

STATEMENT OF BASIS
Stella Jones-Brierfield
Brierfield, Bibb County, Alabama
Facility No. 401-0011

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 MSOP application deemed complete on September 20, 2024. The initial MSOP was issued on August 26, 1999, and this would be the 5th renewal. The current MSOP was issued on June 21, 2019, became effective on August 26, 2019, and is scheduled to expire on August 25, 2024; however, it has been administratively extended until the renewal is issued.

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

There are no current or ongoing enforcement actions against Stella Jones-Brierfield 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 AL0000000100700011).

Permitting History

On February 23, 2005, Air Permit No. X004 was issued to limit Creosote production to remain an area source of HAP. On April 15, 2015, Air Permit Nos. X007 (limit kiln production to 50 MMBF during any consecutive 12-month period) and X008 (Boiler Nos. 001 and 002 not allowed to operate simultaneously and Boiler No.1 limited to 360 hours per 12-month consecutive period) were issued. On January 12, 2017, Air Permit No. X009 was issued to increase the limit of Creosote production to 5,400,540 cubic feet (ft³) during any consecutive 12-month period to remain an area source for HAP. On February 22, 2023, an administrative modification was issued to the facility for a name change from Cahaba Pressure Treated Forest Products to Stella Jones-Brierfield.

Facility Operations

Stella Jones-Brierfield (SJ-B) produces dimensional lumber and treated pine utility poles. The significant sources of air pollutants at the facility include one wood-fired boiler, pole/sawmill, four steam-heated dry kilns, planer mill operation with cyclone, tie mill operation, four wood preserving and storage operations [creosote, pentachlorophenol, copper naphthenate, and chromated copper arsenate (CCA)], a wastewater treatment operation, and a gasoline storage tank.

Proposed Changes

On March 17, 2022, ST-B requested a flexibility change under CAA subpart 502(B)(10) to convert one of their Creosote wood treatment cylinders to use DCOIT. The purpose was to determine the facility's ability to utilize DCOIT as a wood treatment. The Department provided a letter of agreement on May 9, 2022. On February 10, 2023, ST-B requested another flexibility change to

convert their Pentachlorophenol wood treatment process to use DCOIT. The facility submitted the application because Pentachlorophenol chemical production was being discontinued. The Department provided a letter of agreement on May 24, 2023. In addition, the facility would like to remove the sawmill, planer mill, copper naphthenate wood treatment, gasoline storage tank, and cross-tie trimming operation from the MSOP because the equipment has either been removed from the property or will no longer be utilized.

Applicability: Federal Regulations

Title V

This facility is a major source under Title V regulations because potential emissions of particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOC) exceed the 100 TPY major source threshold. The facility is a synthetic minor source for hazardous air pollutants (HAP) because the facility requested a production limit to restrict the HAP potential emissions below the 10/25 TPY major source threshold.

Prevention of Significant Deterioration (PSD)

This facility is located in an attainment area for all criteria pollutants, and the facility operations are not one of the listed major source categories. Therefore, the major source threshold of concern is 250 TPY. The facility is a minor source for PSD because the facility-wide potential emissions of each criteria pollutant are less than 250 TPY.

New Source Performance Standards (NSPS)

The 28.7 MMBtu/hr wood-fired boiler (EU-002) is subject to the Standards of Performance for New Stationary Sources; Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc. Since the capacity of the boiler is <30 MMBtu/hr, the only requirement for this boiler under this standard is to maintain records of the fuel usage on either a daily or monthly basis. A 19.13 MMBtu/hr wood-fired boiler (EU-001) remains on site but has been deactivated. The remaining significant sources are not included in any NSPS source categories.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility has a production limit for creosote treated wood of 5.40 MM ft³ during any consecutive 12-month period. This limit was established to restrict the facility's HAP potential emissions below the applicable 10/25 TPY major source thresholds. In addition, SJ-B has taken a lumber kiln production limit (50 MMBF during any consecutive 12-month period) in order to remain a area source of HAP emissions.

40 CFR Part 63, Subpart DDDD, National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products (PCWP MACT)

As an area source, the dry kilns would not be affected sources under 40 CFR 63, Subpart DDDD, National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products (the "PCWP MACT").

40 CFR Part 63, Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants Industrial, Commercial, and Institutional Boilers at Area Sources (Area Source Boiler MACT)

CPTFP is an area source of HAP, therefore, the 28.7 MMBtu/hr wood-fired boiler is subject to the Area Source Boiler MACT. The boiler is classified as an existing source and is subject to a work practice standards requiring biennial tune-ups conducted in accordance with 40 CFR §63.11223. The first biennial tune-up required by 40 CFR §63.11196 was conducted on April 17, 2014. Each biennial tune-up is required no more than 25 months after the previous tune-up. The last biennial tune-up was conducted on December 6, 2022. The boiler is also subject to the general duty to minimize emissions in accordance with 40 CFR §63.11205(a). According to 40 CFR §63.11196, an energy assessment is required. This assessment was conducted on September 24, 2014.

An Initial Notification of Applicability was not submitted to the US EPA prior to the March 21, 2014, the compliance date specified in 40 CFR §63.11196. The Notification of Compliance Status specified in 40 CFR §63.11196, which indicates that the required initial tune-up has been conducted (September 24, 2014), was submitted on March 3, 2015, via the CDX system. The Notification of Compliance Status is required to include a statement indicating that the facility complies with the requirements in 40 CFR §63.11214 to conduct an initial tune-up of the boilers.

SJ-B is required to comply with the notification, reporting, and recordkeeping requirements outlined in 40 CFR §63.11225. The facility is required to keep a copy of each notification and report submitted to comply with Subpart JJJJJJ, and all documentation supporting any Initial Notification of Applicability or Notification of Compliance Status that is submitted. SJ-B is required to submit biennial compliance certification reports in accordance with 40 CFR §63.11225(b).

The facility is required to keep records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment. Also, the facility is required to maintain records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler to its normal or useful manner of operation. The records are required to be kept in a form suitable and readily available for expeditious review. Each record is required to be retained for a period of five (5) years following the date of each recorded action. For the first two (2) years of this five (5) year period, the records are required to be kept on-site in accordance with 40 CFR §63.11255(d).

40 CFR Part 63, Subpart OOOOOO, National Emission Standard for Hazardous Air Pollutants for Wood Preserving Operations (Wood Preserving MACT)

Since SJ-B is an area source for HAP, the CCA wood preserving operation is subject to the Wood Preserving MACT. The facility submitted an initial notification and notification of compliance status for this MACT on September 21, 2007. The standards applicable to the facility for the CCA operation under this MACT include:

- Apply the preservative to the wood product inside a retort or similarly enclosed vessel;
- Prepare and operate according to a management practice plan to minimize air emissions from the preservative treatment of wood, which must include:
 1. Minimize preservative usage;
 2. Maintain records on the type of treatment process and types and amounts of wood preservatives used at the facility;

3. Maintain charge records identifying pressure reading(s) inside the retorts (or similarly enclosed vessel);
4. Store treated wood product on drip pads or in a primary containment area to convey preservative drippage to a collection system until drippage has ceased;
5. Fully drain the retort to the extent practicable, prior to opening the retort door;
6. Promptly collect any spills; and
7. Perform relevant corrective actions or preventative measures in the event of a malfunction before resuming operations.

Applicability: State Regulations

Particulate Matter

The wood-fired boiler is subject to the particulate matter (as TSP) emission limitations of ADEM Admin. Code r. 335-3-4-.08(2)(d), which limits the boiler to 0.20 gr/dscf, adjusted to 50% excess air.

The lumber/pole dry kilns are subject to the particulate matter (as TSP) emission limitations of ADEM Admin. Code r. 335-3-4-.04 for Process Industries-General. The allowable emission rate for each process is calculated using one of 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 per hour in tons per hour

In addition to the above limitations, ADEM Admin. Code r. 335-3-4-.01(1) sets forth a visible emissions standard which states that the facility shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period from these sources. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Fugitive Dust and Fugitive Emissions

ADEM Admin. Code r. 335-3-4-.02 requires that precautions be taken to prevent particulate matter from becoming airborne. This rule is applicable to the facility. SJ-B submitted a fugitive dust plan as part of the application. The dust plan will be included in Appendix A of the permit.

Sulfur Dioxide (SO₂)

The wood-fired boiler is subject to the sulfur dioxide emission limitations of ADEM Admin. Code r. 335-3-5-.01(b), which limits the boiler to 4.0 lb/MMBtu heat input. As wood is the only fuel source for the boiler, it is expected to be able to comply.

Recordkeeping and Reporting Requirements

The facility would be required to maintain records of the required emission monitoring on-site in a permanent form suitable for inspection and readily available for inspection for at least five (5) years from the date of generation of each record. These records would include (as applicable):

- Records of the %O₂ monitoring data and the calculated 24-hour averages;

- The date, time, and results of each observation for visible emissions;
- The date(s), time, nature, and results of any corrective action taken when deviations from an emission monitoring parameter were observed;
- The date(s) and time the multiclone/cyclones were 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;
- All available process records and operator's logs verifying the boiler's operating parameters.
- The date, time, and duration of all startups and load changes.
- The facility must submit a biennial compliance reports as required by 40 CFR Part 63, Subpart JJJJJ. Furthermore, a report prepared after the required boiler tune-up is completed which should contain CO and O₂ measurements before and after tune-up, the description of corrective actions after the tune-up, and the type and amount of fuel used over the 12 months prior to the biennial tune-up.
- Production from Kiln Nos. 1, 2, 3, and 4 (EU-004A, 004B, 004C, and 004D, respectively) on a monthly and consecutive 12-month periods;
- Creosote wood production on a monthly and 12-month rolling total basis;
- For the CCA operation, records of the type of treatment process and types and amounts of wood preservatives used at the facility; and
- For the CCA operation, charge records identifying pressure reading(s) inside the retorts.

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

- The creosote wood production for each consecutive 12-month period during the reporting period;
- EU-004A, 004B, 004C, and 004D production for each consecutive 12-month period;
- A statement as to whether all emission monitoring was 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 multiclone/cyclones were accomplished during the reporting period, and if so, the date and results of the inspection;
- 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 multiclone/cyclones indicated that cleaning or emission-related maintenance was needed; and
- A statement as to whether the management practice plan for the Wood Preserving MACT was followed during the reporting period.

Compliance Assurance Monitoring (CAM)

None of the process units at the facility would be subject to CAM. This determination is based on the fact that the uncontrolled emissions of particulate from the boiler are less than the Title V major

source threshold, and the cyclone utilized for wood waste transfer from the planer mill is considered inherent process equipment.

Environmental Justice Screen

The Draft Permit contains emission limits based on State and Federal regulations that are protective of human health and the environment. In addition, the Department has robust public engagement that utilizes a number of tools, such as EPA's EJ Screen: Environmental Justice Screening and Mapping Tool, to ensure that local residents and stakeholders are provided a meaningful opportunity to participate in the permitting process. (<http://www.adem.alabama.gov/Moreinfo/pubs/ADEMCommunityEngagement.pdf>).

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 that Stella Jones-Brierfield MSOP 401-0011 be renewed 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.



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Air Division

December 23, 2024
Date