

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

**Permit Issue Date:** XX/XX/2010

**Region:** Washington Regional Office  
**County:** Wayne  
**NC Facility ID:** 9600058  
**Inspector's Name:** Bernie Pittman  
**Date of Last Inspection:** 07/20/2010  
**Compliance Code:** 3 / Compliance - inspection

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>
<p><b>Applicant (Facility's Name):</b> Georgia - Pacific Plywood/OSB/CNS - Dudley</p> <p><b>Facility Address:</b>          Georgia - Pacific Plywood/OSB/CNS - Dudley          139 Brewington Road          Dudley, NC 28333</p> <p><b>SIC:</b> 2436 / Softwood Veneer And Plywood  <b>NAICS:</b> 321212 / Softwood Veneer and Plywood Manufacturing</p> <p><b>Facility Classification: Before:</b> Title V <b>After:</b> Title V  <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V</p>			<p><b>SIP:</b>  <b>NSPS:</b>  <b>NESHAP:</b>  <b>PSD:</b>  <b>PSD Avoidance:</b>  <b>NC Toxics:</b>  <b>112(r):</b>  <b>Other:</b> 2D .1109 – Case-by-Case MACT</p>
<b>Contact Data</b>			<b>Application Data</b>
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<p><b>Application Number:</b> 9600058.10C  <b>Date Received:</b> 11/05/2010  <b>Application Type:</b> Modification  <b>Application Schedule:</b> TV-Reopen for Cause  <b>Existing Permit Data</b>  <b>Existing Permit Number:</b> 09268/T11  <b>Existing Permit Issue Date:</b> 05/17/2010  <b>Existing Permit Expiration Date:</b> 12/31/2014</p>
<p>Floyd Reardon          Environmental          Coordinator          (919) 736-4385          P O Box 308          Dudley, NC 28333</p>	<p>Christopher Seifert          Plant Manager          (919) 736-4385          PO Box 308          Dudley, NC 28333</p>	<p>Steve Wilson          Senior Environmental          Engineer          (803) 782-5890          15 Monckton Blvd, Ste B          Columbia, SC 29206</p>	
<p><b>Review Engineer:</b> Jeff Twisdale</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____</p>		<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue</b> 09268/T12  <b>Permit Issue Date:</b> XX/XX/2010  <b>Permit Expiration Date:</b> 12/31/2014</p>	

**I. Purpose of Applications**

Georgia-Pacific (GP) Wood Products, LLC is located in Dudley, Wayne County, North Carolina. The Division of Air Quality (DAQ) has decided to reopen the existing permit thru Application No. 9600058.10C to revise a limit for carbon monoxide (CO) that was incorrectly set during the Maximum Achievable Control Technology (MACT) "Hammer" application (9600058.09B) for one existing wood residual/bark/edge seal/paint solids-fired boiler (**ID No. ES-B1, 254 million Btu per hour (MMBtu/hr) heat input capacity.**

## II. Permit Modifications/Changes

The following table describes the modifications to the current permit:

Old Page(s)	New Page(s)	Condition/Item	Description of Change(s)
Global	Global	N/A	<ul style="list-style-type: none"> <li>Change the application number and complete date;</li> <li>Change permit revision number to T12; and</li> <li>Change the issuance/effective dates of the permit</li> </ul>
18	18	2.1 E. Emission Limit Table	Correct CO limit for 2D .1109 to 555 ppmv @ 7% oxygen
22	22	2.1 E.7. Emission Limit Table	Correct CO limit for 2D .1109 to 555 ppmv @ 7% oxygen
58 - 66	58 - 66	Section 3	Update General Conditions to version 3.2.2

*Note: Condition/Item numbers are as they appear in Permit No. 09268T12.*

## III. Regulatory Review – 15A NCAC 2D .1109 – CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters

- A. Rule Summary: On July 30, 2007, the D.C. Circuit Court vacated the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, which had been promulgated under 40 CFR 63, Subpart DDDDD. The North Carolina Attorney General's office has determined that the NESHAP vacatur equates to the failure of the U.S. EPA to promulgate a valid standard as required under Section 112(d) of the Clean Air Act (CAA). As a result, the site-specific Maximum Achievable Control Technology (MACT) standards required under CAA § 112(j), commonly referred to as the MACT "Hammer" provisions, have been triggered. North Carolina regulations implementing the MACT hammer are found at 15A NCAC 2D .1109.

On March 23, 2009, the NC DAQ received a Part 2 MACT "Hammer" application from this facility asking that the NC DAQ establish 112(j) emissions limitations. Then on January 7, 2010, the NC DAQ received an addendum to the Part 2 MACT "Hammer" application that included a Health-Based Compliance Alternative (HBCA) eligibility demonstration for the total selected metals (TSM) emission limit as well as other proposed emission limitations based on NC DAQ's 112(j) guidance.

- B. Wood-Fired Boiler: One wood residual/bark/edge seal/paint solids-fired boiler (254 MMBtu/hr heat input capacity, **ID No. ES-B1**) with associated multicyclone (**ID No. CD-MC**) and venturi scrubber (**ID No. CD-SC**) installed in series.

The facility proposed Total Selected Metals (TSM), Hydrogen Chloride (HCl), Mercury (Hg), and Carbon Monoxide (CO) emission limitations that are consistent with the NC DAQ application guidance (<http://daq.state.nc.us/permits/112j/>). NC DAQ has developed this guidance to provide standards and compliance procedures that it has determined meet the requirements of § 112(j).

Also, the facility has chosen to comply with a HBCA for TSM that included a site-specific compliance demonstration for Manganese (Mn). The HBCA eligibility demonstration is consistent with the procedures provided by the EPA in the vacated § 112(d) standard for boilers and process heaters.

Note that the emission standards and compliance methods for TSM, HCl and Hg will remain the same.

## 1. Carbon Monoxide (CO)

This facility initially proposed a CO limit of 508 ppmvd, corrected to 7% oxygen, which was consistent at the time with the NC DAQ application guidance for this size/type of boiler. However, NC DAQ discovered that the CO limits in the permit guidance that was developed last year were based on stack tests that were conducted for COMBINED wood and coal firing. NC DAQ has not been able to find any North Carolina data that isolates the CO emissions from green wood firing. Therefore, NC DAQ has decided to use the AP-42 emission factor for bark/wet wood-fired boilers [*0.6 lbs CO/MMBtu (See Chapter 1.6; Table 1.6-2; Sept. 2003)*]. **Therefore, the presumptive § 112(j) CO limit for green wood fired boilers is 555 ppmv, corrected to 7% oxygen.**

To demonstrate compliance with the standard, the Permittee shall install, operate and maintain a Continuous Emission Monitoring System (CEMS) for CO and oxygen according the applicable procedures under Performance Specification (PS) 3 or 4A or 40 CFR 60, Appendix B, and according to other procedures that are detailed in the permit. The Permittee shall calculate and record a 30-day rolling average emission rate (CO) on a daily basis as the average of all of the hourly CO emission data for the preceding 30 operating days. No initial performance stack test for CO is required since the facility is utilizing CEMS. Compliance is expected.

## IV. Conclusions, Comments, and Recommendations

The cover letter and all other relevant pages of the permit have been modified as detailed in the table of changes above. A copy of the draft permit and review were sent to GP and WaRO on November 10, 2010. Recommend issuance of Permit No. 09268T12 after completion of public notice and EPA review periods.