

Facility Name: **Langdale Forest Products Company**
 City: Valdosta
 County: Lowndes
 AIRS #: 04-13-185-00009

Application #: TV-15529
 Date Application Received: August 9, 2004, updated November 2, 2004
 Permit No: 2421-185-0009-V-02-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **Langdale Forest Products Company** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Facility Identification**

1. Facility Name: Langdale Forest Products Company
2. Parent/Holding Company Name: Langdale Industries, Inc.
3. Previous and/or Other Name(s): None
4. Facility Location: 1202 Madison Highway, Valdosta, GA 31603
5. Attainment or Non-attainment Area Location:

The facility is located in an attainment area.

6. Class I Area Impacts:

This facility is located within 200 km of a Class I Area.

B. Site Determination

TLC Building Components, formerly named Southern Reman, Inc. (AFS No. 185-00094) and Langdale Forest Products Company (AFS No. 185-00009) are part of the same Title V site. The companies are located on contiguous property, operate under common control, and have the same 2-digit SIC code (24). This Title V Renewal Permit will cover only Langdale Forest Products (AFS No. 185-00009). TLC Building Components (AFS No. 185-00094) has applied for a separate Title V Renewal Permit under application number TV-16386. Note that this site is a Title V major source for HAPs.

C. Existing Permits

Table 1 below lists all current Title V permits and amendments issued to the facility, based on a comparative review of form A.6, "Current Permits", of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits and Amendments

Permit Number	Date of Issuance/ Effectiveness	Purpose of Issuance
2421-185-0009-V-01-0	February 8, 2000	Original Title V Operating Permit
2421-185-0009-V-01-1	November 12, 2003	Excursion limit modification for ESP1 based upon performance test results
2421-185-0009-V-01-3*	November 7, 2005	Installation of a 7 th drying kiln

*Note that Permit Amendment No. 2421-185-0009-V-01-2 was revoked on November 7, 2005.

D. Process Description

1. SIC Code(s): 2421 (major) General Sawmills and Planing Mills
2491 (other) Wood Preserving

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s):

This facility produces southern yellow pine dimensional lumber.

3. Overall Facility Process Description

The major products of this facility are dried lumber, dried wooden poles, and posts. Logs are received by truck and directed to one of the processing lines. Logs prepared for lumber manufacture are first debarked in one of two de-barkers and then cut into smaller logs and then into dimensional lumber. The lumber is then dried in one of three indirect, steam-heated kilns or one direct-fired kiln. The dried lumber is planed in the planer mill, and trimmed. A portion of this dried lumber is pressure treated with chromate copper arsenate before being transported by truck or rail for delivery to the customer.

Logs prepared as poles or posts are debarked and cut to size before being dried in one of three indirect, steam-fired kilns. These poles and posts are then pressure treated with chromate copper arsenate and then sold.

Secondary products produced at the facility are wood chips, sawdust, bark, and shavings. A portion of these materials fuel the boiler that provides steam to the kilns and a portion are transported to a medium density fiberboard manufacturer owned by the parent company. Once the direct-fired kiln (DK07) is constructed, it too will fire waste wood.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V Permit Renewal application number TV-15529.

E. Regulatory Status

1. PSD/NSR

The facility is a major source under PSD regulations as discussed in the review of the initial Title V Permit. The facility has the potential to emit (PTE) particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOC) of more than 250 tons per year.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Y	✓		
PM ₁₀	Y	✓		
SO ₂	Y			✓
VOC	Y	✓		
NO _x	Y	✓		
CO	Y	✓		
TRS	Negligible			
H ₂ S	Negligible			
Individual HAP	Y	✓		
Total HAPs	Y	✓		

3. MACT Standards

The following Table shows the HAPs emissions for Langdale Forest Products.

Emission Units		Potential Emissions for Total HAPs from Drying Kilns			
ID No.	Description	Board Feet (MBF/year)	Methanol ^a (tpy)	Formaldehyde ^b (tpy)	VOC ^c (tpy)
BLR1	Boiler	99 MMBtu/hr (heat input)	----	1.90	7.37
DK01	Lumber Drying Kiln	55,188	5.79	0.44	104.9
DK02	Lumber Drying Kiln	55,188	5.79	0.44	104.9
DK03	Lumber Drying Kiln	20,000	2.10	0.16	38.0
DK04	Pole Drying Kiln	14,016	1.47	0.11	26.6
DK05	Pole Drying Kiln	14,016	1.47	0.11	26.6
DK06	Pole Drying Kiln	14,016	1.47	0.11	26.6
DK07*	Lumber Drying Kiln	40,000	4.20	0.32	76.0
TOTAL		212,424 MBF/year	22.29	3.59	411.0

*This kiln is not yet constructed.

As mentioned above in Section I.B, “Site Determination”, of this narrative, Langdale is part of a contiguous Title V site with TLC Building Components. As shown in the table above, Langdale alone emits 24 tons per year of Total HAPs. When TLC Building Components’ Total HAPs are added to Langdale’s Total HAPs per year, the number exceeds the Title V major threshold of 25 tons per year. The facility also emits an individual HAP (methanol) above the major source threshold of 10 tons per year. Therefore, this facility is considered a major source for HAPs.

The facility is subject to MACT standards 40 CFR 63, Subpart DDDD - “National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products” and Subpart DDDDD - “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters”. The facility has to comply with

^a Methanol emission factor = 0.21 lb methanol/MBF from the National Council of the Paper Industry for Air and Stream Improvement Inc. (NCASI) Currently, there aren’t any AP-42 emission factors for methanol emission from wood residue boilers.

^b Formaldehyde emission factor = 0.016 lb formaldehyde/MBF from NCASI; the AP-42 emission factor for formaldehyde in wood residue boilers (Chapter 1.6)= 4.4×10^{-3} lb formaldehyde/MMBtu

^c VOC emission factor = 3.8 lb VOC/MBF from NCASI; the AP-42 emission factor for VOC in wood residue boilers. (Chapter 1.6)= 0.017 lb VOC/MMBtu

Subpart DDDD on and after October 1, 2008 and Subpart DDDDD on and after September 13, 2007.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	No
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

None applicable.

C. Compliance Status

According to documentation for an unannounced Air Quality Inspection on August 11, 2005, the facility received a non-compliance letter for violation of permit condition 5.2.7 in their initial Title V permit no. 2421-185-0009-V-01-0. The facility had failed to keep weekly inspection reports of the Planer Mill Cyclone (source code CY06) since the issuance of the initial Title V Permit. The company sent a letter, via fax, on August 12, 2005 indicating they have begun keeping records of the weekly cyclone inspections. The Division's Compliance Unit is satisfied with this facility and the issue is now closed.

D. Operational Flexibility

None applicable.

E. Permit Conditions

Permit Condition 2.3.1 is now permit Condition 8.17.2 in the new Title V Permit template.

III. Regulated Equipment Requirements

A. Brief Process Description

See Section I.D(3) of this narrative.

B. Equipment List for the Process

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
BLR1	Wood waste-fired boiler	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDDD (Effective September 13, 2007) GA Rule 391-3-1-.02(2)(d)	3.3.1, 3.3.2, 3.4.4, 4.2.1 5.2.1, 5.2.3, 5.2.4, 5.2.8, 5.2.9	MCY1 MCY2 ESP1	Multiclone No. 1 Multiclone No. 2 Electrostatic Precipitator
DK01	Lumber Drying Kiln	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD (Effective October 1, 2008) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.3.1, 3.3.3, 3.4.1, 3.4.2	N/A	N/A
DK02	Lumber Drying Kiln	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD (Effective October 1, 2008) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.3.1, 3.3.3, 3.4.1, 3.4.2	N/A	N/A
DK03	Lumber Drying Kiln	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD (Effective October 1, 2008) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.1, 3.3.1, 3.3.3, 3.4.1, 3.4.2, 6.2.4, 6.2.5	N/A	N/A
DK04	Pole Drying Kiln	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD (Effective October 1, 2008) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.3.1, 3.3.3, 3.4.1, 3.4.2	N/A	N/A
DK05	Pole Drying Kiln	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD (Effective October 1, 2008) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.3.1, 3.3.3, 3.4.1, 3.4.2	N/A	N/A
DK06	Pole Drying Kiln	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD (Effective October 1, 2008) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.3.1, 3.3.3, 3.4.1, 3.4.2	N/A	N/A
DK07	Lumber Drying Kiln	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD (Effective October 1, 2008) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.1, 3.3.1, 3.3.3, 3.4.1, 3.4.2, 6.2.4, 6.2.5	N/A	N/A
PMG1	Planer Mill Group	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.3.1, 3.3.3, 3.4.1, 3.4.3, 5.2.2, 5.2.5, 5.2.6, 5.2.7	BH01	Baghouse

* Generally, applicable requirements contained in this permit may also apply to emission units listed above.

C. Equipment & Rule Applicability

BRL01:

The 99.7 MMBtu/hr wood waste-fired boiler provides steam to six indirect, steam-heated kilns. Particulate emissions from the boiler are controlled by two multiclones and an electrostatic precipitator. The boiler is subject to the particulate matter limit outlined in Georgia Rule 391-3-1-.02(2)(d) "Fuel Burning Equipment" for post-1972 equipment based on the following equation:

$$P = 0.5 \left(\frac{10}{R} \right)^{0.5} \text{ pounds per million Btu heat input}$$

where P = the allowable PM emission rate in pounds per MMBtu/hr,
R = heat input rate in million Btu per hour for the boiler (source code BLR1)

The boiler is rated at 99.7 MMBtu/hr and, according to the above equation, allowable emissions are 0.158 lb/MMBtu or 15.78 lb/hr at maximum design heat input. Previous performance tests indicate compliance with Georgia Rule (d) occurs when the boiler and control equipment are maintained properly.

Georgia Rule (d) also limits the opacity to 20 percent except for one six-minute period per hour of not more than 27 percent opacity.

The boiler is subject to the Boiler MACT standards for the reasons discussed in Section I.E (3) of this narrative. Boiler BLR1 is classified as an existing, large, solid-fuel boiler and must comply with all provisions of the Boiler MACT on and after September 13, 2007. The Boiler MACT (40 CFR 63, Subpart DDDDD-NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters) standards are more stringent than the rules set by Georgia Rule 391-3-1-.02(2)(d)3. Under Subpart DDDDD, the Particulate Matter (PM) emissions rate is limited to 0.07 lb per MMBtu (or alternatively, Total Selected Metals (TSM) is limited to 0.001 lb per MMBtu of heat input); hydrogen chloride emission is limited to 0.09 lb per MMBtu; mercury emission is limited to 9.0×10^{-6} lb per MMBtu. The opacity limit is the same, which is 20 percent except for one six-minute period per hour of not more than 27 percent opacity.

The wood waste fired boiler (source code BLR1) is also subject to the provisions of 40 CFR Part 64, "Compliance Assurance Monitoring" (CAM) because:

- It is located at a major source that is required to obtain a Title V Permit. [§64.2(a)]
- It is subject to an emission limitation or standard (Georgia Air Quality Rule (d) emission standard) for the applicable pollutant (particulate matter). [§64.2(a)(1)]
- It uses control devices (Multiclones MYC1 and MYC2, along with Electrostatic Precipitator ESP1) to achieve compliance. [§64.2(a)(2)]
- Potential pre-controlled emissions of the applicable pollutant (particulate matter) from Boiler BLR1 (with a major source threshold of 100 tpy) are at least 100 percent of a major source threshold. [§64.2(a)(3)]

DKG1 and DKG2:

The facility has two drying kiln groups: DKG1 (source codes DK01, DK02, DK03, and DK07) and DKG2 (source codes DK04, DK05, and DK06). The lumber drying kiln group (DKG1) consists of three indirect, steam fired lumber drying kilns (DK01, DK02, and DK03) and one recently permitted direct-fired lumber drying kiln (DK07), which has yet to start up. Upon installation of kiln DK07, the steam load on the boiler will be reduced; and lumber drying can occur during periodic boiler maintenance. This direct fired kiln will use wood waste generated at the facility as fuel and is designed with a sloped grate and under-fire air for fuel gasification, prior to a secondary combustion chamber, which supplies heat to the kiln for drying.

The average yearly input rate of Kilns DK01 and DK02 is 110,376 MBF/year. In Permit amendment 2421-185-0009-V-01-3, production limits were established (as agreed with the facility) for Kilns DK03 and DK07 to avoid PSD review. The yearly production limit for lumber Kiln DK03 is 20,000 MBF/year and 40,000 MBF/year for Kiln DK07.

The pole drying kiln group (DK02) consists of three indirect, steam fired drying kilns (DK04, DK05, and DK06). These kilns dry dimensional wood poles and posts from approximately 60 percent moisture content to approximately 25 percent moisture content. The maximum hourly input rate of these kilns is 1600 BF/hr each or 42,048 MBF/yr total.

VOC emissions from kilns are based on an emission factor from the National Council of the Paper Industry for Air and Stream Improvement Inc. (NCASI) of 3.8 lb VOC/MBF. Using that, the potential VOC emission rate from the drying kilns is calculated to be 403 tons per year. The methanol emission factor from NCASI is 0.21 lb methanol/MBF; the methanol potential emission rate from the drying kilns is therefore 22 tons per year. The formaldehyde emission factor from NCASI is 0.016 lb formaldehyde/MBF; the formaldehyde potential emission rate from the drying kilns is therefore 2 tons per year.

All drying kilns (DK01, DK02, DK03, DK04, DK05, DK06 and DK07) are subject to Georgia Rule 391-3-1-.02(2)(e) "Particulate Emissions from Manufacturing Processes" based on the following equation:

$$E = 4.1 P^{0.67}$$

Where:

E = the allowable PM emission rate in pounds per hour

P = the total dry process weight input rate in ton per hour

In addition to Georgia Rule for Air Quality Control 391-3-1-.02(2)(e), the drying kilns are also subject to Georgia Rule 391-3-1-.02(2)(b) which limits visible emissions to forty (40) percent opacity.

The kilns are subject to 40 CFR 63, Subpart DDDD-NESHAP for Plywood and Composite Wood Products, as discussed in Section I.E (3) of this narrative. The lumber drying kilns are an affected source under Subpart DDDD; however, there are no applicable requirements for this source. In an amendment to the MACT, dated July 29, 2005, the preamble states that EPA's (Environmental

Protection Agency) intent was for the lumber drying kilns to only submit an initial notification to comply with this rule.

PMG1:

The rule applicability for the planer mill group is discussed in the review of the initial Title V Permit No. 2421-185-0009-V-01-0. Please refer to section III.C of that narrative.

Miscellaneous Equipment:

The rule applicability for the other plant equipment is discussed in the review of the initial Title V Permit No. 2421-185-0009-V-01-0. Please refer to section III.C of that narrative.

Emission and Operating Caps:

As already mentioned, the following production limits have been established for lumber drying kilns DK03 and DK07 for avoidance of PSD review:

- a. Drying Kiln No. 3 (DK03) – 20 million board feet per 12 consecutive month period.
- b. Drying Kiln No. 7 (DK07) – 40 million board feet per 12 consecutive month period.

Potential Emissions from the operation of the new drying kiln (DK07) were calculated in the narrative for Amendment No. 2421-185-0009-V-01-3 for the criteria pollutants. Langdale Forest Products Company estimated its VOC emission rate by using an emission factor of 3.8 pounds VOC emitted per thousand board feet of lumber processed. The potential VOC emission rate is 106 tpy, including emissions from combustion of wood by the direct fired burner. Calculations are shown below.

VOC Emissions from Combustion:

AP-42 Emission factor: 0.017 lb/MMBtu

Operating hours: 8,760 hours per year

VOC Emissions = (30 MMBtu/hr) (0.017 lb/MMBtu) (8760 hrs/year) (1 ton/2000 lb) = 2.23 tpy

Wood Evaporative VOC Emissions:

NCASI Emission factor: 3.8 lb VOC/MBF

VOC Emissions = (54,660 MBF/yr) (3.8 lb/MBF) (1 ton/2000 lb) = 103.85 tpy

Total Potential VOC Emissions = 2.23 + 103.86 = 106 tpy

The potential emissions for methanol and formaldehyde have been calculated using the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI) emission factors of 0.21 lb Methanol/MBF and 0.016 lb Formaldehyde/MBF. The calculation for methanol is shown below.

Methanol Emissions = (54,660 MBF/yr) (0.21 lb/MBF) (1 ton/2000 lb) = 5.74 tpy

The potential PM emissions are based upon the emission factor of 0.2946 pounds per thousand board feet (lb/MBF), from NCASI Technical Bulletin No. 845.

$$\text{PM Emissions} = (54,660 \text{ MBF/yr}) (0.2946 \text{ lb/MBF}) (1 \text{ ton}/2000 \text{ lb}) = 8.05 \text{ tpy}$$

The emissions of the criteria air pollutants were estimated by using AP-42 emission factors for "Wood Residue Combustion in Boilers" (1.6 issued 9/03). Emission factors of 0.22 lb/MMBtu for NO_x, 0.025 lb/MMBtu for SO₂, 0.60 lb/MMBtu for CO, and 0.039 lb/MMBtu for HAPs (Tables 1.6.1 to 1.6.3), were used to calculate potential emissions for the 30 MMBtu/hr direct fired drying kiln. A sample NO_x emissions calculation is shown below.

$$\text{NO}_x \text{ Emissions} = (30 \text{ MMBtu/hr}) (0.22 \text{ lb/MMBtu}) (8760 \text{ hr/yr}) (1 \text{ ton}/2000 \text{ lb}) = 28.91 \text{ tpy}$$

The 106-tpy increase in potential VOC emissions, from the new drying kiln (DK07), exceeds the 40 tpy major modification threshold. In order to remain below the 40 tpy increase threshold, the facility accepted production limits on Drying Kilns No. 3 and No. 7 (DK03 and DK07). In Permit Amendment 2421-185-0009-V-01-3, the facility accepted production limits of 20 million board feet per year for Drying Kiln No. 3 (DK03) and 40 million board feet per year for Drying Kiln No. 7 (DK07).

In the application for Kiln No. 7, the facility submitted actual VOC emissions from the previous two years, for Drying Kiln No. 3 (DK03). The annual average actual VOC emission rate from Drying Kiln No. 3 (DK03) was 77.0 tpy. With a production limit of 20 million board feet per year, potential VOC emissions are limited to 38.0 tpy. This represents a 39.0 tpy (77.0 – 38.0 = 39.0 tpy) offset that was used to increase the potential operating rate of Drying Kiln No. 7 (DK07). Total VOC emissions (combustion and evaporative) from Drying Kiln No. 7 (DK07), with the production limit of 40 million board feet per year, is therefore 77.95 tpy. Calculations are shown below.

VOC Emissions from Combustion:

AP-42 Emission factor: 0.017 lb/MMBtu

Operating hours: 7,665 hours per year

$$\text{VOC Emissions} = (30 \text{ MMBtu/hr}) (0.017 \text{ lb/MMBtu}) (7665 \text{ hrs/year}) (1 \text{ ton}/2000 \text{ lb}) = 1.95 \text{ tpy}$$

Wood Evaporative VOC Emissions:

NCASI Emission factor: 3.8 lb VOC/MBF

$$\text{VOC Emissions} = (40,000 \text{ MBF/yr}) (3.8 \text{ lb/MBF}) (1 \text{ ton}/2000 \text{ lb}) = 76 \text{ tpy}$$

$$\text{Total VOC Emissions} = 1.95 + 76 = 77.95 \text{ tpy}$$

D. Compliance Status

See Section II.C. of this narrative.

E. Operational Flexibility

See Section III.D of this narrative.

F. Permit Conditions

New Condition 3.2.1 limits the throughput of lumber in Kilns DK03 and DK07 to limit VOC emissions. The limits are 20 million board feet per year for DK03, and 40 million board feet per year for DK07. This condition was added in Amendment No. 2421-185-0009-V-01-3 for avoidance of PSD review.

New Conditions 3.3.1 through 3.3.3, added in Amendment No. 2421-185-0009-V-01-3, are general provisions of the Boiler and Plywood MACTs. The facility must comply with these MACTs on and after their respective dates.

Condition 3.4.1 was revised to specify that the visible emissions limit from the stack of each drying kiln (DK01 through DK07) is 40 percent opacity, based on Georgia Rule (b).

Condition 3.4.2 was revised, in Amendment No. 2421-185-0009-V-03, to include PM emission limits from each drying kiln (DK01 through DK07) based on Georgia Rule (e).

IV. Testing Requirements (with Associated Record Keeping and Reporting)**A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

None applicable.

V. Monitoring Requirements**A. General Monitoring Requirements**

The permit requires that any monitoring system installed be in continuous operation except when under repair, and that maintenance or repair be conducted in an expedient manner.

Condition 5.1.1, a generic permit condition, requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

1. Individual Equipment:

Condition 5.2.1 in the existing permit requires the Permittee to continuously monitor the measurement of the secondary voltage and current of each electrostatic precipitator (ESP) field. This condition was revised to require hourly recording of the measurement of the secondary voltage and current, during operation of Boiler BLR1.

Condition 5.2.2 is the same as the existing permit Condition 5.2.2.

Condition 5.2.3, in the initial Title V Permit, required the Permittee to record the secondary voltage and current of each field of the ESP on an hourly basis. This condition was modified in permit amendment no. 2421-185-0009-V-01-01 to include calculation of the total power to the ESP every hour. This calculated number is then to be used to predict compliance, instead of using the individual voltages and currents on each ESP field. They must use following equation to determine the total power for each set of parameter readings:

$$P_t = (V_1)(I_1) + (V_2)(I_2)$$

where: P_t = Total ESP power (watts)

V_1 = Secondary volts (kV), ESP field 1

I_1 = Secondary current (ma), ESP field 1

V_2 = Secondary volts (kV), ESP field 2

I_2 = Secondary current (ma), ESP field 2

Condition 5.2.4 is the same as existing permit Condition 5.2.4.

Condition 5.2.5 is the same as existing permit Condition 5.2.5.

Condition 5.2.6 is the same as existing permit Condition 5.2.6.

Condition 5.2.7 is the same as existing permit Condition 5.2.7.

Conditions 5.2.8 and 5.2.9 were added to this Title V Permit to accommodate CAM requirements.

Condition 5.2.8, in the initial Title V Permit, has been re-numbered as Condition 6.1.7, as per the new Title V template. The condition had defined excursions for the ESP for voltage and current of each field. The permit condition now defines an excursion for the entire boiler exhaust as less than 1495 watts of total power to the ESP. Condition 6.1.7 requires the reporting of exceedances for any 12 consecutive month period when the wood throughput of DK03 and/or DK07 exceeds a limit established in Condition 3.2.1.

Condition 5.2.9 in the initial Title V Permit is removed. It had required that voltage and current of the energized field be recorded hourly. This Condition was only applicable if only one ESP field was energized. This Condition is no longer needed because Langdale has no plans to operate only one field. However, since total ESP power is now the basis for ensuring compliance, Langdale can theoretically operate with only one field energized as long as total power is 1495 watts or higher.

Condition 5.2.10 from the initial Title V Permit was removed. It defined the excursion thresholds (field voltages and currents) when the ESP was operating with only one field energized. This Condition is also no longer needed because total ESP power is now the basis for ensuring compliance.

2. Equipment Groups (all subject to the same monitoring requirements):

Equipment group monitoring requirements were discussed in the review of the initial Title V permit (Permit No. 2421-185-0009-V-01-0). Please refer to section V.B of that narrative.

C. Compliance Assurance Monitoring (CAM)

As discussed in Section III.C. of this permit narrative, the Title V application indicated that the Boiler (BLR1) and the Planer Mill Group (PMG1) are subject to the provisions of 40 CFR Part 64, "Compliance Assurance Monitoring" (CAM). The facility attached CAM plans to their TV renewal application no. 15529. While the application indicated that the Planer Mill Group is subject to the CAM rule, it is not. The facility process description of the planer mill describes the cyclone as a collector of wood chips to be used in the wood waste-fired boiler. The exhaust from the cyclone is sent to the baghouse for control of the PM emissions. After discussion with the Division's Monitoring Program, it was concluded that the cyclone is an emission source and the baghouse is the pollutant control device. The uncontrolled baghouse emission rate is less than 100 tons of PM per year; therefore, the Planer Mill Group is exempt from the CAM requirements.

The facility's proposals for weekly visual inspections of the exterior of the Multiclones (MCY1 and MCY2) and hourly monitoring of secondary voltage and amperage of each field of the Electrostatic Precipitator ESP1, to be used to calculate total power, are acceptable to the Division. The monitoring scheme is in line with what the Division is now requiring for other boilers controlled by an ESP, as opposed to setting separate excursion values for each secondary voltage and current.

Conditions 5.2.8 and 5.2.9 have been added to this Title V Permit to accommodate these CAM requirements.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Record keeping and reporting requirements were specified in the review of the initial Title V Permit (Permit No. 2421-185-0009-V-01-0). Please refer to section V.C of that narrative.

New Conditions 6.2.1 and 6.2.2 require monitoring of some kiln throughput rates to confirm compliance with Condition No. 3.2.1. These conditions require the facility to maintain monthly records of the lumber processed in Kilns DK03 and DK07, and to submit semiannual reports of that production.

VII. Specific Requirements

A. Operational Flexibility

Operational flexibility does not need to be incorporated into this Renewal Title V Permit. The applicant did not include any alternative operating scenarios in their Title V permit application.

B. Alternative Requirements

There are no alternative requirements that need to be incorporated into the title V permit.

C. Insignificant Activities

Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

D. Temporary Sources

None

E. Short-Term Activities

None

F. Compliance Schedule/Progress Reports

See section II.C.

G. Emissions Trading

None Dermatologist

H. Acid Rain Requirements

None

I. Stratospheric Ozone Protection Requirements

The standard permit condition pursuant to 40 CFR 82 Subpart F has been included in the Title V permit. These Title VI requirements apply to all air conditioning and refrigeration units containing ozone-depleting substances regardless of the size of the unit or of the source. Since Langdale Forest Products Company has at least some air conditioners, chillers, and refrigerators, Subpart F is an applicable requirement.

J. Pollution Prevention

None

K. Specific Conditions

None

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.26.1 regarding Credible Evidence was added. This Condition, which is standard to all newer Title V permit, was not included in Langdale's initial Title V permit.

Addendum to Narrative

The 30-day public review started on February 18, 2006 and ended on March 19, 2006. Written comments were received from Resolve Consulting Firm on behalf of Langdale Forest Products Co. on March 6, 2006. No comments were received from the public or EPA. The comments are reproduced below, followed by a discussion of the comments and any changes made to the permit as a result.

Company Comment No. 1

Permit Condition 5.2.5 includes a specific permissible operating range for the pressure drop across Baghouse BH01 of 1 to 5 inches of water column (in. H₂O). Langdale Forest Products Co. has noted pressure drops in the range of 0.6 to 1 in. H₂O during normal operation of the baghouse. Correspondence from the baghouse manufacturer indicates that pressure drops around 0.75 in. H₂O will occur when the particulate loading is light. The company requests the lower end of the acceptable pressure drop operating range in permit condition 5.2.5 be changed from 1 in. H₂O to 0.5 in. H₂O to reflect actual acceptable operating conditions.

EPD Response:

The facility submitted the weekly inspection log for the baghouse pressure drop from September 6, 2005 to March 20, 2005. The records showed a recording of 0.5 in. H₂O after the bag filters were replaced on October 19, 2005. After the Division reviewed information provided by the manufacturer and the company's records for weekly inspections of the baghouse pressure drop, it was agreed that the lower end of the pressure drop range could be changed from 1 in. H₂O to 0.5 in. H₂O.

Company Comment No. 2

Permit conditions 6.1.4, 6.1.5, and 6.1.6 are identical to permit conditions 6.2.1, 6.2.2, and 6.2.3, respectively. Conditions 6.2.1, 6.2.2, and 6.2.3 should be removed from the final Title V permit.

EPD Response:

The Division agrees with the company. Therefore these conditions were removed from the final Title V permit. The removal of these conditions shifted the remaining Condition in Section 6.2 of the permit up.

Company Comment No. 3

Condition 3.3.2 addresses 40 CFR 63, Subpart DDDDD, but contains reference to Subpart DDDD at the end of the condition verbiage.

EPD Response:

The Division agrees with the company. The verbiage was changed to reference Subpart DDDDD.

Company Comment No. 4

The legal name of the facility owner and operator is Langdale Forest Products Co. not Langdale Forest Products Company in permit Condition 1.1.

EPD Response:

The Division agrees with the company. The name was changed to Langdale Forest Products Co.

Additional changes made by EPD

Subpart DDDD was recently amended to change the compliance date from October 1, 2007 to October 1, 2008. Therefore, Condition 3.3.3 and the Equipment Table in Section 3.1 of the permit have been modified to reflect this change.

The permit requires the submittal of an application from the company, 180 days prior to the compliance date of Subparts DDDD and DDDDD as part of Conditions 3.3.3 and 3.3.4. In the final permit, the application requirements are found in Conditions 6.2.1 and 6.2.2.