

Facility Name: **Langboard MDF**
 City: Willacoochee
 County: Atkinson
 AIRS #: 04-13-003-00013

Application #: TV-16352
 Date Application Received: August 24, 2005
 Permit No: 2493-003-0013-V-03-0

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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 the **Langboard MDF** plant 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: Langboard MDF
2. Parent/Holding Company Name: Langdale Industries
3. Previous and/or Other Name(s): None.
4. Facility Location: 1000 Springhead Road, Willacoochee, GA 31650
5. Attainment, Non-attainment Area Location, or Contributing Area

The facility is located in an attainment area.

6. Class I Area Impacts

The facility is located within 200 km of a Class I area.

B. Site Determination

This Renewal Title V Permit is for the Langboard Medium Density Fiberboard (MDF) with AFS No. 003-00013, adjacent to TLC Mouldings, Inc. (AFS No. 003-00015). Both facilities are considered one source for Title V and PSD applicability purposes. TLC Mouldings, Inc. operates under a separate Title V Permit (No. 2431-003-0015-V-01-0), and has applied for a separate Title V Renewal Permit (Application No. 16486).

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, 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, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/Effectiveness	Purpose of Issuance
2493-003-0013-V-02-0	February 23, 2001	Title V Permit
2493-003-0013-V-02-1	August 17, 2005	Installation of Boiler; revision to emission limits; inclusion of off-permit changes.

D. Process Description

1. SIC Codes(s)

2493- Reconstituted Wood Products

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)

The plant produces medium density fiberboard (MDF) from southern pine chips and shavings.

3. Overall Facility Process Description

The plant produces medium density fiberboard (MDF) utilizing southern pine chips and shavings as the basic raw material. Wood is delivered to the site by truck or rail in the form of chips and shavings. This material is then transferred from the initial storage area to reclaim hoppers by front-end loaders. This raw material is screened for fines and oversized chips before entering the storage silos. From the silos, the raw materials are moved to three refiners, which separate fibers from the rest of the wood and add resin and wax. The wood fibers are then routed through the direct contact flash tube dryers and stored prior to being used in the forming machine. The forming machine produces fiber mats that are cut into sections, pressed several minutes, at a high temperature and pressure, into board and then trimmed to size, sanded, graded, and packaged for shipment.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V Permit application.

E. Regulatory Status

1. PSD/NSR

The facility is a synthetic minor PSD/NSR source because the permit limits emissions from various emission units such that the annual emissions of any criteria pollutant does

not equal nor exceed 250 tons per year. Note that this facility is not one of the 28 named source categories under PSD.

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	Yes	✓		
PM ₁₀	Yes	✓		
SO ₂	Yes			✓
VOC	Yes	✓		
NO _x	Yes	✓		
CO	Yes	✓		
TRS	Yes			✓
H ₂ S	Yes			✓
Individual HAP	Yes	✓		
Total HAPs	Yes	✓		

3. MACT Standards

The facility is subject to the MACT standards found in 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". In accordance with the federal rules, the facility has to comply with Subpart DDDD on and after October 1, 2008 and Subpart DDDDD on and after September 13, 2007. The facility is required, by this permit, to submit an application 180 days before each of the compliance dates stating how it intends to comply with the MACT standards.

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	Yes
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

Applicable rules and regulations specified in the initial Title V Permit No. 2493-003-0013-V-02-0 were discussed in the Title V Permit narrative for that permit. Please refer to Section II.B of that narrative.

C. Compliance Status

The facility is operating in full compliance.

D. Operational Flexibility

None applicable.

E. Permit Conditions

None applicable.

III. Regulated Equipment Requirements

A. Brief Process Description

The plant receives southern yellow pine chips and shavings by rail or truck that are then stored in a silo. The chips and shavings are then transported to one of three refineries, which separates the fibers, and wax and resin are applied. These materials are dried in the flash tube dryers. They are routed to the forming machine where fiber mats are produced. The fiber mats are cut into sections, pressed several minutes at a high temperature and pressure into board, trimmed to size, sanded, graded, and packaged for shipment.

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
EU01	Chip Shaker Screen Area	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.1, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C001	Bag Filter
EU03	Shavings and Sawdust Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.2, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C003	Bag Filter
EU04	Fiber Vapor Separator System (FVSS)	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.4.1, 3.4.3, 3.5.2, 5.2.2, 6.1.7	None	None
EU05, EU06, EU07	Flash Tube Dryers #1, #2, and #3	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD	3.2.3, 3.3.5, 3.3.7, 3.4.1, 3.4.3, 4.2.1, 4.2.2, 5.2.2, 6.1.7, 6.2.3, 6.2.4, 6.2.8	C005	Wet ESP
EU08	Face Dryer Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.4, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C008	Bag Filter
EU09	Swing Dryer Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.4, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C009	Bag Filter
EU10	Core Dryer Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.4, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C010	Bag Filter
EU11	Face/Core Shave-off Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.5, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C011	Bag Filter
EU12	Former Vacuum System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.6, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C012	Bag Filter
EU13	Reject Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.7, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4, 6.2.5	C013	Bag Filter
EU14	Vacuum Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.8, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C014	Bag Filter
EU15, EU16	Sanderdust Pickup Systems #1 and #2	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.9, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C015, C016	Bag Filters
EU17	Sanderdust Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.10, 3.4.1, 3.4.3, 6.1.7, 6.2.4	C017	Bin Vent

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
EU18	Saw/Sanderdust Boiler Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.11, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C018	Bag Filter
EU19	Sawdust Pickup System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.12, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C019	Bag Filter
EU20	Hogged Trim Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.13, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C020	Bag Filter
EU21	Saw Trim Relay System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.14, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C021	Bag Filter
EU22	Press Vent System	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD	3.2.15, 3.3.5, 3.3.7, 3.4.1, 3.4.3, 4.2.1, 5.2.2, 6.1.7, 6.2.4, 6.2.8	C022	Scrubber
EU24	Fluidized Bed Energy System	GA Rule 391-3-1-.02(2)(d) GA Rule 391-3-1-.02(2)(g) 40 CFR 60 Subpart A 40 CFR 60 Subpart Db 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD	3.2.3, 3.2.16, 3.3.1, 3.3.2, 3.3.3, 3.3.5, 3.3.7, 3.4.2, 3.4.4, 3.5.1, 4.2.1, 4.2.2, 5.2.1, 6.1.2, 6.1.7, 6.2.1, 6.2.2, 6.2.4, 6.2.8	C024	SNCR
				C025	ESP
EU25	Wax Plant Boiler	GA Rule 391-3-1-.02(2)(d) GA Rule 391-3-1-.02(2)(g) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDDD	3.3.5, 3.3.6, 3.4.2, 3.4.4, 6.2.9	N/A	None
EU26	Ash Storage Silo	GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(b)	3.2.17, 3.4.1, 3.4.3, 5.2.2, 5.2.4, 6.1.7, 6.2.4	C026	Bag Filter

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

C. Equipment & Rule Applicability

Equipment and Rule Applicability specified in the initial Title V Permit No. 2493-003-0013-V-02-0 is discussed in the Title V Permit narrative for that permit. Please refer to Section III.C of that narrative.

Emission and Operating Caps:

Some PSD avoidance limits were modified in Amendment No. 2493-003-0013-V-02-1. The CO limit on emissions from the WESP (which controls PM from the energy system and dryers) was changed from 55.50 lb/hr to 50.0 lb/hr. The PM limit on emissions from the WESP was changed from 21.63 lb/hr to 14.42 lb/hr. The NO_x limit on the energy system was changed from 57.0 lb/hr to 50.0 lb/hr. These limits were reduced to allow Langboard to add the Wax Plant Boiler and to allow an increase in the PM limits at Langboard's contiguous TLC Moulding, Inc. plant, while remaining a minor source with regard to PSD.

The formaldehyde limits were removed in Amendment No. 2493-003-0013-V-02-1 because Langboard demonstrated, through air dispersion modeling, that formaldehyde concentrations would pass Georgia's Air Toxic Guidelines (using the revised formaldehyde AAC) at emission rates equivalent to the allowable VOC emissions.

The Ash Silo (EU26) has a 0.61 lb/hr PM limit to account for this non-fugitive emission source, to assure that the PSD major source threshold is not exceeded.

Rules and Regulations Assessment:

40 CFR 63 Subparts DDDD and DDDDD:

The Wax Plant Boiler is subject to the “Boiler MACT” standard in 40 CFR 63 Subpart DDDDD. The existing wood-fired Fluidized Bed Energy System is not subject to 40 CFR 63 Subpart DDDDD, but instead is subject to 40 CFR 63 Subpart DDDD, the “Plywood MACT”, because the combustion emissions are ducted through the wood dryers and make direct contact with the product. In addition to the Fluidized Bed Energy System, the Press Vent System and Flash Tube Dryers are subject to the “Plywood MACT”.

Georgia Rules:

Both the Wax Plant Boiler and Fluidized Bed Energy System are subject to Georgia Air Quality Rules (d) “Fuel Burning Equipment,” and (g) “Sulfur Dioxide.” Langboard will easily comply with these rules because the boiler only fires propane and the Fluidized Bed only fires wood-waste.

D. Compliance Status

The facility is in compliance.

E. Operational Flexibility

None requested.

F. Permit Conditions

Condition 3.2.1 was revised in Amendment No. 2493-003-0013-V-02-1 to change the name of emission unit EU01 from Chip Fines Relay System to Chip Shaker Screen Area.

Condition 3.2.2 is the same as Condition 3.2.2 in the initial Title V Permit.

Condition 3.2.3 was revised in Amendment No. 2493-003-0013-V-02-1 to remove formaldehyde limits. In previous tests, Langboard failed the existing formaldehyde limits on the press through the press scrubber (C022). The limits were allowed to be removed in Amendment No. 2493-003-0013-V-02-1 because a revision to EPA’s toxicity data for formaldehyde significantly increased the acceptable ambient concentration (AAC) for formaldehyde, calculated per Georgia’s Toxic Guideline. The CO and PM limits were also revised as a result of these tests.

Conditions 3.2.4 through 3.2.14 are the same as Conditions 3.2.4 through 3.2.14 in the initial Title V Permit.

Condition 3.2.15 was revised in Amendment No. 2493-003-0013-V-02-1 to remove formaldehyde limits, as discussed above with regard to Condition 3.2.3.

Condition 3.2.16 was revised in Amendment No. 2493-003-0013-V-02-1 to change the NOx emission limit from the Fluidized Bed Energy System from 57 lb/hr to 50 lb/hr. The reduction in the NOx emission limit was to compensate for the NOx emissions to be emitted by the new Wax Plant Boiler.

Condition 3.2.17 was added in Amendment No. 2493-003-0013-V-02-1 to limit the PM emission from the Ash Silo to 0.62 lb/hr for PSD Avoidance.

Conditions 3.3.1 through 3.3.4 are the same as Conditions 3.3.1 through 3.3.4 in the initial Title V Permit.

New Conditions 3.3.5 and 3.3.6 are added to establish 40 CFR 63 Subpart DDDDD (the Boiler MACT) as applicable to the Wax Plant Boiler (EU25).

New Condition 3.3.7 is being added to this permit to establish the Plywood MACT (40 CFR 63 Subpart DDDD) as applicable to the Fluidized Bed Energy System (EU24), the Flash Tube Dryers (EU05, EU06, and EU07), and the Press Vent System (EU22).

Conditions 3.4.1 and 3.4.2 are the same as Conditions 3.4.1 and 3.4.2 in the initial Title V

Conditions 3.4.3 and 3.4.4 have been modified in the proposed to include the Wax Plant Boiler.

Conditions 3.4.5 and 3.4.6 were added in Amendment No. 2493-003-0013-V-02-1 to establish applicability of Georgia Rules (d) and (g) to the Wax Plant Boiler, as well as the Fluidized Bed Energy System. These conditions have been merged with Conditions 3.4.3 and 3.4.4 in the proposed Title V Permit.

Conditions 3.5.1 and 3.5.2 are the same as Conditions 3.5.1 and 3.5.2 in the initial Title V Permit.

Table 3.1 was modified in Amendment No. 2493-003-0013-V-02-1 to include the addition of the Wax Plant Boiler and Ash Silo.

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

Testing requirements specified in the initial Title V Permit No. 2493-003-0013-V-02-0 are discussed in the initial Title V permit narrative for that permit and the Amendment narrative (2493-003-0013-V-02-1). Please refer to these narratives.

New Condition 4.2.2 is added to require the facility to conduct a performance test to determine the excursion threshold for total secondary power to the electrostatic precipitators (source codes C005 and C025). This monitoring scheme is in line with what the Division is now requiring for equipment controlled by an ESP, as opposed to setting separate excursion values for each secondary voltage and current.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 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 required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Monitoring requirements specified in this permit are discussed in the initial Title V permit narrative (2493-003-0013-V-02-0) and the Amendment narrative (2493-003-0013-V-02-1) for this permit. Please refer to these narratives.

Condition 5.2.1 is the same as Condition 5.2.1 in the initial Title V permit.

Condition 5.2.2 is the same as Condition 5.2.2 in the Amendment.

New Condition 5.2.3 is being added to this permit to require calculation of the total power to the ESP and WESP every hour. This calculated number is then to be used to predict compliance.

Conditions 5.2.4 through 5.2.6 are the same as Conditions 5.2.3 through 5.2.5 in the initial Title V permit.

C. Compliance Assurance Monitoring (CAM)

The Title V application indicated that the Fluidized Bed Energy System (EU24) and Flash Tube Dryers #1, #2, and #3 (EU05, EU06, and EU07) are subject to the provisions of 40 CFR Part 64, "Compliance Assurance Monitoring" (CAM). The facility attached CAM plans to their Title V Renewal Application No. 16352.

The facility proposed continuous monitoring (recording every 15 minutes) of the secondary voltage of each field of the dry Electrostatic Precipitator (C025) and the Wet Electrostatic Precipitator (C005) to be used to calculate a one-hour average of the total secondary voltage. However, the Division will require calculation of total power (using secondary voltage and amperage). Therefore, the CAM Plan proposed by the facility has been modified to require this.

Their proposal also includes continuous monitoring of the gas stream inlet/outlet temperature as a secondary indicator for the Wet Electrostatic Precipitator (C005). A change in temperature is an indication that the precipitator needs to be repaired to eliminate or minimize an infiltration. This is acceptable to the Division. The dry ESP (C025) already has continuous monitoring for opacity, using a continuous opacity monitoring system (COMS) so that will be its secondary indicator.

Conditions 5.2.7 through 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.

Condition 6.1.7b.i was modified in Amendment No. 2493-003-0013-V-02-1 to change the NO_x exceedance definition from 57 lb/hr to 50 lb/hr in accordance with the changes in Condition 3.2.16.

Condition 6.1.7c.ii was modified in Amendment No. 2493-003-0013-V-02-1 to include the Ash Silo baghouse (C026).

Condition 6.1.7c.viii was added in Amendment No. 2493-003-0013-V-02-1 to specify, as an excursion for the Reject Relay System (source code EU13), the operation of it for more than seven hours in any calendar week.

B. Specific Record Keeping and Reporting Requirements

Conditions 6.2.1 through 6.2.4 are the same as Conditions 6.2.1 through 6.2.4 in the initial Title V Permit.

Condition 6.2.5 was added in Amendment No. 2493-003-0013-V-02-1 to require that the hours of operation of the Reject Relay System (EU13) be recorded, on a weekly basis, to show compliance with existing Condition 3.2.7.

Existing Conditions 5.3.1 and 5.3.2 were record keeping requirements. Section 5.3 no longer exists in the current permit template. Condition 5.3.1 was a template condition that has been removed. Condition 5.3.2 becomes 6.2.6 in this permit.

New Conditions 6.2.7 and 6.2.8 are added to this permit to require that the Permittee submit applications 180 days before the compliance dates of Subparts DDDD and DDDDD, indicating how they intend to comply with each rule. At those times, the permit will be reopened to include specific MACT requirements.

VII. Specific Requirements

A. Operational Flexibility

The applicant did not include any alternative operating scenarios in their Title V permit application.

B. Alternative Requirements

None Applicable.

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 applicable.

E. Short-Term Activities

None applicable.

F. Compliance Schedule/Progress Reports

None applicable.

G. Emissions Trading

None applicable.

H. Acid Rain Requirements

None applicable.

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

Langboard MDF has at least some air conditioners, chillers and refrigerators Subpart F is an applicable requirement.

J. Pollution Prevention

None applicable.

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.

Addendum to Narrative

The 30-day public comment period started on August 10, 2006 and ended on September 11, 2006. No comments were received from the public, company, or the EPA. However, after a conversation with Andy Hixson, with Trinity Consultants on September 27, 2006, it became clear that some aspects of the permit more fully considered and changes corrections should to be made to the permit before it was issued. Below are the changes:

1. Permit Condition 3.3.7, as proposed, was:

The Permittee shall comply with all applicable provisions of 40 CFR 63, Subpart DDDD – “National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products” as it applies to the Flash Bulb Tube Dryers (source codes EU05, EU06, and EU07), the Fluidized Bed Energy System (source code EU24) and the Press Vent System (source code EU22) on and after October 1, 2008.

The correct term is not “Flash Bulb Tube Dryers,” it is “Flash Tube Dryers.” The word “bulb” has been removed in the final permit.

2. Permit Condition 4.2.1 had read:

The Permittee shall conduct performance tests at approximately 48-month intervals to verify compliance with the PM, CO, and VOC emission limits in Conditions 3.2.3, 3.2.15, 3.3.3, 3.4.1, 3.4.2, and 3.4.3. [PSD avoidance; 40 CFR 60 Subpart Db; 391-3-1-.02(6)(b); 391-3-1-.02(6)(e)]

It was pointed out that this condition could be written much more clearly, with regard to exactly which equipment and which pollutants are to be tested every 4years. It was noted that proposed Condition 3.4.3 (for which testing is required) subjects all equipment to Rule(e) "except the Fluidized Bed Energy System (source code EU24) and the Wax Plant Boiler (source code EU25)..." Mr. Hixson said that, since that since there are 17 pieces of equipment that are controlled by baghouses and which have PSD-avoidance PM limits, it had been assumed by Langboard that these units were those to be tested. Given the sheer number of these sources, Langboard had assumed that only a few sources needed to be tested each time. He asked that EPD either spell out the requirement to make it clear whether all were to be tested each time or whether just some need be tested.

The initial Title V permit and proposed renewal were reviewed to determine whether the permit conditions were as ambiguous as was said. As already stated above, proposed Condition 4.2.1 reads:

“The Permittee shall conduct performance tests at approximately 48-month intervals to verify compliance with the PM, CO, and VOC emission limits in Conditions 3.2.3, 3.2.15, 3.3.3, 3.4.1, 3.4.2, and 3.4.3.”

Condition 3.2.3 limits VOC, formaldehyde, CO and PM from the dryer stack, for PSD-avoidance.

Condition 3.2.15 limits PM, VOC, and from the board press, for PSD-avoidance.

Condition 3.3.3 limits PM from the energy system, to comply with Subpart Db.

Condition 3.4.1 limits VE to 40% opacity from the energy system to comply with Rule(b).

Condition 3.4.2 limits PM from the energy system to comply with Rule(d).

Condition 3.4.3 limits PM from "all the sources, except the Fluidized Bed Energy System" to comply with Rule(e). [Note: the "Wax Plant Boiler" was added to the exclusion language for the renewal permit because it is a boiler, subject to Rule(d), which was added to the plant after issuance of the initial Title V permit.]

It can be argued that, if Langboard did not agree with these conditions, they should have commented when they appeared over 5 years ago, in the initial Title V permit. A review of the files shows that they did comment on the draft permit, but did not address this requirement to test all Rule(e) sources every 4 years. The explanation may be that, given how unusual this condition is worded, that they did not understand it. Condition 3.4.3 is, as follows:

3.4.3 The Permittee shall not discharge or cause the discharge into the atmosphere from all the sources, except the Fluidized Bed Energy System, any gases which contain particulate matter in excess of the rate derived from $E=55P^{0.11} - 40$ where E equals the allowable particulate emission rate in pounds per hour and P equals the dry process input weight rate in tons per hour.
[391-3-1-.02(2)(e)1(i)]

It is concluded that the requirements of this testing condition are fairly clear and that the company has not complied. However, it might be difficult for the source to determine exactly which sources are subject to Rule(e). In any case, the narrative presents no justification for testing all Rule(e) sources or even the 17 controlled by baghouses. [Note: The matter was discussed with representatives of the compliance program and the testing and monitoring program; they agreed that periodic testing of sources controlled by baghouses need not be required if periodic monitoring is required.] Therefore, the files were reviewed to determine EPD's intent and whether sufficient monitoring was required.

First, it was noted that a number of these sources were required to test by the initial permit, as noted below:

Condition 9 required testing the Heat Source (SC 24) for PM.

Condition 10 required testing PM emissions from:

- The Face Dryer #1 Relay System (SC 8)
- The Core Dryer #1 Relay System (SC 10)
- The Vacuum Relay & System (SC 13)
- The Sander Pneumatic #1 (SC 14A)
- The Primary Saws Pickup System (SC 18).

Condition 11 required testing the Heat Source (SC 24) for CO.

Condition 12 required testing the Heat Source (SC 24) for NOx.

Condition 13 required testing the Core and Face Dryer Stacks (SC 24) for PM and VOC.

Condition 14 required testing the Core and Face Dryer Stacks (SC 24) for formaldehyde.

Once the plant constructed and began operating in 1999, testing was done with the following results:

Heat Source (SC 24) CO: 5.3% of allowable
Heat Source (SC 24) PM: 20.0% of allowable
Heat Source (SC 24) NOx: 27.2% of allowable

System after the Dryers (SC 24) VOC: 85.36% of allowable (1999)
System after the Dryers (SC 24) VOC: 76.1% of allowable (2000)
System after the Dryers (SC 24) formaldehyde: 75.9% of allowable (1999)
System after the Dryers (SC 24) formaldehyde: 47.2% of allowable (2000)
System after the Dryers (SC 24) PM: 18.33% of allowable (1999)

Press (SC) VOC: 63.0%
Press (SC) formaldehyde: 75.0% (1999)
Press (SC) formaldehyde: 47.2% (2000)

The Face Dryer #1 Relay System (SC 8): 5.38% of allowable
The Core Dryer #1 Relay System (SC 10): 8.7%
The Former Vacuum System (SC 12): 21.9% [tested instead of SC 13 due to it being difficult to access.]
The Sander Pneumatic System (SC 14): 23.4%
Sawdust Pickup System (SC 19): 20.8%

It appears clear that further testing of this equipment, which is controlled by baghouses, is not necessary. An adequate monitoring plan (with reportable thresholds) is all that is required by Title V and the Georgia Rules for Air Quality. Condition 5.2.5 requires a daily assessment of visual emissions. If any visible emissions are seen, Condition 5.2.6 requires that the facility “determine the cause of the excursion and correct the problem in the most expedient manner possible” and “note the cause of the excursion, pressure drop, any other pertinent operating parameters, and the corrective action taken in the maintenance log.” Condition 6.1.7c.ii specifies that two consecutive observations of any baghouse, for which emissions were seen, constitutes a reportable excursion.

Additionally Condition 5.2.4 requires that a Preventive Maintenance Program be devised for each baghouse system, which will include that it inspected once per week of operation. This set of monitoring conditions is the standard means by which EPD assures compliance for operations, such as these, that are controlled by baghouses.

With regard to testing requirements other than for PM from baghouses, some changes also appear warranted, as noted below:

VOC emissions from Dryer stack: Emissions tests in 1999 and 2000 indicated that emissions were 85.36% and 76.1% of allowable, respectively. Therefore, testing will continue to be required. In line with similar sources, it was determined that these emissions should be tested every year unless emissions are less than 75% of allowable; in which case, they can switch to every 3 years.

Formaldehyde emissions from Dryer stack: Emissions tests in 1999 and 2000 indicated that emissions were 75.9% and 47.2% of the allowable, respectively. Therefore, it has been determined that testing will be required whenever there is a VOC test.

CO emissions from Dryer stack: Initial emissions testing indicated that emissions were 5.3% of the allowable. Therefore, it has been determined that CO testing will no longer be required.

PM emissions from Dryer stack: Initial emissions testing indicated that emissions were 18.33% of the allowable. Given the importance of the Wet ESP, it has been determined that PM testing will be required every 2 years, but every 4 years if emissions are less than 50% of the allowable.

PM emissions from Board Press: No record was found of the testing results. It has been determined that PM testing will be required every 2 years, but every 4 years if emissions are less than 50% of allowable.

VOC emissions from Board Press: Initial emissions testing indicated that emissions were 63.0% of the allowable. As with similar facilities, it has been determined that VOC testing will be required every year, but only every 3 years if emissions are less than 75% of allowable.

PM emissions from the energy system (prior to dryers):

There appears to be no reason to periodically test what the emissions are from this intermediate point. While we have determined that the emissions at that point are subject to Subpart Db, the NSPS only requires initial testing. That testing showed emissions to be only 20% of the allowable. Since this location has a COMS (as required by the NSPS), no further testing should be required.

Therefore, Condition 4.2.1 is changed to read:

- 4.2.1 The Permittee shall conduct the following performance tests, at the frequency specified, to verify compliance with the emission limits specified in Section 3 of this permit. [PSD avoidance; 391-3-1-.02(6)(b); and 391-3-1-.02(6)(e)]
- a. Volatile organic compound (VOC) and Formaldehyde emissions from the outlet of the WESP (source code C005) shall be conducted once per year, at approximately 12-month intervals; the frequency may be reduced to once per 3 years, if testing demonstrates that emissions of VOCs are less than 75% of allowable.
 - b. Particulate matter (PM) emissions from the outlet of the WESP (source code C005) shall be conducted once every 2 years, at approximately 24-month intervals; the frequency may be reduced to once per 4 years, if testing demonstrates that emissions are less than 50% of allowable.
 - c. PM emissions from the Press Vent System (source code EU22) shall be conducted every 2 years, at approximately 24-month intervals; the frequency may be reduced to once per 4 years, if testing demonstrates that emissions are less than 50% of allowable.
 - d. VOC emissions from the Press Vent System (source code EU22) shall be conducted once per year, at approximately 12-month intervals; the frequency may be reduced to once per 3 years, if testing demonstrates that emissions of VOCs are less than 75% of allowable.

After less frequent testing has been allowed, because a test result is lower than the threshold specified in any of the above paragraphs, if a subsequent test shows emissions are above the that threshold, the Permittee shall revert to the more frequent testing until new test results show emissions are below the threshold.