

Statement of Basis
Abbeville Fiber, LLC
Abbeville, Henry County, Alabama
Facility/Permit No. 606-S008

This draft Title V Major Source Operating Permit (MSOP) is issued under 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. This is the first issuance of the facility's Title V MSOP.

Abbeville Fiber (AF) produces southern pine dimensional lumber. The significant sources of air pollutants at this facility are a debarker, bark hog with storage bin, chipper with storage bin, sawmill, two (2) sawdust storage bins, a 55 MMBF/yr continuous lumber drying kiln (CDK) with a 27 MMBtu/hr wood-fired burner, a planer mill with cyclone and shavings storage bin, and a 223 BHP emergency fire pump engine. Insignificant sources of emissions are fueling of rolling stock, diesel fuel storage tanks, a parts washer, and welding.

Incoming logs are stored on-site prior to processing. The logs are debarked and cut to length before being processed into dimensional lumber in the sawmill. The bark is routed to a hog, and scrap wood from the sawmill is sent to a chipper/screen. The sawdust, hogged bark and chips are mechanically transferred to storage bins.

After being sorted and stacked, the lumber is dried in the continuous dry kiln. As the green lumber enters the continuous kiln, it is slowly heated until it reaches the center of the kiln, where most of the drying takes place. The kiln is direct-fired by a wood-fired burner. Fuel for the dry kiln consists of sawdust generated in the sawmill. All air emissions exhaust through the open doorways at each end of the kiln and through exhaust stacks located just inside and above the doorway openings.

After being dried, the lumber is transported to the planer mill to be cut to finished size. The lumber is then graded, trimmed, sorted and stacked. Shavings from the planer mill are pneumatically conveyed to a cyclone and storage bin to be shipped off site.

Finally, the lumber is forklifted to a warehouse to be shipped out. Waste products such as bark, green chips and dried chips are shipped off site. The facility also utilizes a 223 BHP diesel-fired fire pump engine to provide water in case of an emergency.

Title V

This facility is considered a major source under Title V regulations as the potential emissions of volatile organic compounds (131.67 TPY of VOC) exceed the 100 ton per year (TPY) major source threshold. It is a minor source of hazardous air pollutants (HAPs) as the potential emissions of any single HAP are less than 10 TPY and the potential emissions for combined HAP are less than 25 TPY.

PSD

The facility is located in Henry County which is currently classified as an attainment area for all criteria pollutants. AF is not one of the 28 Major Source categories listed in ADEM Admin. Code r. 335-3-14-.04(2)(a)(1); therefore, the major source threshold of concern is 250 TPY for criteria pollutants. Based upon the potential emissions of all criteria air pollutants, the facility is considered a minor source for PSD.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

NESHAP requires that any facility regulated under section 112 of the Clean Air Act whose potential emission of hazardous air pollutants (HAPs) exceeds the major source threshold, unless the source is a specifically designated area source, must control these emissions to the level achievable by the best demonstrated technology as specified in the applicable provisions under 40 CFR Part 63. The diesel fire pump engine is an affected source under 40 CFR 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. The engine is also subject to the applicable General Provisions as outline in 40 CFR Part 63. 40 CFR §63.6603(a) stipulates “an existing stationary RICE located at an area source of HAP emissions” must comply with the requirements in Table 2d to the subpart. The facility must maintain the engine as outlined in 40 CFR §63.6625 (e), (f), (h) and (i), to include following a maintenance plan, installing a non-resettable hour meter, minimizing the engine’s idle time and startup time, maintaining records as outlined in 40 CFR §63.6655, and submitting reports as outlined in 40 CFR §63.6650. The facility must also operate the engine with hourly limitations to demonstrate the unit is an “emergency stationary RICE” as outlined in 40 CFR §63.6640.

New Source Performance Standards (NSPS)

None of the processes at the proposed facility are affected sources under NSPS. The fire pump engine is not subject to Subpart IIII, *Standards of Performance for Stationary Compression Ignition Combustion Engines*, as it was manufactured prior to 2006.

State Regulations

Particulate Standards

Fuel Burning Equipment

The CDK burner is not subject to ADEM Admin. Code r. 335-3-4-.03(1), because the kiln is direct fired, and therefore, not considered “fuel burning equipment”. The fire pump engine is not subject to this regulation because its function is to supply water in the event of a fire.

Process Industries – General

All units and processes, except for the fire pump engine, are subject to the State particulate matter emission standards for process industries as provided in ADEM Admin. Code r. 334-3-4-.04(1). Utilizing the weight of the fuel to be burned and planer shavings to be transferred, the PM allowable for the kiln and planer mill pneumatic system would be 7.43 lb/hr and 10.1 lb/hr, respectively. However, the facility has

voluntarily requested lower PM emission limits. The PM emissions from the dry kiln and planer mill cyclone are therefore limited to 1.31 lb/hr and 0.42 lb/hr, respectively.

Visible Emissions

All units and processes are subject to the State visible emission standards of ADEM Admin. Code r. 335-3-4-.01(1), which states that no air emission source may emit particulate of an opacity greater than 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 Dioxide

The fire pump engine is subject to the State sulfur dioxide emission standard of 4.0 lb/MMBtu of heat input [ADEM Admin. Code r. 335-3-5-.01(1)(b)]. However, the potential emissions determined by AP-42 emission factors are used for applicability purposes under the Title V and PSD regulations. The CDK burner is not subject to the State sulfur dioxide emission standards as the unit is direct-fired.

Emission Testing and Monitoring

Testing

I recommend that no emission testing be required for the kiln because it is expected that the kiln would be able to comply with the applicable standards and PM limit, testing on continuous kilns is not easily conducted, and there are no emission control devices. I also recommend that no emission testing be required for the planer mill because calculations indicate that it should be capable of complying with the applicable standards and PM limit. If emission problems are observed in the future from these sources, testing may be required at that time.

CAM

Since cyclones on wood waste pneumatic systems are considered process equipment, CAM would not be required for the planer mill.

Periodic Monitoring

To ensure that the maximum capacity of the kiln is not exceeded, AF is required to calculate the kiln production on a monthly and 12-month rolling total basis, to be updated within ten (10) days of the end of each calendar month.

To ensure proper operation of the planer mill, visual observations are required on a weekly basis, with corrective actions to be initiated as soon as practicable but not longer than 24 hours if greater than expected visible emissions are noted from the cyclone. Annual physical inspections of the cyclone are also required.

Recordkeeping and Reporting

Recordkeeping

AF is required to maintain records of its actions taken to comply with proper maintenance and operating practices. Records of weekly visual observations of the cyclone are also required, as well as records of monthly and 12-month rolling lumber production. These records are maintained on-site in a permanent form readily available for inspection.

Reporting

AF is required to submit Semiannual Monitoring Reports for the processes, which include a certification that all emission monitoring and proper maintenance and operating practices were accomplished as required during the reporting period, and if not, describe the date and reason any required action was not accomplished.

Public Notice

The issuance of this Title V MSOP would require a 30-day public comment period and a 45-day EPA review period.

Recommendation

I recommend that Abbeville Fiber's Title V MSOP be issued with the requirements noted above pending the resolution of any comments received during the 30-day public comment period and the EPA 45-day review.



Lester Meredith
Chemical Branch
Air Division

August 28, 2020

Date

VLM/vlm