

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Fayetteville Regional Office
County: Montgomery
NC Facility ID: 6200029
Inspector's Name: Robert Kennedy
Date of Last Inspection: 05/21/2008
Compliance Code: 4 / In Compliance - Certification

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Troy Lumber Co Facility Address: Troy Lumber Co 110 Leslie Street Troy, NC 27371 SIC: 2421 / Sawmills & Planing Mills General NAICS: 321912 / Cut Stock, Resawing Lumber, and Planing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 6200029.08A Date Received: 04/04/2008 Application Type: Modification Application Schedule: TV-Significant Existing Permit Data Existing Permit Number: 02330/T14 Existing Permit Issue Date: 05/04/2006 Existing Permit Expiration Date: 01/31/2011
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Review Engineer: Mike Gordon Review Engineer's Signature: _____ Date: _____		Comments / Recommendations: Issue 02330/T15 Permit Issue Date: Permit Expiration Date:	

1. Introduction

Troy Lumber Co. operates a lumber mill and drying operation at this Montgomery County site. Permitted sources include: a wood hog, a wood trim saw, a sawmill, a planer mill, a wood waste storage silo, two boilers, and two steam-heated lumber drying kilns. Currently, steam is provided to the kilns by two wood-fired boilers.

2. Purpose of Application

Troy Lumber Co. submitted an application (I.D. 6200029.08A) for significant modification of their Title V permit on April 4, 2008. Subsequently it was determined that the application contained incorrect calculations based on erroneous data, therefore Troy Lumber Co. resubmitted the application on September 18, 2008 with the corrected information. The

facility is requesting an increase in production capacity at the facility from 110,000 million board feet per year (MMbf/yr) to 137,500 MMbf/yr. This is a result of kiln loading improvements that allow the facility to increase the amount of wood dried per charge by 30,000 board feet. Each kiln will now be capable of drying 150,000 board feet per charge (bf/charge) instead of the previous 120,000 bf/charge. As a result of this production increase the facility will be major for HAP's and the two wood drying kilns are subject to 40 CFR 63 Subpart DDDD initial notification requirements. The facility is currently classified as a Title V major stationary source and this modification does not change that classification. Prior to this change the facility was classified as non-major for PSD purposes, however following this modification the facility's PTE for VOC's will exceed the major source threshold therefore subsequent modifications will be subject to the significance levels for PSD applicability.

3. Application Chronology

Refer to "Comprehensive Application Report" for complete details.

4. Permit History

Permit No.	Issuance Date	Description of Revision
02330T12	March 30, 2001	Initial TV Permit
02330T13	February 21, 2006	Title V Permit Renewal

5. State-Only Toxic Air Pollutants (TAP's)

The facility was required to undergo modeling for Formaldehyde and Acrolein due to the increase in production that resulted in emission levels higher than the TPER limit for each pollutant. Emissions of Formaldehyde will now be limited to 0.420 pounds per hour (lbs/hr) and Acrolein is now listed in the permit as having a limit of 0.150 lbs/hr. Both limits are a result of modeling that demonstrated compliance with the Acceptable Ambient Level (AAL) for each pollutant (43% of the AAL for Formaldehyde and 30% of the AAL for Acrolein) at the increased lumber production rate.

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

NSPS

The Wood-fired Boiler (ID Nos. ES-Boiler2, CD-Boiler2-1, and CD-Boiler2-2) is subject to NSPS Subpart Dc including initial notification of start-up [60.48c(a)] and recording the of amount of wood combusted during each day [60.48c(g)]

NESHAPS

This modification will change Troy Lumber Co. source status for Title III from minor to major. Because of the increased production, facility wide potentials have increased to approximately 32.1 tons per year. Methanol is the single largest emission at 13.7 tons per

year. As a result of this change in status both steam heated wood drying kilns are subject to initial notification requirements of 40 CFR 63 Subpart DDDD. There are not other substantive requirements for steam heated wood drying kilns under Subpart DDDD.

Attainment Status and NSR

Montgomery County is in attainment. As discussed above, NSR/PSD review is not required for this modification.

112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements.

PSD

Due to the increase in production (137,500 MMbf/yr) requested with this permit **the facility is now considered a major stationary source**. The facility-wide VOC potential-to-emit (PTE) from the facility has increased from 228 tons per year to 285 tons per year. No physical modifications to the facility will occur with the issuance of this permit. The facility has determined that by changing the method of operation used at the facility they can charge the kilns with an additional 30,000 board feet of lumber per charge.

7. Facility Compliance Status

According to the latest inspection report dated May 21, 2008, the facility appeared to be operating in compliance with all applicable air quality standards and regulations.

8. Facility Emissions Review

The following is an emission summary for this facility. Actual emissions are for year 2007, as reported by the company to DAQ through submittal of annual emission inventory.

Pollutant	Actual Emissions Tons/Yr	Pre-change Potential Emissions Tons/Yr
PM	119.78	200
PM10	51.45	100
PM2.5	17.72	20
CO	34.8	95.31
NOx	46.36	< 100
SO ₂	5.27	20
VOC	196.41	228
Single HAP (HCl)	9.4	< 10
Total HAP	21.71	< 25

9. Comments and Recommendations

The Fayetteville Regional Office submitted several comments for this permit that have been addressed. A draft copy has been sent to the FRO for review.