Florida Department of Environmental Protection

Memorandum

To: Trina Vielhauer, Bureau of Air Regulation

Through: Jeffery Koerner, New Source Review Section

From: Bruce Mitchell, New Source Review Section

Date: January 29, 2010

Subject: Project No. 0770010-009-AC
Exemption from Air Construction Permit
Georgia-Pacific Wood Products LLC, Hosford Oriented Strand Board (OSB) Plant
Authorization to Install a Building Ventilation System and to Use an Alternate Wood Species

This project authorizes the installation of a building ventilation system in the roof area to exhaust hot air generated during the hotter months of the year in order to make for better working conditions for the employees. There are no processes exhausting into the building, so the potential dilution of any pollutant emissions are not a concern. In addition, this project authorizes the use and substitution of an alternate wood species, specifically soft hardwood, to supplement the soft wood species currently being used in the production of OSB. Regarding the alternate wood species substitution, actual emissions of all pollutants emitted are expected to remain the same or be reduced; and, in previous permitting actions, there have been no restrictions of the wood species to be used in the production of OSB. As such, this action grants an exemption from having to obtain an air construction permit pursuant to Rule 62-4.040(1)(b), Florida Administrative Code. The proposed work will be performed at the existing Hosford OSB Plant, which is located in Hosford at 12995 Highway 65 North in Liberty County, Florida. The project is not subject to preconstruction new source review requirements for the Prevention of Significant Deterioration of Air Quality nor is it considered a new source review reform project.

The attached Technical Evaluation and Preliminary Determination summarizes the project. I recommend your approval of the attached exemption of an air construction permit.

Attachments

TLV/jfk/rbm

Florida Department of Environmental Protection

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

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

February 2, 2010

Sent by Electronic Mail – Received Receipt Requested

Mr. Johnnie Temples, Plant Manager
Georgia-Pacific Wood Products LLC
Post Office Box 322
Hosford, Florida 32334

Re: Exemption from the Requirement to Obtain an Air Construction Permit
Georgia-Pacific Wood Products LLC, Hosford Oriented Strand Board (OSB) Plant
Project No. 0770010-009-AC
Exemption to Install a Building Ventilation System and Use an Alternate Wood Species

Dear Mr. Temples:

On November 9, 2009, Georgia-Pacific Wood Products LLC submitted a request to install a louvered window building ventilation system in the top section, near the roof line, of the north and south walls of the facility to improve and promote cross flow ventilation and allow air to circulate and reduce the heat in the summer months to improve working conditions for the employees. In addition, the request included the use and substitution of an alternate wood species, specifically a soft hardwood, to supplement the soft wood species currently being used in the production of OSB. The existing Hosford OSB Plant is located in Liberty County at 12995 Highway 65 North in Hosford, Florida. Regarding the building ventilation system, none of the processes exhaust pollutant emissions to the inside of the building, so the potential dilution of any pollutant emissions are not a concern. Regarding the alternate wood species substitution, actual emissions of all pollutants emitted are expected to remain the same or be reduced; and, in previous permitting actions, there have been no restrictions of the wood species to be used in the production of OSB. Pursuant to Rule 62.4.040(1)(b) of the Florida Administrative Code (F.A.C.), the project is exempt from the requirement to obtain an air construction permit and you are authorized to substitute some soft hardwood species for some softwood species in the OSB production and to install a louvered window system in the process building.

Determination: A complete review of this project is summarized in the attached Technical Evaluation. Pursuant to Rule 62.4.040(1)(b), 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 of the Florida Statutes (F.S.).

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, 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 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.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/jfk/rbm

CERTIFICATE OF SERVICE

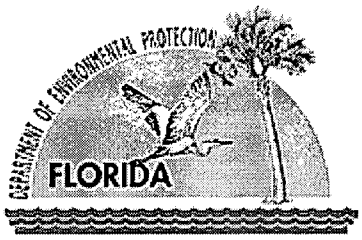
The undersigned duly designated deputy agency clerk hereby certifies that this Exemption from Air Construction Permitting was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 2/3/10 to the persons listed below.

Mr. Johnnie Temples, Plant Manager, Georgia-Pacific Wood Products LLC (jrtemple@gapac.com)
Mr. Mark J. Aguilar, P.E., Georgia-Pacific Wood Products LLC (mjaguila@gapac.com)
Mr. Eric Chang, Regional Environmental Manager, Georgia-Pacific Wood Products LLC (eric.chang@gapac.com)
Mr. Rick Bradburn, DEP-Northwest District (rick.bradburn@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) 2/3/10 (Date)



TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

PROJECT

Project No. 0770010-009-AC
Georgia-Pacific Hosford Oriented Strand Board Plant
Facility ID No. 0770010
Exemption Project

COUNTY

Liberty County, Florida

APPLICANT

Georgia-Pacific Wood Products LLC
Hosford Oriented Strand Board Plant
12995 Highway 65 North
Hosford, Florida 32334

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, FL 32399-2400

February 1, 2010

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 and Location

The Georgia-Pacific Wood Products LLC (G-P) operates an oriented strand board (OSB) plant (SIC No. 2493) in Hosford located at 12995 Highway 65 North, Liberty County, Florida. The UTM coordinates of this facility are: Zone 17; 713.5 kilometers (km) East; and 3369.5 km North. This site is in an area that is in attainment (or designated as unclassifiable) for each air pollutant subject to a state or federal Ambient Air Quality Standard (AAQS).

The facility is comprised of four principal manufacturing processes: (1) furnish production, which includes log cutting, debarking and slashing to process the wood into flakes; (2) flake drying, which occurs in five wood-fired cylindrical rotary drum dryers; (3) forming and pressing, which includes arranging the flakes in the pattern desired, applying the resin and wax and pressing the material under heat to make an OSB mat; and (4) finishing, in which the pressed mats are cut to size, cooled, and the edges are sprayed with a sealant to prevent swelling. Volatile organic compounds (VOC) emissions from the dryers and press processes are controlled using natural gas-fired regenerative thermal oxidizers (RTO). Multiclones precede the RTO devices to remove particulate matter (PM). PM emissions from the material handling processes are controlled using baghouses. The facility has a maximum production rate of 600 million board feet on a 3/8-inch thickness basis.

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 in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source subject to the Prevention of Significant Deterioration (PSD) of Air Quality, but is not within an industry included in the list of the major facility categories per Rule 62-212.400(3)(b), F.A.C.

Project Description

1. Proposed Building Ventilation System:

Currently, heat from the various processes that are housed in the building is trapped in the ceiling area and makes it hotter during the warmer months of the year and uncomfortable for the employees working inside. A request was made to allow a louvered window system to be installed in the top section of the ceiling, near the

roof line of the north and south walls, to promote cross flow ventilation and allow the heat rising to the ceiling to be released to the outside and cool the temperature inside. This action will hopefully create a better working environment that will be cooler and more pleasant during the warmer months. Since none of the processes exhaust pollutant emissions to the inside of the building, the potential dilution of any pollutant emissions are not a concern. Therefore, there is no PSD preconstruction review required for any pollutants required for this construction activity. Also, there are no state or federal regulations that would be affected by this activity.

2. Alternate Wood Species:

The facility currently processes a softwood species (pine wood variety) for their OSB product. A request has been made to allow the facility to substitute a portion of the current softwood species with an alternate wood species that is called a soft hardwood. The main difference between softwoods and soft hardwoods is the terpene (VOC) content, with soft hardwoods generally containing greatly reduced terpene content. Therefore, it is expected that actual VOC emissions will decrease from the five wood flake rotary dryers, the two wood heaters for the thermal oil and the thermal oil-heated press, with all other actual pollutant emissions remaining the same.

2. PSD APPLICABILITY

General PSD Applicability

The Department regulates major stationary sources in accordance with Florida's PSD program pursuant to Rule 62-212.400, F.A.C. A PSD preconstruction review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards or areas designated as "unclassifiable" for a given pollutant. A facility is considered "major" with respect to PSD if it emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant; 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories; or, 5 tons per year or more of lead.

New projects at existing PSD-major stationary sources are reviewed for PSD applicability based on net emissions increases from the project. Each PSD pollutant is evaluated for applicability based on emissions thresholds known as the Significant Emission Rates as defined in Rule 62-210.200, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant". In addition, applicants may choose to conduct a "PSD netting analysis" that includes all emissions increases as well as all emissions decreases for a 5-year period contemporaneous with the project to determine whether or not a PSD significant emissions increase will occur. Although a facility may be "major" for only one PSD pollutant, the project may be "significant" for several PSD pollutants. For each significant PSD pollutant, the applicant must employ the Best Available Control Technology (BACT) to minimize emissions and conduct an air quality analysis that demonstrates emissions from the project will not cause or contribute to adverse ambient impacts.

PSD Applicability for the Project

The project is located in Bristol, which is in an area that is currently in attainment with the state and federal Ambient Air Quality Standards or otherwise designated as unclassifiable. The existing facility is an existing PSD major stationary source. New projects must be reviewed for PSD applicability. With this proposed change and from an emissions standpoint, the most affected processes in the existing OSB operation are the panel press and the wood-fired heaters for the flake dryers and thermal oil.

The five wood-flake dryers (dryers) are heated by suspension-type wood burners. Air pollutant emissions associated with the drying operation are products of wood fuel combustion such as VOC, particulate matter (PM), sulfur dioxide (SO_2), nitrogen oxides (NOx) and carbon monoxide (CO); and, there are also emissions of PM, VOC, CO and formaldehyde that are produced from the thermal breakdown of the wood in the wood drying process. The dryers have two dedicated and shared RTO for VOC control and the press has one dedicated RTO for VOC control. Based on the U.S. EPA's AP-42 Emission Factors, specifically Table 10.6.1.-3, a table of emission factors for organics for OSB dryers, the VOC emission factor [measured as propane (and

accounts for formaldehyde)] for softwoods is approximately four times higher than that for hardwoods [8.1 pounds per oven dried ton (lb/ODT) versus 2.1 lb/ODT, respectively].[1] Since sulfur is inherently low and essentially the same in both softwoods and hardwoods, then SO_2 emissions are essentially considered to be unchanged and negligible.[2] Emission factors for PM (Table 10.6.1.-1) and SO_2, NOx and CO (Table 10.6.1.-2) are relatively the same for both softwoods and soft hardwoods.[1] Therefore, it is expected that the current actual emissions of VOC should decrease, with all other pollutants remaining unchanged, when substituting soft hardwoods for softwoods while processing flakes through the dryers and continued treatment in the two dedicated RTO.

For the thermal oil-heated press (press) operations, the dried wood flakes (furnish) are blended with a phenol-formaldehyde (PF) resin and wax and placed as a mat on the forming line in layers. The mat is moved into the press, where it is compressed and heated to bond the resin to the flakes. When the press opens, vapors of the resin ingredients such as phenol, formaldehydes and other VOC are released, which are treated in the dedicated RTO. Less VOC in the starting wood species will translate into less actual emissions of VOC from the press operations, with all other pollutants expecting to remain unchanged.

With the proposed change in the wood species used in the production of OSB at this facility, there is expected be an actual VOC emissions decrease, with all other pollutant emissions unchanged. Therefore, the project does not trigger PSD preconstruction review.

3. NSPS APPLICABILITY

NSPS Applicability

There is no physical change required to process and utilize the soft hardwoods. The substitution and utilization of the soft hardwoods is not considered a change in the method of operation since the current permit does not restrict the type of wood species to be used at the facility in all of the processes, even though the majority of the current wood species being used at the facility has been a softwood – mainly a pine wood variety. Overall short-term pollutant emissions are expected to decrease by the proposal. Therefore, NSPS applicability is not an issue.

When the thermal oil system exhausts directly to the atmosphere, it is subject to the applicable NSPS requirements of Subparts A and Dc. Because natural gas usage is required whenever the exhaust is emitted directly to the atmosphere, the only requirements are reporting and recordkeeping. Since actual emissions are expected to decrease and the usage of the soft hardwood species in the process is not considered to be a change in the method of operation, then NSPS applicability is not affected for this operation.

4. NESHAP APPLICABILITY

NESHAP Applicability

There is no physical change required to process and utilize the soft hardwoods. Also, the utilization of the soft hardwoods is not considered a change in the method of operation since the current permit does not restrict the type of wood species to be used at the facility in the all of the processes, even though the majority of the current wood species being used at the facility has been a softwood – mainly a pine wood variety. The facility is major for HAP based on potential point source and fugitive emissions of formaldehyde and total HAP. At the time of obtaining an air construction permit for authorization to build the facility (October 13, 2000), the Plywood Composite and Wood Products MACT at 40 CFR 63, Subpart DDDD was not yet in effect (promulgated on July 30, 2004, with a compliance date of October 1, 2008). As such, the facility was subject to a case-by-case

[1] "Section 10.6.1., Waferboard/Oriented Strandboard Manufacturing", *Compilation of Air Pollutant Emission Factors*, Volume I (AP-42), U.S. EPA, Fifth Edition, As Updated

[2] "Section 5, Table 32, Analyses of Wood and Wood Ash", *Steam/Its Generation and Use*, 38th Edition

MACT determination for the control of the emissions of HAP. For this facility, the majority of the HAP emissions are VOC, so control technologies for VOC are also applicable to the control of HAP. In reviewing EPA's information on similar sources, the proposed MACT standards for the Plywood Composite and Wood Products would require control of emissions from the dryers and press at the facility. The MACT proposed standards required 90% reduction across the control device for VOC, methanol and formaldehyde emissions, set a maximum concentration for these compounds and provided for an emissions averaging program for controlling sources not subject to the regulation to generate credits to offset lesser controls on regulated sources. Therefore, the Department's BACT determination, control technology requirements and emission limits for the dryers and press were consistent with the level of control of the proposed MACT and the control of similar sources; as such, the evaluation represented the case-by-case MACT determination for the facility and the air construction permit required the destruction of VOC and HAP emissions by RTO. With anticipated lower VOC content, including HAP, in the soft hardwood species, the overall short-term pollutant HAP emissions are expected to decrease. Therefore, NESHAP applicability is not an issue with this project.

5. DEPARTMENT REVIEW

Current Applicable Requirements

1. Five Flake Dryers with two dedicated RTO (dryers): Emissions Unit-001 (EU-001).

The operation of the dryers is currently subject to the following industry-specific state regulations:

- Rule 62-296.410(2)(b), F.A.C., for Carbonaceous Fuel Burning Equipment. Since the BACT emission limits are more stringent than the limits of this rule, compliance with the BACT emission limits will ensure compliance within this rule.
- Rule 62-212.400, F.A.C., for PSD Preconstruction Review. Permit No. PSD-FL-282 required the installation of two RTO.

The operation of the dryers is currently subject to the following federal regulations:

- 40 CFR 63, Subparts A and DDDD, NESHAP for Plywood Composite and Wood Products. The facility is a major source for HAP primarily due to the formaldehyde emissions. The Department's BACT determination required the installation of RTOs, which satisfies MACT requirements of NESHAP Subpart DDDD in 40 CFR 63 for Plywood Composite and Wood Products.
- 40 CFR 64, for Compliance Assurance Monitoring (CAM) for PM and VOC.

2. Panel Press with one dedicated RTO (press): EU-002.

The operation of the press is currently subject to the following state regulation:

- Rule 62-212.400, F.A.C., for PSD Preconstruction Review. Permit No. PSD-FL-282 required the installation of a RTO.

The operation of the press is currently subject to the following federal regulations:

- 40 CFR 63, Subparts A and DDDD, NESHAP for Plywood Composite and Wood Products. The facility is a major source for HAP primarily due to the formaldehyde emissions. The Department's BACT determination required the installation of RTOs, which satisfies MACT requirements of NESHAP Subpart DDDD in 40 CFR 63 for Plywood Composite and Wood Products.
- 40 CFR 64, for CAM for VOC.

3. Thermal Oil Heater System with an ESP, followed by the dryers and associated two RTO: EU-011.

The operation of the thermal oil heater system is currently subject to the following industry-specific state regulations:

- Rule 62-212.400, F.A.C., for PSD Preconstruction Review. Permit No. PSD-FL-282 required the installation of two RTO.
- Rule 62-296.410(2)(b), F.A.C., for Carbonaceous Fuel Burning Equipment. Since the emissions are routed to the dryers and associated two RTO, while wood fuel is fired, and the BACT emission limits for the dryers are more stringent than the limits of this rule, compliance with the dryers' BACT emission limits will ensure compliance within this rule.

The operation of the thermal oil heater system is currently subject to the following federal regulations:

- 40 CFR 60, Subparts A and Dc, NSPS for Small Industrial-Commercial-Institutional Steam Generator Units. Applies only when the exhaust is emitted directly to the atmosphere because fuel usage during these periods is limited to only natural gas firing. Then only the reporting and recordkeeping requirements of the NSPS apply.
- 40 CFR 63, Subparts A and DDDD, NESHAP for Plywood Composite and Wood Products for Startup, Shutdown and Malfunction. Applies to any instance of exhaust that is aborted to the dryers and associated RTO and routed only through the ESP or bypassing the ESP while only firing natural gas.
- 40 CFR 64, for CAM for PM. Applies when the exhaust from the thermal oil heaters is directed to the dryers.

This project will not change any of the applicable provisions for these emissions units, which remain subject to all applicable conditions in the current Title V air operation permit.

Conclusion

The project is not expected to result in any actual emissions increases. Pursuant to Rule 62-4.040(1)(b), F.A.C., the proposed project will not emit air pollutants in sufficient quantity to significantly contribute to air pollution problems. Therefore, the Department will issue an exemption from air construction permitting requirements for the substitution of some soft hardwood species for some softwood species in the OSB production and to install a louvered window system in the process building.

6. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project does not trigger preconstruction new source review under PSD, will remain in compliance with the terms and conditions contained in the current Title V operation permit and is entitled to an exemption pursuant to Rule 62-4.040(1), F.A.C. This determination is based on a technical review of the request, reasonable assurances provided by the applicant and the conditions contained in their current Title V operation permit. Bruce Mitchell is the project engineer responsible for reviewing the application and drafting the permit documents. Jeff Koerner, P.E. is the Air Permitting Supervisor responsible for reviewing and editing the proposed 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.

which in turn is cracked to a gas by the heat. Refinery gas is also used for enrichment. It may either be mixed with the steam and passed through the coke bed or mixed directly with the water gas. Such enriched water gas is called "carbureted water gas" (Table 30) and it is piped for relatively short distances through city mains for industrial and domestic consumption. Where it is so used, it is cleaned at the source to remove sulfur gases and other impurities. In many areas use of carbureted water gas has been replaced by natural gas.

Producer gas. When coal or coke is burned with a deficiency of air and a controlled amount of moisture (steam), a gas known as producer gas is obtained. This gas, after removal of entrained ash and sulfur compounds, is used near its source because of its low heating value.

Gasification using in-situ combustion of coal has been carried out by the Bureau of Mines on an experimental basis at Gorgas, Alabama. The purpose of these tests was to demonstrate that energy from coal in seams too thin for mining could be made available through underground gasification. Russia has made producer gas for power generation using this process. This means of gasification is not economically competitive in the U.S. at the present time.

Coke from petroleum

The heavy residuals from the various petroleum cracking processes are presently utilized in a number of ways to produce a higher yield of lighter hydrocarbons and a solid residue suitable for fuel. Characteristics of these residues vary widely, depending on the process used. Solid fuels from oil include delayed coke, fluid coke and petroleum pitch. Some selected analyses are given in Table 31.

Table 31
Selected analyses of solid fuels derived from oil

Analyses (dry basis), % by wt	Delayed Coke		Fluid Coke	
Proximate				
Volatile matter	10.8	9.0	6.0	6.7
Fixed carbon	88.5	90.9	93.7	93.2
Ash	0.7	0.1	0.3	0.1
Ultimate				
Sulfur	9.9	1.5	4.7	5.7
Heating value, Btu/lb	14,700	15,700	14,160	14,290

The delayed coking process uses residual oil heated and pumped to a reactor for coking. Coke is deposited as a solid mass and is subsequently stripped either mechanically or hydraulically, in the form of lumps and granular material. Some of these cokes are easy to burn and pulverize, while others are quite difficult.

Fluid coke is produced by spraying hot residual feed onto externally heated seed coke in a fluid bed. The fluid coke is removed as small particles, which are built up in layers similar to an onion. This coke can be pulverized and burned, or it can be burned in the as-received size in a Cyclone Furnace. Both types of firing require some supplemental fuel to aid ignition.

The process producing petroleum pitch is an alternate to the coking process and yields fuels of various characteristics. Melting points vary considerably and the physical properties vary from soft and gummy to hard and friable. The low melting point pitches may be heated and burned like heavy oil, while those with higher melting points may be pulverized and burned, or crushed and burned in the Cyclone Furnace.

Wood

Selected analyses and heating values of several types of wood (also analyses of wood ash) are given in Table 32. Wood, in common with all types of vegetation, is composed primarily of carbohydrates and consequently has a relatively low heating value compared with bituminous coal and oil.

Wood bark may pick up impurities during transportation. It is common practice to drag the rough logs to central loading points in the logging area. This results in sand pick-up. Where the logs are salt-water borne, bark will absorb sea water with its included salt. Combustion temperatures from burning dry bark may be high enough for impurities to cause fluxing of refractory furnace walls and fouling of boiler heating surfaces, unless sufficient furnace cooling surface is provided. Sand passing through the boiler banks can cause erosion of boiler

Table 32
Analyses of wood and wood ash

Wood analyses (dry basis), % by wt	Pine Bark	Oak Bark	Spruce Bark°	Redwood Bark°
Proximate				
Volatile matter	72.9	76.0	69.6	72.6
Fixed carbon	24.2	18.7	26.6	27.0
Ash	2.9	5.3	3.8	0.4
Ultimate				
Hydrogen	5.6	5.4	5.7	5.1
Carbon	53.4	49.7	51.8	51.9
Sulfur	0.1	0.1	0.1	0.1
Nitrogen	0.1	0.2	0.2	0.1
Oxygen	37.9	39.3	38.4	42.4
Ash	2.9	5.3	3.8	0.4
Heating value, Btu/lb	9030	8370	8740	8350
Ash analyses, % by wt				
SiO_2	39.0	11.1	32.0	14.3
Fe_2O_3	3.0	3.3	6.4	3.5
TiO_2	0.2	0.1	0.8	0.3
Al_2O_3	14.0	0.1	11.0	4.0
Mn_3O_4	Trace	Trace	1.5	0.1
CaO	25.5	64.5	25.3	6.0
MgO	6.5	1.2	4.1	6.6
Na_2O	1.3	8.9	8.0	18.0
K_2O	6.0	0.2	2.4	10.6
SO_3	0.3	2.0	2.1	7.4
Cl	Trace	Trace	Trace	18.4
Ash fusibility, F				
Reducing				
Initial deformation	2180	2690		
Softening	2240	2720		
Fluid	2310	2740		
Oxidizing				
Initial deformation	2210	2680		
Softening	2280	2730		
Fluid	2350	2750		

° Salt-water stored.

Steam / its generation and use

Babcock & Wilcox
161 East 42nd Street, New York, N.Y. 10017

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Wednesday, February 03, 2010 10:28 AM
To: 'jrtemple@gapac.com'
Cc: 'mjaguila@gapac.com'; 'eric.chang@gapac.com'; Bradburn, Rick; Gibson, Victoria; Mitchell, Bruce; Koerner, Jeff; Walker, Elizabeth (AIR)
Subject: GA-Pacific Wood Productcts LLC - GA-PACIFIC WOOD PRODUCTS (HOSFORD OSB); 0770010-009-AC
Attachments: 0770010-009-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/0770010.009.AC.D_pdf.zip

Owner/Company Name: GA-PACIFIC WOOD PRODUCTS
Facility Name: GA-PACIFIC WOOD PRODUCTS (HOSFORD OSB)
Project Number: 0770010-009-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: LIBERTY
Processor: Bruce Mitchell

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 are 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
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us