spec used oil and ULSD fuel is limited to 7,860,640 gallons per any consecutive 12 months. The maximum steam production rate is 789,000 lb/hour (24-hour average) for steam conditions of 850 degrees Fahrenheit (° F) to 900° F at 1250 pounds per square inch (psi). PM emissions are controlled by an 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 over-fire 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, sulfur dioxide (SO_2), TRS and opacity.

{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 and PSD-FL-380; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated June 7, 1991, September 18, 1995 and May 29, 2007; 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.}

EQUIPMENT

1. No. 4 Recovery Boiler: The permittee is authorized to conduct the following work on the No. 4 Recovery Boiler including repair, replacement and maintenance on various equipment and components including (but not limited to) the following: replace the horizontally oriented floor, including tubes, on the No. 4 Recovery Boiler with an inclined floor including new, single-piece, corrosion-resistant tubes. [Design and Application]

PERFORMANCE RESTRICTIONS

2. Capacities and Fuels: The proposed work shall not result in any increase in BLS processing rate, boiler heat input rate, fuel consumption rates and steam generation rates. [Rule 62-4.070(3), F.A.C. and Application]

TESTING REQUIREMENTS

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

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

resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., 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, TRS and opacity.

   2) The permittee shall use the data collected from the required stack tests to determine and report the actual annual emissions of 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.

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