Statement of Basis
T.R. Miller Mill Company, Inc.
Brewton, Escambia County, Alabama
Facility/Permit No. 502-S002

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.

T.R. Miller Mill (TRMM) was originally constructed in 1892. The initial application for this renewal was received June 6, 2024, and the application was deemed complete on August 7, 2025. The initial MSOP was issued on December 21, 1999, and this is the 5th renewal. The current MSOP was issued on April 21, 2020, became effective on the same date and expired on December 20, 2024.

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

There are no current or ongoing enforcement actions against T.R. Miller 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 AL000000010530S002).

Permit History

Permit No.	Issuance Date	Limit(s) Established	Limit(s) Basis/ Reasoning
Air Permit No. Z003	September 21, 1999	• SSC-1 synthetic minor limit of 5.47 lb/hr PM	PSD avoidance
Air Permit No. X015	May 16, 2006	• Boiler SB-2 VOC limit of 0.017 lb/MMBtu	PSD BACT
Air Permit No. X019	July 23, 2008	• Kiln TP-1 synthetic minor limits of 0.88 lb/hr PM and 0.792 lb/hr PM10	PSD Avoidance
Air Permit No. X021	November 12, 2009	• Boiler SB-2 production limit: 334,075 MMBtu during any consecutive 12-month period • Boiler SB-2 synthetic minor limits of 0.22 lb/MMBtu of PM and 0.20 lb/MMBtu of PM10	PSD Avoidance
Air Permit No. X022	June 5, 2018	• DPK-1 VOC limit of 4.43 lb/MBF	PSD BACT
Air Permit No. X023	June 5, 2018	• DPK-2 VOC limit of 4.43 lb/MBF	PSD BACT
Air Permit No. X025	July 27, 2022	• PMCF-1 synthetic minor limit of 8.6 lb/hr PM	PSD Avoidance

Facility Operations

TRMM operates a sawmill, pole mill, and wood treating facility in Brewton, Escambia County, Alabama. The significant sources of air pollutants at this facility are the 68 MMBtu/hr (SB-1) and 35.62 MMBtu/hr (SB-2) wood-fired boilers that provide indirect heat to two (2) 100 MMBF/yr continuous dual path lumber dry kilns (DPK-1 and DPK-2); one (1) wood-fired (with a natural gas backup) continuous pole dry kiln (TP-1); a planer mill with pneumatic conveyance system utilizing a cyclofilter (PMCF-1) and a truck load-out bin with a closed loop cyclone; a box factory with pneumatic conveyance system utilizing four (4) cyclones; a specialty shop with pneumatic conveyance system utilizing a dual cyclone; a sawmill; a 240 HP diesel-fired emergency fire water pump engine; and one (1) gasoline storage tank (9,000 gallon). Insignificant emission sources at this facility include space heaters, debarkers, wood/lumber chippers, bark/chip/sawdust mechanical handling and transfer systems, CCA/diesel storage tanks, and storage piles.

Proposed Changes

Air Permit X025 was issued to TRMM on July 27, 2022, for a new planer mill pneumatic conveyance system with a cyclofilter and closed-loop cyclone. The system replaced the existing system (Unit 010) which included a cyclone, baghouse, and two truck loadout cyclones. The facility has requested that this change be incorporated into the Title V MSOP with this renewal. TRMM also requests that the requirement for quinquennial particulate matter testing for CDK TP-1 (Unit 003) in the current Title V MSOP be removed.

Applicability: Federal Regulations

Title V

This facility is a major source under Title V regulations because potential emissions of particulate matter (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC) exceed the 100 TPY major source threshold. It is also a major source of Hazardous Air Pollutants (HAP) because individual HAP potential emissions are greater than 10 TPY (Methanol) and the total HAP potential emissions are greater than 25 TPY.

Prevention of Significant Deterioration (PSD)

The facility is located in an attainment area for all criteria pollutants. The facility operations are not one of the listed 28 major source categories listed in ADEM Admin. Code r. 335-3-14-.04(2)(a)1(i); therefore, the applicable PSD major source threshold is 250 TPY for criteria pollutants. The facility is considered a major source under PSD regulations. The Sawmill Boiler No. SB-2 is subject to synthetic minor source limits for TSP, PM_{10}, an annual heat input limit, and a BACT limit for VOC. The Continuous Dry Kiln (TP-1), Planer Mill Pneumatic System and Specialty Shop are subject to synthetic minor source limits for TSP and PM_{10}. The Continuous Dry Kilns (DPK-1 and DPK-2) are each subject to a BACT limit for VOC.

New Source Performance Standards (NSPS)

Both boilers were constructed prior to June 9, 1989, the applicability date for 40 CFR Part 60, Subpart Dc, and are, therefore, not subject. The gasoline storage tank is not subject to any NSPS for storage tanks due to its size. The remaining significant sources are not included in any NSPS source categories.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

RICE MACT (40 CFR Part 63, Subpart ZZZZ)

The 240 Hp diesel-fired fire water pump engine is an affected source under 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* (the RICE MACT). The engine is classified as an existing source (constructed before June 12, 2006) and is subject to the work practice, recordkeeping and reporting requirements of 40 CFR Part 63, Subpart ZZZZ, and the applicable requirements of 40 CFR 63, Subpart A, General Provisions as provided in Table 8 to Subpart ZZZZ. The facility must comply with the applicable requirements of 40 CFR §63.6602 and Table 2c to Subpart ZZZZ, which include, but may not be limited to:

(a) Meet the following work practice requirements, except during periods of startup:

i. Change oil and filter every 500 hours of operation or annually, whichever comes first;

ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(b) During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(c) If the unit is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated.

(d) TRMM shall not operate this unit except as provided in §63.6640(f)(1) through (f)(4), which include but may not be limited to:

i. Emergency situations;

ii. Maintenance checks and readiness testing, not to exceed 100 hours per year; and

iii. Non-emergency situations, not to exceed 50 hours per year (those 50 hours are counted towards the 100 hours per year provided for maintenance and testing).

(e) In accordance with 40 CFR §63.6625(e) & 40 CFR §63.6640(a), the facility must operate and maintain the unit according to the manufacturer's emission-related written instructions or develop a maintenance plan that provides for, to the extent practicable, the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The engine must also be equipped with an hour meter in accordance with 40 CFR §63.6625(f).

(f) In accordance with 40 CFR §63.6655, TRMM must keep records of the operation and maintenance of the unit. At a minimum, these records shall include:

i. For each period of operation, the length of operation and the reason the engine was in operation during that time. For periods of operation designated as "emergency operation," the records shall reflect what classified the operation as emergency;

ii. The total number of hours the engine was operated during a calendar year subtotaled by the reason the engine was in operation;

iii. The dates of each oil and filter change with the corresponding hour on the hour meter;

iv. The dates of each inspection and replacement of air cleaners, hoses, and belts with the corresponding hour on the hour meter; and

v. The dates and nature of other emission-related repairs and maintenance performed.

(g) The facility must maintain onsite for the life of the unit either a copy of the manufacturer's emission-related operation and maintenance instructions for the unit or the maintenance plan developed in accordance with §63.6625(e).

(h) In accordance with 40 CFR §63.6660, and 40 CFR §63.10(b)(1), the facility must maintain files of all information (including all reports and notifications) required by 40 CFR 63, Subparts A and ZZZZ for the unit, recorded in a form suitable and readily available for expeditious inspection and review. The files must be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data must be retained onsite. The remaining 3 years of data may be retained offsite.

(i) In accordance with 40 CFR §63.6640(b), TRMM must report to the Air Division any failure to perform a work practice on the schedule required, including instances when the work practice standard was not performed due to emergency operation or unacceptable risk under a federal, state, or local law. The facility must submit the report within two working days of the deviation and provide an explanation as to why the work practice requirement was not performed.

Boiler MACT (40 CFR Part 63, Subpart DDDDD)

The facility is a major source of HAP emissions and has two boilers that are affected sources under 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 Boiler MACT). The 68 MMBtu/hr wood-fired boiler with multiclone (SB-1 or Emission Unit 002) and the 35.62 MMBtu/hr industrial wood-fired boiler with multiclone (SB-2 or Emission Unit 023) are subject to the emission limitations, work practice standards and compliance requirements of the Boiler MACT as outlined, but not limited to, the following:

(a) Pursuant to §63.7500, TRMM must comply with the applicable emission limitations and work practice requirements of 40 CFR Part 63 Subpart DDDDD Table 2 (Emission Limits for Existing Boilers and Process Heaters) and Table 3 (Work Practice Standards) at all times the units are operating, except during periods of startup and shutdown, during which time the units must comply with the work practices noted below:

(b) During Startup and Shutdown TRMM must operate all CMS,

(c) For startup of a boiler or process heater, TRMM must use one or a combination of the clean fuels listed in Table 3 of 40 CFR Part 63 Subpart DDDDD.

Applicable Emission Limitations

Required for	Pollutant	Limitation
Units in all subcategories designed to burn solid fuel	HCL	2.2×10^{-2} lbs per MMBtu heat input (Until October 6, 2025) and 2.0×10^{-2} lbs/MMBtu heat input (After October 6, 2025)
	Hg	5.7×10^{-6} lbs per MMBtu heat input (Until October 6, 2025) and 5.4×10^{-6} lbs/MMBtu heat input (After October 6, 2025)
Hybrid suspension grate units designed to burn biomass/bio-based solid	PM	0.44 lbs per MMBtu heat input
	CO	3500 ppm by volume on a dry basis corrected to 3% O_2

As an initial compliance requirement, TRMM was required to conduct a one-time energy assessment performed by a qualified energy assessor which met the requirements of Table 3. This assessment was performed on January 29, 2016, by McBurney Engineering.

To show continued compliance with the applicable emission standards, TRMM must conduct all applicable performance tests according to 40 CFR §63.7520 and Table 5 of Subpart DDDDD on an annual basis except as specified below.

(a) Annual performance tests must be completed no more than 13 months after the previous performance test,

(b) If performance tests for a given pollutant for at least 2 consecutive years show that emissions are at or below 75 percent of the emission limit for the pollutant and there are no changes to the operation or air pollution control equipment that could increase emissions,

i. The permittee may choose to conduct performance tests for the pollutant every third year

ii. Each such performance test must be conducted no more than 37 months after the previous performance test

iii. If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit for a pollutant, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit)

TRMM must conduct a tune-up of the boilers to demonstrate continuous compliance, as specified, but not limited to:

(a) Inspect the burner, and clean or replace any components of the burner as necessary,

(b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly,

(d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject,

(e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and,

(f) Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR §63.7540 (a)(10)(vi)(a) through (c).

(g) Each tune-up, specified in §63.7540(a)(12), must be conducted at least once every 72 months after the previous tune-up.

Pursuant to 40 CFR §63.7525(a)(7), the oxygen level of the oxygen trim system shall be set to no lower than the oxygen concentration measured during the CO performance test.

As specified in 40 CFR §63.10(b)(1), TRMM must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be maintained on site, or accessible from on site (e.g., through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1). Records can be kept off site for the remaining 3 years

PCWP MACT (40 CFR Part 63, Subpart DDDD)

The facility is a major source of HAP emissions and has processes that are affected sources under 40 CFR Part 63, Subpart DDDD, *National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products* (the PCWP MACT). The dry kilns are considered affected sources under the subpart but are only subject to the initial reporting requirements.

Wood Treating MACT (40 CFR Part 63, Subpart QQQQQQ)

The facility is a major source of HAP emissions. Therefore, 40 CFR Part 63, Subpart QQQQQQ, *National Emission Standards for Hazardous Air Pollutants for Area Source Wood Treating Facilities* does not apply to TRMM.

Applicability: State Regulations

Particulates

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

The remaining processes (except the fire water pump engine) 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 the appropriate process weight equation:

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

$E = 17.31P^{0.16}$ (P ≥ 30 tons per hour) OR

$E = 4.10P^{0.67}$ (P < 30 tons per hour) *(Sources in a Class 2 county built prior to 1/1972)*

Where E = Emissions in pounds per hour

P = Process weight 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 no stationary source at the facility shall discharge more than one 6-minute average opacity greater than 20% in any 60-minute period, and, at no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Sulfur Oxides (SO_x)

The two wood-fired boilers are subject to the sulfur oxides (as SO_2) emission limitations of ADEM Admin. Code r. 335-3-5-.01(b), which limits each boiler to 4.0 lb/MMBtu heat input. The expected emissions from the boilers would be much less than the standard as only wood residue is burned in the boilers. The pole kiln is not subject to the standard as it is direct fired.

Volatile Organic Compounds (VOC)

The gasoline storage tank is equipped with a submerged fill pipe to comply ADEM Admin. Code r. 335-3-6-.03.

Emission Testing and Monitoring

EU002 – Sawmill Boiler No. SB-1 and EU023 – Sawmill Boiler No. SB-2

Pursuant to ADEM Admin. Code r. 335-3-16-.05(c), TRMM would be required to conduct emission testing for particulate emissions every five (5) years to determine compliance with the applicable standards for SB-2. The facility would be required to conduct each test no later than 60 months from the date of the previous test unless an extension of time is granted by the Air Division. Also, TRMM would be required to properly maintain and operate a device to measure and record steam flow for SB-2. The data collected would be used to calculate the heat input to SB-2. Within ten (10) days of the end of each calendar month, TRMM would be required to calculate the heat input to the boiler on a monthly and 12-month rolling total basis to determine compliance with the heat input limitation of 334,075 MMBtu during any consecutive 12-month period.

TRMM would be required to conduct emission testing to show compliance with the emission limitations under Boiler MACT as outlined above. The facility would also be required to conduct a Method 9 of the opacity of each boiler's exhaust at least once per day while the boiler is operating. If the results of the Method 9 test indicate visible emissions of greater than 10% opacity, the boiler operator would be required to immediately undertake the necessary procedures to return the boiler to its normal operating condition. Once the boiler has been returned to its normal operating condition, an additional Method 9 test would be required. If the additional Method 9 test indicates visible emissions of greater than 10% opacity, the above steps shall be repeated until a Method 9 test indicates that visible emissions are no greater than 10% opacity.

No emission testing or monitoring for the VOC emission standard would be considered necessary at this time.

EU003 – Continuous Pole Dry Kiln No. TP-1

EU026 – Continuous Dual Path Lumber Dry Kiln DPK-1

EU027 – Continuous Dual Path Lumber Dry Kiln DPK-2

TRMM is currently required to conduct particulate emissions testing every five (5) years on EU003 to determine compliance with its synthetic minor emission limits. TRMM has requested this testing be discontinued. No testing is currently required for EU026 and EU027.

The US EPA documented the difficulty of stack testing kilns in their documentation of proposed PCWP MACT amendments. EPA stated within EPA PCWP MACT Proposed Rule Prepublication Copy for Federal Register Notice 5/5/23:

> "For CDKs, direct measurement of total kiln exhaust flow is not technically feasible due to the significant volume of fugitive emissions from the kiln openings. In addition to being unable to measure total flow, many CDKs have no specific emission point (or conduit) in which to measure emissions concentration *(e.g.,* no outlet stack or hood, or in an indirect-fired kiln no kiln air return duct to a burner). This lack of a specific emission point for measurement of total kiln air flow and concentration is also an economic limitation, because even if outlet vents suitable for testing were present for a portion of exhaust, all such vents would need to be tested to ensure uniformity of concentration or to establish vent-specific concentrations, which would greatly increase source testing costs (while total flow would continue to remain uncertain, limiting usefulness of the data for prescribing or enforcing an emission standard)."

Based upon these findings, testing would not be required for the dry kilns.

EU010 – Planer Mill Pneumatic Conveyance System (PMCF-1)

EU011 – Box Factory with Pneumatic Conveyance System (BFC-1, BFC-2, BFC-3, & BFC-4)

EU012 – Specialty Shop with Pneumatic Conveyance System (SSC-1)

TRMM would be required to perform the following periodic monitoring for the cyclones and cyclofilter associated with these processes:

(a) While the process is operating during daylight hours, someone familiar with the process shall observe the visible emissions from the cyclone at least daily for greater than normal emissions, as determined by previous observations of normal operations;

(b) While the process is operating during daylight hours, someone familiar with the process shall observe the cyclofilter for any visible emissions;

(c) Whenever observed visible emissions are greater than normal from a cyclone and/or any visible emissions are observed from the cyclofilter, the observer shall note the occurrence and notify the appropriate operations supervisor. The supervisor shall immediately investigate the cause of the exceedance. If it is determined that the exceedance is caused by operator error, operational procedures shall be modified to prevent a recurrence of the error. If the exceedance is determined to be the result of a mechanical failure, the system shall be immediately modified or repaired to return the

system to its normal operation; followed by an additional observation to ensure that no visible emissions are noted from the cyclofilter and no greater than normal emissions are noted from any cyclone.

(d) Each cyclone and the cyclofilter shall be inspected for proper operation at least annually but more frequently whenever an excursion from a monitoring parameter occurs. If the inspection indicates that cleaning or emission-related maintenance is needed, such action shall be initiated as soon as practicable but no longer than 24 hours after completing the inspection.

(e) If applicable, TRMM shall calculate the hours of operation of a process within ten (10) days of the end of each calendar month.

EU013 – Sawmill Operations

EU024 – Gasoline Storage Tank

No specific emission monitoring and/or testing would be considered necessary for these emission units.

EU025 – 240 HP Diesel-fired Fire Water Pump

No specific emission monitoring and/or testing are required or deemed necessary for this unit. However, work practice standards to include maintenance activities for the engine are required to be conducted and documented.

Compliance Assurance Monitoring (CAM)

The cyclones and baghouse utilized at this facility are for the transfer and separation of wood residues and are considered to be inherent process equipment. The multiclones associated with the wood-fired boilers are also considered inherent process equipment in that they precede and protect the induced draft (ID) fan of each boiler. As such, the facility does not have any "active control devices" subject to CAM requirements (40 CFR Part 64).

Recordkeeping and Reporting Requirements

EU002 – Sawmill Boiler No. SB-1 and EU023 – Sawmill Boiler No. SB-2

In compliance with Boiler MACT, TRMM would be required to maintain records in accordance with the applicable requirements listed in 40 CFR §63.7555 and §63.7560 and submit a Semiannual Compliance Report in accordance with 40 CFR §63.7550.

Facility-wide Reporting Requirements

TRMM would be required to maintain records of the dates, times, and results of all emission monitoring performed; the dates, times, nature, and duration of all excursions from an emission monitoring parameter; the dates, times, and nature of all corrective actions taken when an excursion from an emission monitoring parameter occurred; and the monthly and 12-month rolling totals for the units that have annual limitations for heat input or operating hours. The facility would be required to submit a Semiannual Monitoring Report (SMR) to certify whether all emission monitoring was conducted as required, and if not, the dates and reasons why it was not conducted. In addition, the SMR would provide monthly and 12-month rolling totals of the heat input to Sawmill Boiler No. 2 and the operating hours for the specialty shop. The SMR would be required

no later than 60 days after the end of each semiannual reporting period (December 21-June 20 and June 21-December 20).

Coastal Consistency/Class 1

This facility is not located within the 10-foot contour line of Mobile and Baldwin Counties or within 100 kilometers of any Class 1 area.

Public Participation

A 30-day public comment period and a 45-day EPA review period would be required prior to issuance of this Title V Major Source Operating Permit renewal.

Recommendation

Based on the above analysis, I recommend that T.R. Miller Mill's MSOP (502-S002) be renewed with the requirements noted above, and 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

November 17, 2025
Date