

Florida Department of
Environmental Protection

Memorandum

To: Trina Vielhauer, Bureau of Air Regulation
From: Jeff Koerner, New Source Review Section
Date: November 30, 2010
Subject: Air Construction Permit Exemption
Project No. 1070005-065-AC
Georgia-Pacific, Palatka Pulp and Paper Operations
Advanced Control System, No. 4 Combination Boiler

Attached for your review is an exemption from the requirement to obtain an air construction permit for an advanced control system for the No. 4 combination boiler at the existing Palatka pulp and paper mill, which is located in Putnam County, North of County Road 216 and West of U.S. Highway 17 in Palatka, Florida. On November 9th, we received a request for authorization to replace obsolete manual boiler controls with new air damper controllers and a computer software package to improve boiler performance and efficiency. The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for the exemption. I recommend your approval of the attached exemption package.

Attachments

TLV/jfk



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi A. Drew
Secretary

November 30, 2010

Sent by Electronic Mail – Received Receipt Requested

Mr. Gary Frost, Vice President and Mill Manager
Georgia-Pacific, Palatka Pulp and Paper Operations
P. O. Box 919
Palatka, Florida 32178-0919

Re: Air Construction Permit Exemption
Georgia-Pacific, Palatka Pulp and Paper Operations
Project No. 1070005-065-AC
Advanced Control System, No. 4 Combination Boiler

Dear Mr. Frost:

On November 9, 2010, Georgia-Pacific submitted a request for authorization to install an advanced control system for the No. 4 combination boiler at the existing Palatka pulp and paper mill, which is located in Putnam County, North of County Road 216 and West of U.S. Highway 17 in Palatka, Florida. Approximately five existing pneumatic combustion air control dampers will be replaced with motorized controllers, which are more precise. The new combustion air controllers will provide feedback to the control system, which, along with fuel flow, will allow optimization of the boiler for performance and efficiency. Although the request does require construction and is a change in the method of operation, the project is unlikely to increase emissions or adversely impact air quality.

Determination: A complete review of this project is summarized in the attached Technical Evaluation. Pursuant to Rule 62.4.040(1)(b) of the Florida Administrative Code (F.A.C.) and for the reasons stated in the Technical Evaluation, the Bureau of Air Regulation determines that the activity will not emit air pollutants, "... in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified." Therefore, the project is exempt from the requirement to obtain an air construction permit. This determination may be revoked if the proposed activity is substantially modified or the basis for the exemption is determined to be materially incorrect. A copy of this letter shall be maintained at the site of the proposed activity. This permitting decision is made pursuant to Chapter 403, Florida Statutes.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C. The Permitting Authority responsible for making a permit determination for this project is the Bureau of Air Regulation in the Department of Environmental Protection's Division of Air Resource Management. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the

EXEMPTION FROM AIR CONSTRUCTION PERMITTING

information set forth below and must be filed with (received by) the agency clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241). Petitions must be filed within 21 days of receipt of this exemption from air permitting requirements. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this permitting action. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

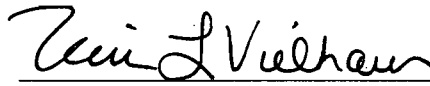
Mediation: Mediation is not available in this proceeding.

Effective Date: This permitting decision is final and effective on the date filed with the clerk of the Permitting Authority unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Permitting Authority.

Judicial Review: Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., 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.

EXEMPTION FROM AIR CONSTRUCTION PERMITTING

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/jfk


CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Exemption from Air Construction Permitting 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 11/30/10 to the persons listed below.

- Mr. Gary Frost, Georgia-Pacific (gary.frost@gapac.com)
- Mr. Ron Reynolds, Georgia-Pacific (ron.reynolds@gapac.com)
- Mr. Chris Kirts, DEP NED Office (kirts_c@dep.state.fl.us)
- Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

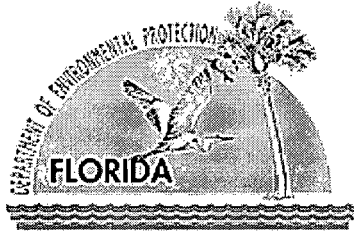
Clerk Stamp

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.



(Clerk)

11/30/10
(Date)



TECHNICAL EVALUATION

APPLICANT

Georgia-Pacific
P. O. Box 919
Palatka, Florida 32178-0919

Palatka Pulp and Paper Operations
Facility ID No. 1070005

PROJECT

Project No. 1070005-065-AC
Application for Minor Source Air Construction Permit
Installation of Advanced Control System, No. 4 Combination Boiler

COUNTY

Putnam County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
New Source Review Section
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

November 30, 2010

TECHNICAL EVALUATION

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Facility Description and Location

Georgia-Pacific Consumer Operations LLC operates the existing Palatka pulp and paper mill (Standard Industrial Classification Code Nos. 2611 and 2621) in Putnam County, North of County Road 216 and West of U.S. Highway 17 in Palatka, Florida. The map coordinates are: UTM Zone 17; 434.0 km East; and, 3283.4 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Using the Kraft sulfate process, the digesting liquor (white liquor) is a solution of sodium hydroxide and sodium sulfide that is mixed with wood chips and cooked under pressure. The spent liquor, known as weak black liquor, is concentrated and sodium sulfate is added to make up for chemical losses. The black liquor solids (BLS) are burned in the recovery boiler to produce a smelt of sodium carbonate and sodium sulfide. The smelt is dissolved in water to form green liquor to which quicklime (calcium oxide) is added to convert the sodium carbonate back to sodium hydroxide, which reconstitutes the cooking liquor. The spent lime cake (calcium carbonate) is recalcined in a lime kiln to produce quicklime, which is used to convert the green liquor to cooking liquor. Other steam and energy needs are met by the combination and power boilers, which burn a variety of fuels including wood chips, bark, fuel oil and natural gas.

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution.
- The facility is a major stationary source subject to the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

On November 9, 2010, the Department received a written request for a permit exemption to install an advanced control system for the existing No. 4 combination boiler. The obsolete manual boiler controls will be replaced with a new computer software package to improve energy management and reduce fossil fuel consumption in the boiler. Five existing pneumatic combustion air control dampers will be replaced with motorized controllers, which are more precise. The new combustion air controllers will provide feedback to the control system, which, along with fuel flow, will allow optimization of the boiler for performance and efficiency. Currently, fuel oil is

TECHNICAL EVALUATION

used to stabilize combustion while firing bark and wood. The advanced control system will provide more detailed control over the boiler and reduce supplemental fuel oil firing.

2. DEPARTMENT REVIEW

The No. 4 combination boiler fires bark and wood as the primary fuel to produce steam for the various mill operations. Fuel oil is fired as a startup fuel and as a supplemental fuel to steady the combustion process. Since the upgraded controllers and software will result in tighter control of the combustion process, there will be less of a need to fire fuel oil to stabilize combustion. It is also possible that optimization of the boiler control system will improve overall boiler performance such that less total fuel is needed to provide the same amount of steam. Although the request does require construction and is a change in the method of operation, the project is unlikely to increase emissions or otherwise adversely impact air quality.

3. CONCLUSION

Pursuant to Rule 62.4.040(1)(b) of the Florida Administrative Code (F.A.C.) and for the reasons previously stated, the Bureau of Air Regulation determines that the activity will not emit air pollutants, "... in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified." Therefore, the project is exempt from the requirement to obtain an air construction permit. This determination may be revoked if the proposed activity is substantially modified or the basis for the exemption is determined to be materially incorrect. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the exemption. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.



Georgia-Pacific

Palatka Pulp and Paper Operations
Consumer Products Division

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

November 5, 2010

RECEIVED

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**BUREAU OF
AIR REGULATION**

Mr. Jeffery F. Koerner, Air Permitting North Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

**Re: Georgia-Pacific Consumer Operations LLC
Palatka, Florida Mill-Facility ID No. 1070005
Installation of Advanced Control Software for No. 4 Combination Boiler**

Dear Mr. Koerner:

Georgia-Pacific Consumer Operations LLC (GP) owns and operates an unbleached Kraft linerboard 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 existing obsolete boiler controls with a new advanced control computer software package for the No. 4 Combination Boiler (EU ID 016) to improve energy management and reduce fossil fuel consumption in the boiler.

The No. 4 Combination Boiler currently burns a combination of bark and No. 6 fuel oil to generate steam for process operations and to make electricity using a turbine generator. The fuel oil is necessary to stabilize the combustion process and to provide steam at those times when there is an interruption in the delivery of bark to the boiler. As part of this project, the mill is also planning to upgrade five existing boiler air control damper actuators located in the ductwork supplying combustion air to the boiler from pneumatic to motorized controllers. The motorized controllers will be more precise and will provide feedback to the control system, which is vital to optimizing the boiler's performance and efficiency allowing for a reduction in its reliance on No. 6 fuel oil.

There will be no physical changes made to the boiler or to the combustion control and fuel feed systems. There will be no change in boiler capacity or in the fuels burned, and no fuels will be combusted in amounts exceeding current permit limits. Georgia-Pacific has concluded that, since this initiative requires no physical changes to be made to the boiler, and, as we believe, no change in the method of operation of the boiler, it requires no further analysis for New Source Review (NSR) or other air permitting requirements. This letter provides additional detail for the proposed work. Again, the goal of the project is to reduce fossil fuel consumption, thereby reducing emissions and energy costs.

Combination Boiler Advanced Control Software

The advanced control software is designed to minimize the use of fuel oil for steam generation and maximize the use of bark in the No. 4 Combination Boiler. The software does not change how the boiler is operated, or even how the boiler is managed and controlled, but rather optimizes its management just as an ideal operator would.

The advanced control system is simply a computer software package that is installed in the powerhouse control room to utilize existing parametric monitoring (such as fuel flow and combustion air flow) within the existing Distributive Control System (DCS). The system does not add any additional monitoring systems or physically modify the boiler in any way. The control package currently in place within the DCS requires excessive operator interaction with the controls and results in inefficient operation of the boiler. The new system will perform many of the same operator functions automatically and thereby improve efficiency of the boiler and reduce the need for supplemental fossil fuel. A similar system installed on a recovery furnace at another GP pulp and paper mill resulted in an efficiency increase in operation of the furnace in terms of the amount of steam produced from each pound of black liquor solids (BLS) combusted (without increasing the amount of BLS fired). The unit efficiency increased from producing 3.22 pounds of steam per pound of black liquor solids (lb steam/lb BLS) to producing 3.32 lb steam/lb BLS when comparing the six months of operation before installation of the software package to the three months after the installation.

The advanced control system will not allow the boiler to operate in a manner differently than it can currently operate. The control system does not alter the fuels combusted or increase the capacity of the boiler to burn bark or fuel oil. No existing operational limits will be increased or exceeded as a result of implementation of the system, and the boiler will not burn any more of a given fuel than it is currently able and permitted to burn. In addition, operational restraints ensuring compliance with environmental limits and regulations can be considered within the new software system, providing a greater assurance of compliance in the future.

Actual operation of the No. 4 Combination Boiler will be optimized to take advantage of the lowest cost fuel, which is bark, just as it is now. There exists no future operating scenario that is not possible at the present time with the current operator-driven control capability. The advanced control system will simply allow the Mill to maximize the burning of bark fuel instead of fuel oil.

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For the reasons stated above, Georgia-Pacific believes that installation of the boiler control software does not constitute a modification which would trigger NSR or any other State of Florida permitting requirements. The Mill wishes to begin installation of the damper control components of the system early this month to take advantage of the boiler annual outage. Given our expedited timeline, we respectfully request that FL DEP consider this request at its earliest convenience. Should you have any questions concerning this submittal, please contact Ron Reynolds at (386) 329-0967.

Sincerely,



Gary Frost  
Vice President and Mill Manager  
Georgia-Pacific Consumer Operations LLC – Palatka Pulp & Paper Mill

Mr. Jeffery F. Koerner  
November 5, 2010

Page 3 of 3

cc: Ron Reynolds, Georgia-Pacific Consumer Operations LLC (Palatka, Florida)  
Scott Bailey, Georgia-Pacific Consumer Products LP (Atlanta, Georgia)  
Melissa Antoine, Georgia-Pacific LLC (Atlanta, Georgia)  
Wayne Galler, Georgia-Pacific LLC (Atlanta, Georgia)

## Livingston, Sylvania

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**From:** Livingston, Sylvania  
**Sent:** Tuesday, November 30, 2010 2:35 PM  
**To:** 'gary.frost@gapac.com'  
**Cc:** 'ron.reynolds@gapac.com'; Kirts, Christopher; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)  
**Subject:** GA-PACIFIC CONSUMER OPERATIONS LLC - PALATKA PULP and PAPER MILL; 1070005-065-AC- Exemption  
**Attachments:** 1070005-065-AC\_Signatures.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Exemption from the Requirement to Obtain an Air Construction Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

**Click on the following link to access the permit project documents:**

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/1070005.065.AC.F\\_pdf.ZIP](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1070005.065.AC.F_pdf.ZIP)

**Owner/Company Name:** GEORGIA-PACIFIC CONSUMER OPERATIONS LLC

**Facility Name:** PALATKA PULP and PAPER MILL

**Project Number:** 1070005-065-AC

**Permit Status:** FINAL

**Permit Activity:** CONSTRUCTION

**Facility County:** PUTNAM

**Processor:** Jeff Koerner

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/emission/apds/default.asp>.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston  
Division of Air Resource Management (DARM)  
Department of Environmental Protection  
850/921-9561  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

## Livingston, Sylvania

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**From:** Reynolds, Ron E. [Ron.Reynolds@GAPAC.com]  
**Sent:** Tuesday, November 30, 2010 2:41 PM  
**To:** Livingston, Sylvania; Frost, Gary (Florida)  
**Cc:** Kirts, Christopher; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)  
**Subject:** RE: GA-PACIFIC CONSUMER OPERATIONS LLC - PALATKA PULP and PAPER MILL; 1070005-065-AC- Exemption

As requested, I am confirming access to documents attached and linked.

Thank you!  
Ron Reynolds  
GP, Palatka

-----Original Message-----

**From:** Livingston, Sylvania [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Tuesday, November 30, 2010 2:35 PM  
**To:** Frost, Gary (Florida)  
**Cc:** Reynolds, Ron E.; Kirts, Christopher; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)  
**Subject:** GA-PACIFIC CONSUMER OPERATIONS LLC - PALATKA PULP and PAPER MILL; 1070005-065-AC- Exemption

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**Owner/Company Name:** GEORGIA-PACIFIC CONSUMER OPERATIONS LLC  
**Facility Name:** PALATKA PULP and PAPER MILL  
**Project Number:** 1070005-065-AC  
**Permit Status:** FINAL  
**Permit Activity:** CONSTRUCTION  
**Facility County:** PUTNAM

**Processor:** Jeff Koerner

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