

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: XX

Region: Wilmington Regional Office
County: Columbus
NC Facility ID: 2400040
Inspector's Name: Lynette Bryan
Date of Last Inspection: 08/19/2005
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Georgia - Pacific Whiteville Plant Facility Address: Georgia - Pacific Whiteville Plant 1980 Georgia Pacific Road Whiteville, NC 28472 SIC: 2436 / Softwood Veneer And Plywood NAICS: 321212 / Softwood Veneer and Plywood Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: X NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 2400040.05A Date Received: 02/28/2005 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 00007/T15 Existing Permit Issue Date: 12/02/2005 Existing Permit Expiration Date: 11/30/2005
Royce Nobles Environmental Coordinator (910) 642-5041 P O Box 589 Whiteville NC, 28472	Norman Hiers Plant Manager (910) 642-5041 P O Box 589 Whiteville NC, 28472	Steve Wilson Regional Environmental Engineer (803) 782-5890 15 Monckton Blvd, Suite B Columbia SC, 29206	
Review Engineer: Kevin Godwin Review Engineer's Signature: _____ Date: _____		Comments / Recommendations:	
		Issue 00007/T16 Permit Issue Date: XX Permit Expiration Date: XX	

1. Purpose of Application

This revision is a renewal of existing Title V permit 00007T15 pursuant to 15A NCAC 2Q .0513. The Title V permit is set to expire on November 30, 2005. The renewal application was received on February 28, 2005 or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewed permit has been either issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewed permit has been issued or denied.

2. Facility Description

Georgia Pacific Corporation operates a plywood manufacturing plant and a chip-n-saw plant at this Columbus County site. The two plants are included in this single Title V permit. Sources at the plywood plant include: log de-barkers, various pieces of wood working and transfer equipment, a wood fuel-fired boiler, three veneer dryers, and three plywood presses. Sources at the chip-n-saw plant include: log de-barkers, various pieces of wood working and transfer equipment, and four steam-heated lumber drying kilns.

3. Permit Modification/Changes

When the initial Title V permits were issued, the two plants were still operating under separate permits (0174T10 for the Chip-N-Saw Plant and 00007T12 for the Plywood Plant). The Chip-N-Saw Plant was issued its initial Title V permit on December 15, 2000 (effective February 1, 2000). The Plywood Plant was issued its initial Title V permit on January 30, 2003 (effective March 17, 2003). On October 29, 2004, a permit revision was issued (**00007T13**) consolidating the two plants into one Title V permit.

On September 15, 2005, **00007T14** was issued for the construction and operation of a natural gas-fired regenerative thermal oxidizer (9.0 million Btu per hour heat input) installed on the existing veneer dryers (ID Nos. VD-1, VD-2, and VD-3).

On December 2, 2005, **00007T15** was issued to correct the second semi-annual reporting date from March 1 to January 30. No other changes have taken place since the initial Title V permits were issued.

4. Application Chronology

February 28, 2005	Renewal application for Georgia Pacific Corporation deemed complete.
January 30, 2006	Draft to Title V Coordinator
February 6, 2006	Draft to Wilmington Regional Office (WiRO)
February 9, 2006	Draft to applicant
February 15, 2006	Emission Source Module (ESM) update verification
March 20, 2006	Draft to Public Notice and EPA

5. Regulatory Review

Georgia Pacific Corporation, Whiteville Plywood Plant is subject to the following regulations:

15A NCAC 2D .0504 "Particulates from Wood Burning Indirect Heat Exchangers"
15A NCAC 2D .0512 "Particulates from Miscellaneous Wood Products Finishing Plants"
15A NCAC 2D .0515 "Particulates from Miscellaneous Industrial Processes"
15A NCAC 2D .0516 "Sulfur Dioxide Emissions from Combustion Sources"
15A NCAC 2D .0521 "Control of Visible Emissions"
15A NCAC 2D .0524 "New Source Performance Standards – Subpart Db"
15A NCAC 2D .0535 "Excess Emissions Reporting and Malfunctions"
15A NCAC 2D .1111 "Maximum Achievable Control Technology – Subpart DDDD"
15A NCAC 2D .1806 "Control and Prohibition of Odorous Emissions"
15A NCAC 2Q .0705 "Existing Facilities and SIC Calls"

Georgia Pacific Corporation, Whiteville Chip-n-Saw Plant is subject to the following regulations:

15A NCAC 2D .0512 "Particulates from Miscellaneous Wood Products Finishing Plants"
15A NCAC 2D .0521 "Control of Visible Emissions"
15A NCAC 2D .1111 "Maximum Achievable Control Technology – Subpart DDDD"
15A NCAC 2D .1806 "Control and Prohibition of Odorous Emissions"
15A NCAC 2Q .0705 "Existing Facilities and SIC Calls"

Below is a summary of potential facility-wide criteria pollutant emissions based on 2004 emissions inventory information.

Pollutant	Emission Rate (tpy)
Carbon monoxide	1443
Nitrogen oxides	222
Particulate matter less than 10 microns	493
Sulfur dioxide	31.7
Volatile organic compounds	800.5

The following table summarizes the changes to the existing permit:

Pages	Section	Description of Change
Entire permit	Entire Permit, where applicable	Removed reference to 40 CFR 52 Subpart II, since EPA has approved regulation 15A NCAC 2D .0521 in its entirety
Cover letter	Cover letter	Modified to reflect current permit number, issue and effective date, and associated application information.
N/A	Attachment	Added table with changes to Title V as Attachment
16	Section 2.2 B.	Included TAP compliance requirement per 2Q .0705
16	Section 2.2 C.	Included MACT Subpart DDDD placeholder language (final compliance date October 1, 2007)
17	Section 2.2 D.	Included CAM plan
21	Section 3	Updated with most recent General Conditions and List of Acronyms
N/A	N/A	Removed Part II

6. NSPS, NESHAPS, PSD, Attainment Status, 112(r), and CAM

NSPS

New Source Performance Standards, Subpart Db apply to the existing wood fuel-fired boiler located at the plywood plant. Subpart Db sets a standard for particulate matter (0.1 pounds per million Btu heat input) and visible emissions (20% opacity).

NESHAPS

NESHAP, Subpart DDDD applies to the veneer dryers and plywood presses at the plywood plant and the lumber drying kilns at the chip-n-saw plant. The final compliance date for Subpart DDDD is October 1, 2007. A condition is included in the renewed permit requiring the facility to comply with Subpart DDDD by October 1, 2007 (Specific Condition 2.2 C.).

PSD

Based on potential VOC emissions this facility is classified as PSD major.

Attainment Status

Columbus County is in attainment for all pollutants.

112(r)

According to the renewal application, this facility does not store any chemicals regulated under 112(r) above the applicable thresholds.

CAM

Pursuant to 15A NCAC 2D .0614, a compliance assurance monitoring (CAM) applicability determination is required for this renewal because: (1) the facility is a Title V source with potential emissions that exceed the Title V major source thresholds without considering controls; and (2) there are sources subject to an emission standard that require controls in order to comply with that standard.

The applicant provided a CAM applicability determination in the renewal application. According to the application, the wood fuel-fired boiler is the only source requiring a CAM plan. The boiler is controlled by a multicyclone in series with a venturi scrubber. Considering an expected control system efficiency of at least 95%, after control emissions from wood-fired boiler are calculated to be 86.7 tpy. Since after control emissions are less than 100 tpy, the boiler is considered an 'other PSEU' [64.3(b)(4)(iii)]. For other PSEU, the required monitoring frequency is one data point per 24-hour period.

Background

- a. Emission unit: wood fuel-fired boiler (**ID No. ES-B1**)
- b. Applicable regulations: 15A NCAC 2D .0504, 2D .0516, and 2D .0524 (Subpart Db)

Emission limits: 0.34 pounds per million Btu heat input (2D .0504, particulate matter)
 0.1 pounds per million Btu heat input (2D 0524, Subpart Db, particulate matter)
 20 percent opacity (2D .0524, Subpart Db, visible emissions)

Control Technology: multicyclone in series with venturi scrubber

Monitoring Approach The key elements of the monitoring approach are presented in the following table.

	Indicator No. 1	Indicator No. 2	Inspection/Maintenance
Indicator [64.6(c)(1)(i)]	Pressure drop (ΔP) across the <i>multicyclone</i>	Pressure drop (ΔP) and liquid flow rate to <i>venturi scrubber</i>	Monthly maintenance and structural integrity inspection. Maintenance performed as needed.
Measurement Approach [64.6(c)(1)(ii)]	A pressure drop indicator shall be used to measure ΔP across <i>multicyclone</i>	A pressure drop indicator shall be used to measure ΔP across the <i>venturi scrubber</i> A flow meter shall be used to measure liquid flow rate to the <i>venturi scrubber</i>	
Indicator Range [64.6(c)(2)]	An excursion for the <i>multicyclone</i> is defined as any operating condition where the ΔP is less than 2" H ₂ O or greater than 5" H ₂ O, based on a 15-minute average	An excursion for the <i>venturi scrubber</i> is defined as any operating condition where ΔP is less than 7" H ₂ O or liquid flow rate is less than 750 gpm, based on a 15-minute average	
Bypass	If the ΔP falls below 1"	If the ΔP falls below 1"	

<p>[64.3(a)(2)]</p> <p>QIP Threshold [64.8]</p>	<p>H₂O, the possibility of bypass is investigated</p> <p>15-minute average ΔP readings outside range 5 times within a 6-month period</p>	<p>H₂O, the possibility of bypass is investigated</p> <p>15-minute average ΔP readings and 15-minute average liquid flow rate readings outside range 5 times within a 6-month period</p>	
<p>Performance criteria/data representativeness [64.6(c)(1)(iii)]</p> <p>Verification of operational status [64.3(b)(1)]</p> <p>QA/QC Practices and Criteria [64.3(b)(3)]</p> <p>Monitoring frequency [64.3(b)(4)]</p> <p>Data collection procedures [64.3(b)(4)]</p>	<p>ΔP: minimum acceptable accuracy of pressure drop indicator per manufacturers specifications</p> <p>N/A</p> <p>ΔP: visual inspections, calibrations, and routine maintenance per manufacturers recommendations</p> <p><i>multicyclone</i>: inspect and maintain per manufacturers recommendations</p> <p>ΔP measured continuously</p> <p>Recorded manually once per day</p>	<p>ΔP and Liquid flow rate: minimum acceptable accuracy of pressure drip indicator and flow meter per manufacturers specifications</p> <p>N/A</p> <p>ΔP and flow meter: visual inspections, calibrations, and routine maintenance per manufacturers recommendations</p> <p><i>venturi scrubber</i>: inspect and maintain per manufacturers recommendations</p> <p>ΔP and liquid flow rate measured continuously</p> <p>Recorded manually once per day</p>	<p>Inspections are made at the control system</p> <p>Qualified personnel perform inspection</p> <p>Monthly inspection</p> <p>Records are maintained to document monthly inspections and required maintenance</p>
<p>Recordkeeping and Reporting [64.9]</p>	<p>Excursion reports and corrective actions, boiler shift reports, I&M logs for ΔP monitoring and recording system, multicyclone inspection and maintenance reports</p> <p>Quarterly reports include:</p> <p>Investigative and corrective action report,</p> <p>Date, time, and duration of excursion,</p>	<p>Excursion reports and corrective actions, I&M logs for ΔP and liquid flow rate monitoring and recording system, scrubber inspection and maintenance reports</p> <p>Quarterly reports include:</p> <p>Investigative and corrective action report,</p> <p>Date, time, and duration of excursion</p>	

	<p>Cause of and corrective actions taken to eliminate excursion, and</p> <p>Measures taken to prevent re-occurrence</p> <p>A description of the actions taken to implement a QIP (as applicable)</p>	<p>Cause of and corrective actions taken to eliminate excursion, and</p> <p>Measures taken to prevent re-occurrence</p> <p>A description of the actions taken to implement a QIP (as applicable)</p>	
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Justification

Background: The pollutant specific emissions control system at the facility consists of a multicyclone in series with the venturi scrubber. The control system is used to control particulate matter emissions.

Rationale for Selection of Performance Indicators: Pressure drop and liquid flow rate were selected as performance indicators because, in combination, they are indicative of good operation and maintenance.

Rationale for Selection of Indicator Ranges: The selected ΔP range for the multicyclone is 2" to 5" H₂O. The selected minimum ΔP and minimum flow rate for the venturi scrubber is 7" H₂O and 750 gpm, respectively. These values were arrived at through past performance testing used to demonstrate compliance with the particulate matter limit. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence. All excursions will be documented.

QIP Threshold: The selected QIP threshold is five excursions per six-month period. If the QIP threshold is exceeded in a semi-annual period, a QIP will be developed and implemented.

Other particulate matter emission sources at this site are controlled by cyclones. The applicant documents that these cyclones are used for material recovery and not to achieve compliance with air pollution regulations. Therefore, the cyclones fit the definition of inherent process equipment and are not considered control devices as defined in 64.1 (ref. Norman R. Heirs, October 12, 2005). According to the applicant, the process cannot operate without the cyclones. Therefore, the cyclones are exempt from CAM.

7. Facility-wide North Carolina Air Toxics

An increase in facility-wide TAP emissions is not expected. The existing permit does contain the standard TAP condition listing the TPER pursuant to 2Q .0711. A condition referencing 2Q .0705 is included in this renewal. This condition requires compliance with NC TAPs as of the final MACT compliance date.

8. Facility Compliance Status

The DAQ has reviewed the compliance status of this facility. Georgia Pacific - Whiteville was last inspected on August 15, 2005 by Ms. Lynette Bryan (WilRO). At the time of inspection, Georgia Pacific - Whiteville was found to be in compliance with the requirements of the permit.

The applicant has certified that the facility will be in compliance with all applicable requirements at the time of permit issuance and will continue to comply with these requirements. The applicant also certified that the facility will be in compliance with any applicable requirements taking effect during the term of the permit and will meet such requirements on a timely basis.

9. Stipulation Review

New stipulations are as follows:

Section 2.2 B; included TAP compliance demonstration requirement in accordance with 2Q .0705.

Section 2.2 C; included MACT placeholder language (Subpart DDDD final compliance date October 1, 2007) in accordance with 2D .1111.

Section 2.2 D; included CAM plan in accordance with 2D .0614.

No other stipulations are modified.

10. Public Notice/EPA and Affected States Review

Pursuant to 15A NCAC 2Q .0521, a notice of the draft Title V permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 2Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. South Carolina is an affected state for this facility.

Public notice of the DRAFT Title V permit was published in the XX on XX and the public comment period ran from XX through XX.

11. Conclusions, Recommendations, and Comments

The renewal Title V application for Georgia Pacific Corporation, Whiteville Plywood and Chip & Saw Plants has been reviewed by the DAQ to determine compliance with all procedures and requirements under 15A NCAC 2Q .0500 and 40 CFR Part 70. Upon completion of public notice and EPA review periods, the DAQ proposes to issue the Title V permit renewal.

12. Miscellaneous Requirements

PE Seal

Pursuant to 2Q .0112, no PE Seal was required because the permit renewal does not involve the determination of applicability and appropriateness or performance of air pollution capture and control systems [15A NCAC 2Q .0112(b)(2) and (3)].

Zoning

A request for zoning consistency determination is not required for this permit renewal.

Fee Classification

Based on potential to emit, this facility has been classified as **Title V Major**. The facility's current IBEAM status is **Title V Major**. This renewal **will not** change the fee classification.