

**STATEMENT OF BASIS
EAST ALABAMA LUMBER COMPANY, INC.
LAFAYETTE, CHAMBERS COUNTY, ALABAMA
FACILITY/PERMIT NO. 302-S003**

This proposed Title V Major Source Operating Permit (MSOP) renewal has been developed in accordance with the provisions of ADEM Admin. Code chap. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

The initial application for this renewal was received on April 1, 2024, with revisions received on August 14, 2024, January 9, 2025, and January 15, 2025. The application was deemed complete on January 15, 2025. The initial MSOP was issued on November 9, 1999, and this is the 5th renewal. The current MSOP was issued and effective on November 9, 2019, and expired on November 8, 2024.

The facility is located in Chambers County, which is currently listed as attainment with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against East Alabama Lumber Company, Inc. (EAL) necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at <https://echo.epa.gov/> (Search using Facility ID AL000000010170S003)

Permit History

Table 1: *The following is a history of previously issued permits which established current permit limits for this facility.*

Issuance No./ Permit No.	Issuance Date	Limit(s) Established	Limit(s) Basis/ Reasoning
Air Permit No. X003	September 23, 2004	<ul style="list-style-type: none"> Kiln Production Limit: 100 MMBF during any consecutive 12-month period combined kilns 1 and 2 (DK-1 and DK-2) 	HAP
4REN MSOP*	August 19, 2019	<ul style="list-style-type: none"> Kiln Production Limit: 100 MMBF during any consecutive 12-month period combined kilns 1 and 2 (DK-1 and DK-2) 	HAP/ PSD (SMS)-VOC

**A new limit was not established during the 4th renewal MSOP. The PSD regulations began being referenced in relation to VOC through the existing throughput limit.*

Facility Operations

EAL operates a softwood sawmill in Lafayette, Chambers County. The significant sources of air pollutants include a 30 MMBtu/hr wood-fired suspension burner that provides direct heat to a 174 MBF dry kiln (EU 001); a 35 MMBtu/hr wood-fired suspension burner that provides direct heat to a 184 MBF dry kiln (EU 002); sawmill operations (EU 003) with a cyclone; and planer mill operations (EU 004) with two (2) cyclones. Insignificant emission sources at this facility include chipper operations, wet decking operations, parts washing, petroleum storage and loading/unloading, mobile internal combustion engines, miscellaneous wood waste handling, unpaved roads, and ash handling.

Incoming logs from wet decking operations are transferred to the new sawmill where they are debarked and cut to length. Equipment used includes debarker, cut saw, band saw, profiler, gang saw, edger, trip saw, sorter, stacker, and chipper. Most of the sawdust is conveyed by auger into a closed top hopper and pneumatically conveyed, via closed loop air lock system to the kiln fuel bins. The remainder of the sawdust/shavings and bark is loaded directly into trucks and transported off-site.

Trim blocks from the sawing operations are transported to one of two chippers. Chips are dropped into a storage bin (via chain conveyor), loaded into trucks, and transported off-site.

The lumber is conveyed to one of the two (2) direct fired dry lumber kilns. Emissions from the kilns are vented through stacks. Lumber from the dry kilns is conveyed to a planer mill where it is further cut and shaped. Emissions from the planer mill are conveyed to a dual cyclone system, operating in parallel. Wood waste is conveyed to a storage bin before being transported off-site.

The facility also has three Safety Kleen parts washers. Emissions from these units are fugitive. Diesel fuel and gasoline storage and handling operations are also conducted on-site.

Proposed Changes

This MSOP renewal will incorporate Air Permit No. X004, which was issued to EAL on February 1, 2023, for the construction of a replacement sawmill. Air Permit No. X004 was re-issued on February 3, 2025, to reflect the correct construction of the sawmill since the process was not built as proposed.

Applicability: Federal Regulations

Title V

This facility is considered a major source under Title V regulations because potential emissions of volatile organic compounds (VOC) exceed the 100 TPY major source threshold. The facility is considered a synthetic minor source of Hazardous Air Pollutants (HAP) due to a facility-wide throughput limit of 100 MMBF during any consecutive 12-month period, which serves to limit potential methanol emissions to less than 10 TPY and total HAP emissions to less than 25 TPY.

Prevention of Significant Deterioration (PSD)

The facility operations are not one of the 28 listed major source categories, and the facility is located in an attainment area for all criteria pollutants. Therefore, the major source thresholds of concern are 250 TPY for criteria pollutants. The facility is a synthetic minor source under PSD regulations for VOC; EAL has facility-wide throughput limit of 100 MMBF during any consecutive 12-month period to limit the potential VOC emissions below the major source threshold of 250 TPY.

New Source Performance Standards (NSPS)

There are no sources at this facility that would be subject to any federal New Source Performance Standard (NSPS) regulations.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

This facility is considered an area source under 40 CFR 63, National Emission Standards for Hazardous Air Pollutants regulations due to a facility-wide throughput limit of 100 MMBF during any consecutive 12-month period, which serves to limit emissions of any single HAP to less than 10 TPY and emissions of total HAP to less than 25 TPY. There are currently no area source Maximum Available Control Technology (MACT) regulations applicable to the sources at this facility.

Applicability: State Regulations

Particulate Matter

Emissions from each process are subject to the particulate matter (as TSP) emission limitation of ADEM Admin. Code r. 335-3-4-.04 for Process Industries-General. The allowable emission rate for each of the facility's processes is calculated using the following process weight equations:

$$E = 3.59P^{0.62} \quad (P < 30 \text{ tons per hour})$$

Or

$$E = 17.31P^{0.16} \quad (P \geq 30 \text{ tons per hour})$$

where E = Emissions in pounds per hour

P = Process weight in tons per hour

Visible Emissions

The facility is subject to the State visible emissions standard of ADEM Admin. Code r. 335-3-4-.01(1) which states that each stationary source at the facility shall not emit particulate of an opacity greater than twenty percent (20%) (as measured by a six-minute average) more than once during any 60-minute period and at no time shall emit particulate of an opacity greater than 40% (as measured by a six-minute average).

Sulfur Oxides (SO_x)

The wood-fired suspension burners do not meet the definition of fuel burning equipment, as defined by ADEM Admin. Code r. 335-3-1-.02, because they provide direct heat to the kilns;

therefore, the burners are not subject to any sulfur dioxide (SO₂) emission limitations of ADEM Admin. Code r. 335-3-5.

Emission Testing and Monitoring

001 – Dry Kiln No. 1 (174 MBF Lumber Dry Kiln with 30 MMBtu/hr Wood-Fired Burner)

002 – Dry Kiln No. 2 (184 MBF Lumber Dry Kiln with 35 MMBtu/hr Wood-Fired Burner)

To verify compliance with the facility's 100 MMBF production limit, EAL is required to calculate the combined throughput for the previous calendar month and previous 12-month period for dry kiln nos. 1 and 2 within ten days after the end of each month. Emissions from the kiln vents are primarily condensed water vapor and VOC driven off from the drying lumber. Due to the nature of the emissions from the kilns, emission testing and monitoring for the SIP visible emission and particulate standards is not considered practical or necessary.

003 – Sawmill Operations (Sawmill with a Cyclone)

004 – Planer Mill Operations (Planer Mill with Two (2) Cyclones)

For compliance with the particulate and visible emission standards, emission monitoring for each cyclone would include:

- At least daily during daylight hours, while the process is operating, personnel familiar with the process shall perform an instantaneous check of the exhaust from each cyclone for the presence of greater than normal visible emissions, as determined by previous observations.
- Whenever observed visible emissions are greater than normal, corrective action to reduce the visible emissions to normal shall be initiated as soon as practicable but no longer than 24 hours from the time of observation, followed by an additional observation to confirm that visible emissions were reduced to normal.
- The cyclones shall be inspected for proper operation and cleaned at least annually, but more frequently whenever greater than normal visible emissions are observed. If the results of the inspection indicate that cleaning or maintenance is needed, such action shall be initiated as soon as practicable but no longer than 24 hours from the completion of the inspection.

Because emissions of particulate matter do not surpass any applicability thresholds, emissions testing will not be required at this time.

Recordkeeping and Reporting Requirements

The permittee is required to maintain records of production for EU 001 and EU 002 on a monthly and 12-month rolling total basis. These records shall be maintained in a permanent form readily available for inspection. The records shall be retained for a period of five years with the most recent two years being on-site.

The permittee is also required to maintain records of the required visible emission checks, inspections, and cleanings of all cyclones in a form suitable for inspection. The records shall be

retained for a period of five (5) years from the date of generation of each record. These records must include (as applicable):

- The date, time, and results of each instantaneous check of visible emissions;
- The date(s), time, nature, and results of any corrective action taken when deviations from an emission monitoring parameter were observed; and
- The date(s) and time each control device was inspected for proper operation and, if the results of the inspection indicated that cleaning or emission-related maintenance was needed, the date(s), time, and nature of the cleaning/maintenance performed.

The permittee is required to include the following information (as applicable) in the Semiannual Monitoring Report required by General Permit Proviso No. 21:

- The total kiln throughput for Emission Units 001 and 002 for each consecutive 12-month period during the reporting period;
- A statement as to whether all instantaneous checks of visible emissions were completed as required during the reporting period, and if not, the date(s) and reasons(s) why the monitoring was not performed;
- A statement as to whether the annual inspections of the cyclones were accomplished during the reporting period, and if so, the date and results of the inspection; and
- The date(s), time, nature, and results of any corrective action taken when (1) a deviation from an emission monitoring parameter was observed or (2) an inspection of the cyclones indicated that cleaning or emission-related maintenance was needed.

The permittee is required to submit an Annual Compliance Certification for each source to the Air Division as required by General Permit Proviso No. 12. This compliance certification must include the following for each source, as applicable:

- The identification of each term or condition of this permit that is the basis of the certification;
- The compliance status, whether continuous or intermittent;
- The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- Other facts the Department may require to determine the compliance status of the source.

Compliance Assurance Monitoring (CAM)

According to the application, there are no units at the facility that have prior to a control device the potential to emit greater than 100 TPY of any criteria pollutant. Therefore, this facility is not required to submit a CAM plan for this renewal.

Air Quality Impact

This facility is located in Chambers County, which is an attainment area for all criteria pollutants. It is not located within a 100 km radius of any PSD Class I Area. Therefore, the emissions from this facility are not expected to have any significant impact on the area.

Public Participation

A 30-day public comment period and a 45-day EPA review period are required prior to issuance of this MSOP.

Recommendation

Based on the above analysis, I recommend East Alabama Lumber Company, Inc.'s Major Source Operating Permit (302-S003) be renewed with the requirements noted above, and pending the resolution of any comments received during the 30-day public comment period and 45-day EPA review.

Melanie Nabors
Chemical Branch
Air Division

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Date