**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**
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**PERMITTEE**

Georgia-Pacific Consumer Operations, LLC
Post Office Box 919
Palatka, FL 32178-0919

Authorized Representative:
Gary L. Frost, Vice President Operations

Air Permit No. 1070005-078-AC
Permit Expires: January 1, 2015
Minor Air Construction Permit Revision
Palatka Mill
No. 4 Combination Boiler Electrostatic Precipitator (ESP) Replacement

**PROJECT**

This is the final air construction permit, which revises Permit Nos. 1070005-066-AC and 1070005-070-AC to allow the replacement of the ESP for No. 4 Combination Boiler. The proposed work will be conducted at the existing Palatka Mill, which is a Kraft pulp and paper mill categorized under Standard Industrial Classification No. 2611. The existing facility is located in Putnam County at 215 County Road 216 in Palatka, Florida. The UTM coordinates are Zone 17, 434.00 kilometer (km) East and 3,283.4 km North.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions). As noted in the Final Determination provided with this final permit no changes were made to the draft 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

*for* Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

## 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) 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. Khalid AlNahdy, DEP Northeast District Office: (khalid.alnahdy@dep.state.fl.us)
Ms. Heather Ceron, US EPA Region 4 (ceron.heather@epa.gov)
Ms. Katy Forney, US EPA Region 4 (forney.kathleen@epamail.epa.gov)
Ms. Barbara Friday, DEP OPC (barbara.friday@dep.state.fl.us)
Ms. Lynn Scearce, DEP OPC Reading File (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.

## FACILITY DESCRIPTION

The existing facility consists of the following emissions units (EU). The EU affected by this permitting action is highlighted.

**Facility ID No. 1070005**

| EU ID No. | Emission Unit Description |
|---|---|
| 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 |
| 035 | $ClO_2$ Plant and Methanol Storage Tank |
| 036 | ECF No. 3 Bleach Plant |
| 037 | Thermal Oxidizer |
| 039 | Bark Hog |
| 044 | No. 7 Package Boiler |
| 045 | Wide-web Flexographic Printers |
| 046 | Condensate Stripper System |
| 047 | Brown Stock Washing System- Lines 3,5,6,&7 |
| 048 | Oxygen Delignification System |
| 050 | Converting Department |

## 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 (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The proposed project **does not** trigger a PSD review and a requirement to conduct a Best Available Control Technology (BACT) pursuant to Department Rule 62-212.400, F.A.C.

## PROPOSED PROJECT

This permit will revise Permit Nos. 1070005-066-AC and 1070005-070-AC for the No. 4 combination boiler. Permit No. 1070005-066-AC authorized the applicant to perform the following modifications to the No. 4 combination boiler: replace the fuel oil burners with natural gas burners; upgrade of the existing mechanical dust collection system; and replace 28 continuous tube sections in the No. 4 combination boiler superheater section. 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. Approximately 400 tubes required prompt replacement due to corrosion or ash buildup, while approximately 1,000 tubes were replaced to minimize future failures and plugging.

This project (Permit No. 1070005-078-AC) involves replacing the existing ESP used to control particulate matter (PM) emissions from the No. 4 combination boiler with an ESP previously used to control PM emission from the No. 5 power boiler. The ESP for the No. 5 power boiler is no longer used since the boiler was converted to natural gas firing. The replacement is necessary, because the original ESP was damaged by fire in November

2012. According to the applicant, the power boiler ESP is nearly identical in size, design and configuration to the original ESP and should provide equivalent PM control efficiency.

Finally, in a permit exemption letter dated December 12, 2012, the Department granted the permittee the authority to plug off 14 dust collector tubes in the No 4 Combination Boiler dust collection system. After plugging these tubes, 34 active tubes will remain in the dust collection system. The result of plugging the tubes will be an increase in flue gas velocity through the dust collection system (cyclones), which should increase the efficiency of the mechanical dust collection system. This work is also included in this permitting action for completeness even through no permit is required to conduct the work.

**Permit Being Modified: Permit No. 1070005-066-AC**

Affected Emissions Unit: EU 016

Subsection 3A, Emission Standards: This section is revised as follows.

**EMISSIONS STANDARDS**

5. Standards

   a. *Existing Standards*: The No. 4 Combination Boiler remains subject to all applicable requirements in the current Title V air operation permit. No new emissions standards are imposed by this permit. [Rules 62-4.070(3) and 62-210.300 and Chapter 62-213, F.A.C.]

   b. *New Standards*: Compliance stack testing to show that the PM emission limits specified in the current Title V air operation permit are met shall be completed within 90 days of the initial operation of the replacement ESP on the No. 4 combination boiler. The test methods and conditions specified in the Title V permit shall be utilized. Results shall be reported to the Compliance Authority with 30 days of the completion of the stack testing. [Rules 62-4.070(3), F.A.C.]

**Permit Being Modified: Permit No. 1070005-070-AC**

Affected Emissions Unit: EU 016

Section II – Permit Revisions: This condition is revised as follows.

2. Modifications : The permittee shall make the following modifications and other related work to the No. 4 Combination Boiler:

   a. Replace the three existing No. 6 residual oil burners with natural gas burners. Natural gas shall replace No. 6 residual fuel oil as the supplemental fuel supply for No. 4 Combination Boiler. Fuel oil will no longer be permitted after the burner replacement is complete.

   b. Upgrade the existing mechanical dust collection system. The No. 3 tertiary collector shall be upgraded to become the primary dust collector prior to the electrostatic precipitator. Plug off 14 dust collector tubes in the dust collection system leaving 34 active tubes in the dust collection system. Plugging the tubes will increase in flue gas velocity through the dust collection system (cyclones) thereby increasing the collection efficiency.

   c. Replace the existing steam turbine-driven on the induced draft (ID) fan for the No. 4 combination boiler with an electric motor ID fan.

   d. Partially replace 28 continuous tube sections in the boiler's superheater section.

   e. Replace approximately 1,400 tubes in the boiler air preheater section.

   f. Replace the existing ESP used to control PM emissions from the No. 4 combination boiler with the ESP previously used to control PM emission from the No. 5 power boiler. To accomplish this task, the duct work shall be modified to redirect the flue gas from the No. 4 combination boiler from inlet of the damaged ESP to the inlet of the ESP that had previously been used to control PM emissions from the No. 5 power boiler.

      {Permitting Note: the ESP previously used to control PM emissions from the No. 5 power boiler is no longer in use because the No. 5 boiler was converted to fire only natural gas in a previous permitting action.}

   [Applicant's Request]