



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

STATEMENT OF LEGAL AND FACTUAL BASIS

Franklin Lumber, LLC
529 Carrsville Highway
Franklin, Virginia
Permit No. (TRO- 61673)

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Franklin Lumber, LLC has applied for a Title V Operating Permit for its Franklin facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Permit Writer:

Laura D. Corl
(757) 518-2178

Date: November 3, 2015

Regional Air Permits
Manager:

Troy D. Breathwaite

Date: November 3, 2015

Regional Director:

Maria R. Nold

Date: _____

I. FACILITY INFORMATION

Permittee

Franklin Lumber, LLC
529 Carrsville Highway
Franklin, Virginia 23851

Responsible Official

E. Carl Buck
Plant Manager

Facility

Franklin Lumber, LLC
529 Carrsville Highway
Franklin, Virginia 23851

Contact Person

E. Carl Buck
Plant Manager
757-304-5200

County-Plant Identification Number: 51-093-00061

Facility Description: NAICS: 321113, 321999 SIC: 2421

Franklin Lumber LLC (61673) is a new Title V facility that has restarted the previously shut down International Paper-Franklin Lumber Mill (61448) located at 529 Carrsville Highway in Franklin, Virginia. Franklin Lumber LLC purchased the operations of the facility from International Paper who had operated the lumber mill for many years. Franklin Lumber LLC has a new registration number (61673) for their operations.

The lumber mill consists of 3 parts: a sawmill, where log receiving, debarking and trimming takes place; three lumber drying kilns; and a planer mill, where planing, final trimming, and a waste wood hog operate. Specific equipment at the plant consists of 2 bucking saws (rated at 40 thousand board feet per hr (MBF/hr), each), 2 debarkers (40 MBF/hr), a wood chipper (16 MBF/hr), a screener (16 MBF/hr), 2 bark conveyors (30 ton/hr) and a waste conveyor (30 ton/hr).

The logs arrive at the plant and are debarked, then cut to a specific length and then trimmed into dimensional lumber. This area of the plant is all fugitive emissions. From the sawmill area the lumber is then sent to the kiln area. There are 2 natural gas fired boilers (25.2 mmBtu/hr, each), which supply steam to three drying kilns; 2 of which are rated at 163 MBF per 20-hour charge and one is rated at 126 MBF per 20-hour charge. From the kilns, the wood is run through a planer (60 MBF/hr) and then a trim saw (60 MBF/hr) before being shipped. The waste wood hog (60 MBF/hr) reduces the size of the planings and trimmings. All emissions from the planer, trim saw and waste wood hog are routed through a fabric filter (99.9% efficiency) to control the particulate emissions. The primary pollutants being emitted from this source are particulate matter of varying sizes (chips > 100 microns, PM<100 microns, PM₁₀<10 microns and PM_{2.5}<2.5 microns) from all the wood working operations, and VOCs and HAPs (Methanol) from the lumber kilns. The facility produces wood chips as a by-product from the primary operations.

This facility is a state major source of VOC and a Title V major source for VOC and HAP (Methanol). They are currently operating under a State Major NSR permit dated November 18, 2013.

II. EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
B1	S1	Cleaver-Brooks Natural Gas Fired Boiler (1994) NSPS Dc, MACT DDDDD	25.2 mmBtu/hr, 600 HP				11/18/13
B2	S2	Cleaver-Brooks Natural Gas Fired Boiler (1994) NSPS Dc, MACT DDDDD	25.2 mmBtu/hr, 600 HP				11/18/13
SawMill							
IS1		Bucking Saw 1, Unknown (1985)	40 MBF/hr				11/18/13
IS2		Bucking Saw 2, Unknown (1985)	40 MBF/hr				11/18/13
IS3		Wood Chipper & Loading, Unknown (2002)	16 MBF/hr				11/18/13
IS7		Lumber Debarker, Valon Kone (1992)	40 MBF/hr				11/18/13
IS8		Cambio Lumber Debarker (1992)	40 MBF/hr				11/18/13
IS9		Chip Screener, Unknown (1985)	16 MBF/hr				11/18/13
Drying							
1L		No. 1 Lumber Dry Kiln, Irvington-Moore (1982) MACT DDDD	163 MBF/20 hour charge				11/18/13
2L		No. 2 Lumber Dry Kiln, Irvington-Moore (1982) MACT DDDD	163 MBF/20 hour charge				11/18/13
3L		No. 3 Lumber Dry Kiln, Wellons (1989) MACT DDDD	126 MBF/20 hour charge				11/18/13
Planer Mill							
4L	CL	Planer, Newman Whitney (1989)	60 MBF/hr	Fabric Filter Pneumafil Air Filter 13.5-448-12	PCD-CL	PM, PM10, PM2.5	11/18/13
5L	CL	Trim Saw, Irvington-Moore (1989)	60 MBF/hr	Fabric Filter Pneumafil Air Filter 13.5-448-12	PCD-CL	PM, PM10, PM2.5	11/18/13
6L	CL	Waste Wood Hog, Stedman (1989)	60 MBF/hr	Fabric Filter Pneumafil Air Filter 13.5-448-12	PCD-CL	PM, PM10, PM2.5	11/18/13

III. COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

IV. EMISSIONS INVENTORY

Emissions from 2014 are summarized in the following tables.

2014 Facility Actual Emissions

Emission Unit	2014 Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO ₂	PM ₁₀	NO _x
Saw Mill				0.6	
Kilns	85.3			0.9	
Planing Mill				8.6	
Boilers	1.5	14.1	0.1	1.4	11.3
Total	86.3	14.1	0.1	11.6	11.3

2014 Facility Hazardous Air Pollutant Emissions

Pollutant	2014 Hazardous Air Pollutant Emission in Tons/Yr
Methanol	5.0

V. FUEL BURNING EQUIPMENT REQUIREMENTS - (Units B1 & B2)

The following Federal Requirements are applicable to this source:

40 CFR Part 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR Part 63, Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5 Chapter 50	New and Modified Stationary Sources
9 VAC 5 Chapter 60	Article 2: EPA Maximum Achievable Control Technology Standards
9 VAC 5 Chapter 80	Article 1: Federal Operating Permits for Stationary Sources
9 VAC 5 Chapter 80	Article 2: Permit Program Fees for Stationary Sources
9 VAC 5 Chapter 80	Article 4: Insignificant Activities
9 VAC 5 Chapter 80	Article 6: Permits for New and Modified Stationary Sources
9 VAC 5 Chapter 80	Article 10: Permit Application Fees for Stationary Sources
9 VAC 5 Chapter 80	Article 11: Annual Permit Maintenance Fees for Stationary Sources

A. Limitations

Conditions 1 - 5 list the limitations for the boilers. These include the boiler MACT (DDDDD) annual tune-ups and the one time energy assessment. The boilers are limited to operating only on natural gas and they are not limited by hours of operation so the emission limits are based on the manufacturer's emissions data operating at 8760 hours of operation. Visible emissions are limited to 10% opacity.

B. Monitoring

Condition 6 requires visible emission monitoring.

C. Recordkeeping

Condition 7 lists the recordkeeping required for the boilers which includes keeping track of the throughput of natural gas to the boilers, maintaining visible emission logs, keeping records of the annual tune-up and energy assessment required by the boiler MACT.

VI. PROCESS EQUIPMENT REQUIREMENTS

The following Federal Requirements are applicable to this source:

40 CFR Part 63, Subpart DDDD National Emission Standards for Hazardous Air Pollutants:
Plywood and Composite Wood Products

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5 Chapter 50	New and Modified Stationary Sources
9 VAC 5 Chapter 60	Article 2: EPA Maximum Achievable Control Technology Standards
9 VAC 5 Chapter 80	Article 1: Federal Operating Permits for Stationary Sources
9 VAC 5 Chapter 80	Article 2: Permit Program Fees for Stationary Sources
9 VAC 5 Chapter 80	Article 4: Insignificant Activities
9 VAC 5 Chapter 80	Article 6: Permits for New and Modified Stationary Sources
9 VAC 5 Chapter 80	Article 10: Permit Application Fees for Stationary Sources
9 VAC 5 Chapter 80	Article 11: Annual Permit Maintenance Fees for Stationary Sources

A. Limitations

Conditions 8-16 list the limitation conditions for the saw mill, the lumber kilns and the planing mill. These include: a requirement to have a fabric filter on the planing mill operations with a monitoring device; fugitive dust limitations; throughput limits for the lumber kilns and the planing mill; emission limits for the three processes, and a visible emission limit on the fabric filter in the planing mill.

This facility is applicable to MACT DDDD according to 40 CFR 63.2231(a) because they have lumber kilns. In 40 CFR 63.2252 the regulation specifically exempts lumber kilns from the regulation and all the requirements of Subpart A with the exception of the initial notification requirements. This requirement has been completed, so there are no applicable requirements in the permit from MACT DDDD.

B. Monitoring

Conditions 17 and 18 list the monitoring requirements for the saw mill, the lumber kilns and the planing mill. Visible emissions checks and differential pressure monitoring of the fabric filter at the planing mill are the monitoring requirements for these processes.

The potential to emit of the planing mill is 65.7 ton/yr uncontrolled (PM/PM10), so this process is not CAM applicable.

C. Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include the annual throughputs for the saw mill, the lumber kilns and the planing mill in thousand board feet (MBF); records of the monitoring of the differential pressure gauge on the planing mill fabric filter and records of the visible emission checks on the planing mill fabric filter.

VII. FACILITY WIDE REQUIREMENTS

Conditions 20 and 21 list the facility wide requirements.

Condition 20 is the facility wide emission limits for all criteria pollutants, which is the summation of the boilers, the sawmill, the lumber kilns, and the planing mill. There is no monitoring or recordkeeping associated with this condition because it is covered in Sections III and IV of the permit.

Condition 21 is the requirement that the facility must be constructed in a manner that would allow for testing at any time using appropriate test methods.

VIII. STREAMLINED REQUIREMENTS

Condition 12 of the underlying NSR permit dated 11/18/13, has been streamlined out because all the requirements for MACT DDDDD have been included in the Title V permit and is redundant.

Condition 23 of the underlying NSR permit dated 11/18/13, has been streamlined out because the stack testing has been completed.

Condition 24 of the underlying NSR permit dated 11/18/13, has been streamlined out because the notification requirements have been completed.

IX. GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Conditions 25-30 - Permit Expiration - These conditions refer to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit applications has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-09".

Condition 36 - Failure/Malfunction Reporting - Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

Condition 40 - Permit Modification - This general condition cites the sections that follow:

9 VAC 5-80-50 - Applicability, Federal Operating Permit For Stationary Sources.

9 VAC 5-80-190 - Changes to Permits.

9 VAC 5-80-260 - Enforcement.

9 VAC 5-80-1100 - Applicability, Permits For New and Modified Stationary Sources.

9 VAC 5-80-1605 - Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas.

9 VAC 5-80-2000 - Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas.

Condition 54-57. Malfunction as an Affirmative Defense - The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition 36 and General Condition 54-57. For further explanation see the comments on general condition 36.

Condition Y - Asbestos Requirements - The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

X. INAPPLICABLE REQUIREMENTS

There were no regulations listed as inapplicable in the application.

XI. INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720 B)	Rated Capacity (9VAC5-80-720 C)
IS4	Lumber Mill Saw	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS5	Band Saw	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS6	Holtec Vario-Cut Saw	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS10	Chip Screener Feed Conveyor	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS11	Bark Conveyor	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS12	Bark Conveyor	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS13	Waste Conveyor 1	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS14	Various Conveying Equipment	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS15	Baghouse Fines Conveyor	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS16	Baghouse Fines Conveyor	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS17	Baghouse Fines Bin	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	
IS18	Savings Bin	9 VAC 5-80-720 B	PM/PM ₁₀ /PM _{2.5}	

¹The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

XII. PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Tidewater News from **Friday, September 18, 2015** to **Monday, October 19, 2015**.