

# RECEIVED

**DEC 09 2011** 

DIVISION OF AIR
RESOURCE MANAGEMENT

Palatka Pulp and Paper Operations

Consumer Products Division

P.O. Box 919 Palatka, FL 32178-0919 (386) 325-2001

Sent via Federal Express

December 9, 2011

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DIVISION OF AIR
RESOURCE MANAGEMENT

Mr. Jeffery F. Koerner
Administrator
Office of Permitting and Compliance
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Poytot NO! 107005 -070-AC-

Re: Georgia-Pacific Consumer Operations LLC

Palatka Mill

No. 4 Combination Boiler Air Preheater Tube Replacement Project

Dear Mr. Koerner:

Georgia-Pacific Consumer Operations LLC (GP) owns and operates a Kraft pulp and paper mill in Palatka, Putnam County, Florida (Palatka Mill), which operates under Title V Air Operating Permit No. 1070005-064-AV. The Palatka Mill is proposing to replace approximately 1,400 air preheater tubes in the No. 4 Combination Boiler during a regularly scheduled outage in January 2012.

The No. 4 Combination Boiler, originally constructed in 1965, is rated at 512.7 million British thermal units per hour (MM Btu/hr) heat input, and is currently permitted to burn bark/wood and No. 6 fuel oil, as well as natural gas as a startup fuel. The boiler generates steam for process operations and electrical power for use on-site. The boiler is also the backup control device for dilute non-condensable gases (DNCGs), non-condensable gases (NCGs), and stripper off-gases (SOGs). Mechanical dust collectors and an electrostatic precipitator (ESP) are used to control particulate matter (PM) emissions from the boiler.

On April 7, 2011, the Florida Department of Environmental Protection (FDEP) issued an air construction permit (Air Permit No. 1070005-066-AC)¹ authorizing replacement of the No. 6 fuel oil burners with natural gas burners, upgrading the existing mechanical dust collection system, replacement of the existing steam driven turbine induced draft fan drive with an electric motor and fan, and the partial replacement of 28 tube sections in the boiler's superheater section.

The Mill plans to complete all of these activities as part of the January 2012 outage, except for the partial replacement of the superheater tubes. A recent engineering analysis conducted by the Mill has determined that the superheater tube replacement work is not necessary, and for this reason, this activity has been removed from the work scheduled as part of the January 2012 outage.

So that the Mill can complete the air preheater tube replacement project at the same time as the other authorized work, GP respectfully requests that FDEP revise the April 7, 2011 construction permit to incorporate the air preheater tube replacement project.

#### **Project Description:**

The Combination Boiler's air heater uses its exhaust flue gas to pre-heat the combustion air with an "air-to-air" heat exchanger, which is referred to as the "air preheater". There are approximately 53 air preheater tubes that are currently leaking due to corrosion and approximately 350 tubes (out of a total of 2,320 tubes) that are plugged due to ash build-up. The corrosion damage occurs due to cool air entering the inlet of the air preheater and cooling the flue gas below the dew point, resulting in acid corrosion on the inside surface of the tubes. When the tubes corrode and leak, the combustion air by-passes the furnace and travels directly into the flue gas stream causing an overall reduction in boiler efficiency. After the Mill replaces the No. 6 fuel oil burners with natural gas burners, the amount of acid corrosion on the tubes will be significantly reduced. When air is bypassing the furnace, the induced draft (ID) fan must run at a higher speed to maintain the proper furnace pressure and excess oxygen content.

The Mill is proposing to replace approximately 1,400 tubes in the air preheater section with new tubes. There will be a slight change in the material of construction used for the air preheater tubes in order to increase protection from corrosion in the future, but the material change will not affect the function or design capacity of the air preheater tubes. Although there are only approximately 400 air heater tubes with leaks or pluggage, the Mill is replacing additional air heater tubes as a defensive measure to prevent future failures/plugging. There will be no increase in the boiler's design fuel input rate or steaming capacity as a result of replacing the tubes. This project will improve the performance of the dust collector and reduce wear on the ID (induced draft) fan.

As part of the permit application for the No. 4 Combination Boiler that resulted in the April 7, 2011 construction permit, the Mill submitted a PSD applicability analysis using the "baseline actual-to-projected actual" emission comparison allowed under Rule 62-212.400(2)(a)1 of the Florida Administrative Code (F.A.C.). Based on this comparison, all projected emission increases due to the proposed project were less than the PSD significant emission rates, as was

<sup>&</sup>lt;sup>1</sup> Permit application for this project was submitted to the FDEP by the Mill on January 7, 2011.

shown in Table 4-10 of the January 2011 permit application. The addition of the air preheater tube replacement project will not change the results of that PSD applicability analysis.

As instructed by Mr. Linero of the FDEP during a December 6, 2011 telephone discussion with GP, we have enclosed the first 13 pages of the "Application for Air Permit - Long Form" application with this letter, which has been reviewed and certified by Mr. Mark Aguilar of GP, a registered professional engineer in the State of Florida.

Please feel free to contact Ron Reynolds at (386)-329-0967 should you have any questions or require further information.

Sincerely,

Gary Frost

Vice President and Mill Manager Georgia-Pacific Palatka LLC

cc: Wayne Galler, Georgia-Pacific LLC (Atlanta, GA)

Kenneth Prest, Georgia-Pacific Palatka LLC (Palatka, FL)

Ron Reynolds, Georgia-Pacific Palatka LLC (Palatka, FL)

Mark Ruppel, Georgia-Pacific Consumer Products LP (North Little Rock, AR)



# Department of **Environmental Protection RECEIVED**

### Division of Air Resource Management

DEC 09 2011

#### **APPLICATION FOR AIR PERMIT - LONG FORM**

DIVISION OF AIR RESOURCE MANAGEMENT

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT):
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

### To ensure accuracy, please see form instructions.

#### Identification of Facility

1.	Facility Owner/Company Name: Georgia-Pacific Consumer Operations LLC						
2.	Site Name: Palatka Mill						
3.	Facility Identification Number: 1070005						
4.	Facility Location Street Address or Other Locator: 215 County Road 216						
	City: Palatka Cou	nty: P	utnam	Zip Code: <b>32177</b>			
5.	Relocatable Facility?  ☐ Yes ☐ No	,	6. Existing Ti  ⊠ Yes	tle V Permitted Facility? ☐ No			
A	oplication Contact						
1.	Application Contact Name: Ron Reyn	nolds, E	Environmental E	Engineer – Air Quality			
2.	Application Contact Mailing Address Organization/Firm: Georgia-Pacific C		er Operations L	LC			
	Street Address: P.O. Box 919						
	City: Palatka	Sta	te: FL	Zip Code: <b>32178-0919</b>			
3.	Application Contact Telephone Numb	ers					
	Telephone: (386) 329-0967	ext.	Fax: (368) 3	328-0014			
4.	4. Application Contact E-mail Address: ron.reynolds@gapac.com						
Aŗ	Application Processing Information (DEP Use)						
	Date of Receipt of Application: 12-9			nber (if applicable):			
2.	Project Number(s): 070005 -070	- AC	4. Siting Nu	mber (if applicable):			

#### **Purpose of Application**

Thi	is application for air permit is being submitted to obtain: (Check one)
Air	· Construction Permit
$\boxtimes$	Air construction permit.
	Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
	Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.
Air	Operation Permit
	Initial Title V air operation permit.
	Title V air operation permit revision.
	Title V air operation permit renewal.
	Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
	Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.
	Construction Permit and Revised/Renewal Title V Air Operation Permit oncurrent Processing)
	Air construction permit and Title V permit revision, incorporating the proposed project.
	Air construction permit and Title V permit renewal, incorporating the proposed project.
	Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:
	☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

#### **Application Comment**

This application is being submitted to revise the existing Construction Permit No. 1070005-66-AC for the No. 4 Combination Boiler (EU ID 016) to allow for the replacement of 1,400 air preheater tubes. Approximately 400 of the 1,400 tubes are either damaged or plugged due to corrosion or ash plugging. The additional air preheater tubes are being replaced as a defensive measure to prevent future failures/plugging.

# **Scope of Application**

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee	
016	No. 4 Combination Boiler	N/A	N/A	
_				
	-			
		<u> </u>		
<b>Application</b>	Processing Fee			

Application Processing Fee	
Check one: Attached - Amount: \$	

#### Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

Owner/Authorized Representative Name:

Gary L. Frost, Vice-President Operations

Owner/Authorized Representative Mailing Address...

Organization/Firm: Georgia-Pacific Consumer Operations LLC

Street Address: P.O. Box 919

City: Palatka

State: FL

Zip Code: **32178** 

3. Owner/Authorized Representative Telephone Numbers...

Telephone: (386) 329-0063

Fax:

(386) 312-1135

4. Owner/Authorized Representative E-mail Address: gary.frost@gapac.com

5. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.

DEP Form No. 62-210.900(1) - Form Effective: 03/11/2010

### **Application Responsible Official Certification**

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:				
Application Responsible Official Qualification (Check one or more of the following options, as applicable):				
For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.				
<ul> <li>For a partnership or sole proprietorship, a general partner or the proprietor, respectively.</li> <li>For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.</li> </ul>				
☐ The designated representative at an Acid Rain source or CAIR source.				
3. Application Responsible Official Mailing Address Organization/Firm:				
Street Address:				
City: State: Zip Code:				
4. Application Responsible Official Telephone Numbers  Telephone: ( ) ext. Fax: ( )				
5. Application Responsible Official E-mail Address:				
6. Application Responsible Official Certification:				
5. Application Responsible Official E-mail Address:				
Signature Date				

### **Professional Engineer Certification**

1.	Professional Engineer Name: Mark J. Aguilar				
	Registration Number: 52248				
2.	Professional Engineer Mailing Address				
	Organization/Firm: Georgia-Pacific LLC				
	Street Address: 133 Peachtree Street, N.E.				
	City: Atlanta State: Georgia Zip Code: 30303				
3.	Professional Engineer Telephone Numbers				
	Telephone: (404) 652-4293 ext. Fax: (404) 654-4706				
4.	Professional Engineer E-mail Address: mjaguila@gapac.com				
5.	Professional Engineer Statement:				
	I, the undersigned, hereby certify, except as particularly noted herein*, that:				
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and				
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.				
	(3) If the purpose of this application is to obtain a Title $V$ air operation permit (check here $\square$ , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.				
	(4) If the purpose of this application is to obtain an air construction permit (check here $\boxtimes$ , if so) or concurrently process and obtain an air construction permit and a Title $V$ air operation permit revision or renewal for one or more proposed new or modified emissions units (check here $\square$ , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.				
1 3 J. C.	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.				
0.5	Signature Date (seal)				

#### II. FACILITY INFORMATION

#### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1.	Facility UTM Coordinates  Zone 17 East (km) 434.0  North (km) 3,283.4		2. Facility Latitude/Longitude Latitude (DD/MM/SS) 29 / 41 / 00 Longitude (DD/MM/SS) 81 / 40 / 45				
3.	Governmental Facility Code:	4. Facility Status Code: A	5.	Facility Major Group SIC Code: 26	6.	Facility SIC(s): <b>2611 2621</b>	
7.	Facility Comment :						

#### **Facility Contact**

1.	Facility Contact Name: Ron E. Reynolds, Environmental E	Engineer – Air Quali	ty			
2.	Facility Contact Mailing Address Organization/Firm: Georgia-Pacific Consumer Operations LLC					
	Street Address: P.O. Box 919					
	City: Palatka	State: FL	Zip Code: <b>32178</b>			
3.	Facility Contact Telephone Numb Telephone: (386) 329-0967	ext.	Fax: (386) 328-0014			
4.	Facility Contact E-mail Address:	ron.reynolds@gap	ac.com			

#### Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

	J F				
1.	Facility Primary Responsi	ble Official Name:			
2.	Facility Primary Responsible Official Mailing Address Organization/Firm: Street Address:				
ļ	Silver Address.				
	City:	State:		Zip Code:	
3.	Facility Primary Responsi	ble Official Telephone	Numbers		
	Telephone: ( )	ext.	Fax: (	)	
4.	Facility Primary Responsi	ble Official E-mail Ad	dress:		

DEP Form No. 62-210.900(1) - Form %F1180-pksfftile1\fil180-millwideenvironmental\Air\Permits\Projects\2011\Projects\CB\ Annual\ outage\Long\ Form\ (2)\docx 7 12/2011

### **Facility Regulatory Classifications**

Check all that would apply following completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1.   Small Business Stationary	Source Unknown
2.   Synthetic Non-Title V Sour	rce
3.   Title V Source	
4. Major Source of Air Polluta	ants, Other than Hazardous Air Pollutants (HAPs)
5.  Synthetic Minor Source of	Air Pollutants, Other than HAPs
6. Major Source of Hazardous	s Air Pollutants (HAPs)
7.  Synthetic Minor Source of	HAPs
8.	nits Subject to NSPS (40 CFR Part 60)
9.   One or More Emissions Un	nits Subject to Emission Guidelines (40 CFR Part 60)
10. More Emissions Un	nits Subject to NESHAP (40 CFR Part 61 or Part 63)
11. ☐ Title V Source Solely by E.	PA Designation (40 CFR 70.3(a)(5))
12. Facility Regulatory Classificati	ions Comment:

### **List of Pollutants Emitted by Facility**

1 Dellatent Enritted	2 Pollutout Classification	2 Emissians Con
1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter Total – PM	Α	N
Particulate Matter – PM10	A	N
Particulate Matter – PM2.5	Α	N
Sulfur Dioxide - SO2	A	N
Nitrogen Oxides – NOx	Α	N
Carbon Monoxide – CO	Α	N
Volatile Organic Compounds – VOC	Α	N
Lead – Pb	Α	N
Sulfuric Acid Mist – SAM	A	N
Total Reduced Sulfur - TRS	A	N
Benzene – H017	Α	N
m-Cresol – H051	Α	N
Formaldehyde – H095	Α	N
Hexachlorocyclopentadiene – H100	Α	N
Methanol – H115	Α	N
Naphthalene – H132	Α	N
Phenol – H144	Α	N
Toluene – H169	Α	N
1,2,4-Trichlorobenzene – H174	Α	N
o-Xylene – H187	Α	N
Hazardous Air Pollutants – HAPS	Α	N
	-	

### **B. EMISSIONS CAPS**

### Facility-Wide or Multi-Unit Emissions Caps

_	Pollutant	2. Facility-	3. Emissions	4.	Hourly	5.	Annual	6. Basis for
1	Subject to	Wide Cap	Unit ID's		Cap		Cap	Emissions
1	Emissions	[Y or N]?	Under Cap		(lb/hr)		(ton/yr)	Cap
	Cap	(all units)	(if not all units)	ĺ	, ,	ĺ	• • •	<u> </u>
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7.	Facility-Wi	ide or Multi-Unit l	Emissions Cap Con	nme	nt:			
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### C. FACILITY ADDITIONAL INFORMATION

### Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  Previously Submitted, Date: 1-7-2011
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  Previously Submitted, Date: 1-7-2011
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  Previously Submitted, Date: 1-7-2011
L	Iditional Requirements for Air Construction Permit Applications
	Area Map Showing Facility Location:
1.	☐ Attached, Document ID: ☐ Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):  Attached, Document ID: see attached letter
3.	Rule Applicability Analysis:  Attached, Document ID: see previously submitted application dated 1-7-2011
4.	List of Exempt Emissions Units:  Attached, Document ID: Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification:  ☐ Attached, Document ID:  ☐ Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.):  ☐ Attached, Document ID:  ☐ Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.):  ☐ Attached, Document ID:  ☐ Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):  ☐ Attached, Document ID: ☐ Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):  Attached, Document ID: Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):

# C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

### **Additional Requirements for FESOP Applications**

1.	List of Exempt Emissions Units:  Attached, Document ID: Not Applicable (no exempt units at facility)
	Iditional Requirements for Title V Air Operation Permit Applications
I.	List of Insignificant Activities: (Required for initial/renewal applications only)  Attached, Document ID:
_	
2.	Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)  Attached, Document ID:
	☐ Not Applicable (revision application with no change in applicable requirements)
3.	Compliance Report and Plan: (Required for all initial/revision/renewal applications)  Attached, Document ID:
	Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4.	List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)  Attached, Document ID:
	☐ Equipment/Activities Onsite but Not Required to be Individually Listed
	☐ Not Applicable
5.	Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)  Attached, Document ID: Not Applicable
6.	Requested Changes to Current Title V Air Operation Permit:  Attached, Document ID: Not Applicable

 $DEP\ Form\ No.\ 62-210.900(1)-Form \\ Effective:\ 03/11/2010 \\ 12 \\ 12/2011$ 

# C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

### Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1,	Acid Rain Program Forms:
	Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):  ☐ Attached, Document ID: ☐ Previously Submitted, Date: ☐ Not Applicable (not an Acid Rain source)
	Phase II NO <sub>X</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):  ☐ Attached, Document ID: ☐ Previously Submitted, Date: ☐ Not Applicable
	New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):  ☐ Attached, Document ID: ☐ Previously Submitted, Date: ☐ Not Applicable
2.	CAIR Part (DEP Form No. 62-210.900(1)(b)):  ☐ Attached, Document ID: ☐ Previously Submitted, Date: ☐ Not Applicable (not a CAIR source)
Ac	Iditional Requirements Comment
1	