

INFORMATION RELATIVE TO THE DRAFT TITLE V OPERATING PERMIT September 19, 2023

GENERAL FACILITY INFORMATION

Facility Name: Weyerhaeuser NR Company, McComb Wood Products

Facility Address: 2056 Jesse Hall Industrial Parkway, Magnolia, MS 39652

County: Pike

SIC Code(s): 2421

NAICS Code(s): 321113

APPLICATION SUMMARY

Permit No.: 2280-00050

NSPS (Part 60): IIII

Permit Action: Renewal

NESHAP (Part 61): N/A

Permit Folder: PER20220001

NESHAP (Part 63): DDDD; ZZZZ

Application Receipt Date: November 17, 2022

112(r) / RMP: N/A

Application Deemed Complete: April 6, 2023

Other: N/A

CBI Submitted? No

FACILITY DESCRIPTION

Weyerhaeuser NR Company – McComb Wood Products (“Weyerhaeuser”) is an existing wood products sawmill that produces dimensional lumber from southern yellow pine trees. The facility’s operations fall within SIC Code 2421 (Sawmills and Planing Mills, General).

Operations at the facility include the log processing area, the green lumber sawmill area, the lumber drying area, the planer mill, and the shipping area. Southern yellow pine logs are delivered to the mill by truck where they are stored until they can be debarked and then cut to usable lengths. Once cut to usable lengths, the logs are cut into rough boards of different dimensions in the sawmill. The green cut lumber is then dried in one of seven (7) wood-fired drying kilns. Once dry, the rough-cut lumber is removed from the drying kilns and sent to the planer mill where the rough-cut lumber is cut to its final thickness, width, and length. The final product is then graded, stamped, and stored prior to shipping.

TITLE V SOURCE APPLICABILITY

The facility’s potential-to-emit (PTE) exceeds the Title V major source threshold of 100 tons per year (tpy) for each of the following criteria air pollutants: carbon monoxide (CO), particulate matter less than 10 microns (μm) in diameter (PM_{10}), and volatile organic compounds (VOCs). The facility’s potential-to-emit hazardous air pollutants (HAPs) exceeds the Title V major source thresholds of 25 tpy of total HAPs and 10 tpy for the following individual HAP – methanol.

Facility-Wide Potential-to-Emit Summary¹

Pollutant	PTE Emissions (tons/yr)
Particulate Matter (TSP)	109.72
PM ₁₀	101.94
PM _{2.5}	64.37
Sulfur Dioxide (SO ₂)	20.21
Nitrogen Oxides (NO _x)	95.70
Carbon Monoxide (CO)	423.45
Volatile Organic Compounds (VOCs)	839.79
Total Reduced Sulfur (TRS)	--
Lead	--
CFC/HCFC	--
Total HAPs	48.36

¹ The PTE emissions reflect any emission limits or enforceable restrictions included in the proposed permit.

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY

The facility is not one of the twenty-eight (28) categorical facilities listed in 40 CFR 52.21(b)(1)(i)(a); therefore, the PSD threshold for a major source is 250 tpy. The facility has the potential to emit more than 250 tpy of VOCs and CO; therefore, the facility is considered a major stationary source. This permitting action will not change the current PSD status of the facility.

FACILITY MODIFICATIONS AND/OR PERMIT CHANGES

The facility applied for a re-issuance of the Title V Operating Permit (TVOP) without proposed changes to the existing permit monitoring requirements or equipment on-site. Since the last TVOP modification in 2022, Weyerhaeuser has submitted two 502(b)(10) modification requests. However, neither one required any changes to the TVOP.

Based on the information submitted in the permit application, the MDEQ proposes the following changes to the TVOP:

- Reclassifying the Dry Lumber Waste Chipper and Conveyor System (Emission Point AA-013) as an 'insignificant activity': There are no specific requirements for these units and their potential emissions are below the thresholds outlined in 11 Miss. Admin. Code Pt. 2, R. 6.7.D.
- Removing the requirement for calculating emissions for the lumber kilns (Emission Points AA-002, AA-003, AA-004, AA-005, AA-006, AA-007 and AA-011), planer mill (Emission Point AA-008) and wood fuel silo (Emission Point AA-010): The facility demonstrates compliance with the PM, PM₁₀, NO_x, CO and VOC emission limitations (established in the PSD Permit to

Construct issued December 28, 2000 and modified November 16, 2015) by monitoring the lumber throughput from the lumber kilns and the planer mill. The emissions for these sources are calculated using the lumber throughput data and the pollutant-specific emission factors specified in the permit. Since the emissions vary solely based on lumber throughput, the requirement to calculate and report them was removed.

COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY

40 CFR 64 specifies the requirements for CAM. The general applicability of this rule can be found in 40 CFR 64.2 and requires a Title V source to comply with the CAM requirements if all three of the following criteria are met for a pollutant-specific emission unit (PSEU):

1. The unit is subject to an emission limitation or standard for a regulated air pollutant other than exemptions under 40 CFR 64.2(b)(1);
2. The unit uses a control device to comply with the standard; and
3. The unit has pre-control emissions exceeding Title V major source threshold.

There is no control equipment associated with any emission unit subject to an emission limit or standard at the facility; therefore, the CAM provisions are not applicable to Weyerhaeuser.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) APPLICABILITY

40 CFR Part 63, Subpart DDDD – NESHAP: Plywood and Composite Wood Products – The provisions of Subpart DDDD are applicable to any facility that manufactures plywood and composite wood products (which includes kiln-dried lumber) and is located at a major source of HAP emissions. Weyerhaeuser manufactures dimensional lumber and is considered a major source of HAP emissions; therefore, the provisions of Subpart DDDD are applicable. Currently, the only applicable requirement under this subpart is the submittal of initial notification for the lumber kilns (which the facility has satisfied). However, the EPA is proposing revisions to this subpart, which may result in additional requirements for the lumber kilns.

40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) – The provisions of Subpart ZZZZ are applicable to stationary RICE located at area and major sources of HAP emissions. Emission Point AA-012 is considered an “existing” (i.e. constructed before June 12, 2006) emergency stationary RICE and it is subject to the maintenance and operating provisions of Subpart ZZZZ.

Emission Point AA-014 is considered a “new” (i.e. constructed after June 12, 2006) emergency RICE with a rating of less than or equal to 500 horsepower (HP) located at a major source of HAPs. As such, the engine demonstrates compliance with the provisions of Subpart ZZZZ by complying with the applicable requirements in 40 CFR Part 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines).

40 CFR Part 63, Subpart CCCCCC – NESHAP for Source Category: Gasoline Dispensing Facilities – The provisions of Subpart CCCCCC are applicable to gasoline dispensing facilities

located at an area source of HAPs. Weyerhaeuser has a 2,000-gallon gasoline storage tank. However, the facility is classified as a major source of HAPs; therefore, it is not subject to the provisions of Subpart CCCCCC.

NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY

40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 – The provisions of Subpart Kb are applicable to storage vessels with a capacity greater than or equal to 75 cubic meters (19,813 gallons) that are used to store volatile organic liquids. None of the storage vessels at the facility exceed the applicability threshold; therefore, the storage vessels are not subject to the provisions of Subpart Kb.

40 CFR 60, Part Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines – The provisions of Subpart IIII are applicable to stationary CI internal combustion engines that were manufactured after April 1, 2006 (or after July 1, 2006 for fire pump engines). Emission Point AA-014 is a CI emergency fire pump engine manufactured after the applicability date; therefore, the engine is subject to Subpart IIII. The applicable requirements of Subpart IIII are included in the proposed permit.

40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – The provisions of Subpart JJJJ are applicable to stationary spark ignition internal combustion engines manufactured after June 12, 2006. The facility does not have any spark ignition engines; therefore, the facility is not subject to the provisions of Subpart JJJJ.

SPECIFIC APPLICABLE REQUIREMENTS

Emission Point No.	Pollutant	Draft Permit Emission Limits	Monitoring Requirements
Facility-wide	PM (filterable)	$E = 4.1 \cdot (p^{0.67})$; (113.8 lb. / hour and 498.6 tpy)	Monitoring not proposed given that a large margin of compliance is expected for these standards (applicable process equipment are subject to more stringent PM limits)
AA-002 AA-003 AA-004 AA-005 AA-006 AA-007 AA-011	PM (filterable)	$E = 0.8808 (I^{-0.1667})$	
	PM (filterable)	0.61 lb. / MBF (each kiln) 92.1 tpy (all kilns combined on a rolling 12-month total)	Monitor the total dried lumber throughput on both daily and rolling 12-month basis. Implement and maintain a Maintenance and Inspection Plan.
	PM ₁₀ (filterable + condensable)	0.61 lb. / MBF (each kiln) 92.1 tpy (all kilns combined on a rolling 12-month total)	
	NO _x	0.62 lb. / MBF (each kiln) 93.6 tpy (all kilns combined on a rolling 12-month total)	
	CO	2.80 lb. / MBF (each kiln) 422.8 tpy (all kilns combined on a rolling 12-month total)	
	VOC (as WPP1)	5.35 lb. / MBF (each kiln) 807.9 tpy (all kilns combined on a rolling 12-month total)	
	Lumber Throughput	302,000.0 MBF / Year (all kilns combined on a rolling 12-month total)	
AA-008	PM (filterable)	0.30 lb. / MBF and 4.53 tpy (rolling 365-day total)	Monitor total dried lumber throughput on both a daily and rolling 365-day total basis. Implement and maintain a Maintenance and Inspection Plan
	PM ₁₀ (filterable only)	0.30 lb. / MBF and 4.53 tpy (rolling 365-day total)	
	Lumber Throughput	302,000.0 MBF / Year (rolling 365-day total)	
AA-010	PM (filterable)	0.024 lb. / MBF and 3.62 tpy	Implement and maintain a Maintenance and Inspection Plan
	PM ₁₀ (filterable only)	0.024 lb. / MBF and 3.62 tpy	
AA-012 AA-014	PM (filterable)	0.6 lb. / MMBTU	Monitoring not proposed given that each engine is subject to a more stringent PM standard.
	Operational Requirements	100 hours / calendar year for maintenance and readiness testing; 50 hours / calendar year for non-emergency situations	Record the hours of operation for each type of operation (emergency & non-emergency)

Emission Point No.	Pollutant	Draft Permit Emission Limits	Monitoring Requirements
AA-014	NMHC+NO _x CO PM (filterable)	4.7 g. / KW-hr (3.5 g. / HP-hr) 5.0 g. / KW-hr (3.7 g. / HP-hr) 0.40 g. / KW-hr (0.30 g. / HP-hr)	Maintain documentation that engine is certified to meet standards