# STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

# AND PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AUTHORITY

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

# THIS CERTIFIES THAT

Hardy Technologies, LLC 115 Old Highway 11 Lumberton, Lamar County, Mississippi

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

# MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: March 31, 2021 Permit No.: 1440-00046

**Modified:** 

#### SECTION 1. GENERAL CONDITIONS

1.1 This permit is for air pollution control purposes only.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)

1.2 Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29(1)(b))

1.3 The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)

1.4 It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including (but not limited to) all required local government zoning approvals or permits.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)

1.5 The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)

1.6 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)

1.7 The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(b).)

1.8 The permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)

1.9 The permittee shall furnish to the Department of Environmental Quality (DEQ) within a reasonable time any information the MDEQ may request in writing to determine whether

cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the MDEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the MDEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(d).)

1.10 Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of any Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(1)-(3).)

1.11 The necessary facilities shall be constructed to prevent any wastes or other products or substances to be placed in a location where they are likely to cause pollution of the air or waters of the State without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29(1) and (2))

1.12 Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)

- 1.13 *General Nuisances*: The permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
  - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.
  - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.)

- 1.14 Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality, Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives, upon presentation of credentials:
  - (a) To enter at reasonable times upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and
  - (b) To have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air contaminants or waste waters, fuel, process material, or other material which affects or may affect emission of air contaminants from any source.

(Ref.: Miss. Code Ann. 49-17-21)

- 1.15 *Permit Modification or Revocation*: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to, the following:
  - (a) Persistent violation of any of the terms or conditions of this permit;
  - (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - (c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.C.)

1.16 Public Record and Confidential Information: Except for information determined to be confidential under the Mississippi Air and Water Pollution Control Law, all information obtained in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control.

(Ref.: Miss. Code Ann. 49-17-39)

1.17 *Permit Transfer*: This permit shall not be transferred except upon approval of the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

1.18 Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)

1.19 *Permit Expiration*: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance, if construction is suspended for eighteen (18) months or more, or if construction is not completed within a reasonable time. The MDEQ may extend the 18-month period upon a satisfactory showing that an extension is justified.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1)., R. 2.5.C(4)., and R. 5.2.)

1.20 *Certification of Construction*: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)

1.21 Beginning Operation: After certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate (whichever is applicable) is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by Mississippi Administrative Code, Title 11, Part 2, Chapter 2, Rule 2.13.G.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)

1.22 Application for a Permit to Operate: The application for issuance or modification of the State Permit to Operate or the Title V Permit (whichever is applicable) is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

1.23 Operating Under a Permit to Construct: Upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
  - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
    - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable

rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:

- (i) An upset occurred and that the source can identify the cause(s) of the upset;
- (ii) The source was at the time being properly operated;
- (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
- (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
- (v) That as soon as practicable but no later than twenty-four (24) hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
  - (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for start-ups and shutdowns are defined by an applicable rule, regulation, or permit.
  - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or

work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B(2)(a) through (e).

(3) Where an upset (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.) occurs during start-up or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.25 *General Duty*: All air emission equipment shall be operated as efficiently as possible to minimize emissions of air contaminants.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 1.26 *Compliance Testing*: Regarding compliance testing:
  - (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
  - (b) Compliance testing will be performed at the expense of the permittee.
  - (c) Each emission sampling and analysis report shall include but not be limited to the following:
    - (1) Detailed description of testing procedures;
    - (2) Sample calculation(s);
    - (3) Results; and
    - (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).))

# **SECTION 2. EMISSION POINT DESCRIPTION**

The permittee is authorized to construct and/or modify and operate, upon certification of construction, air emissions equipment, as described in the following table.

Emission Point	Description		
AA-000	Facility-Wide (Hardy Technologies, LLC)		
AA-100	Green Lumber Operations		
AA-101	Log Debarking Operations		
AA-102	Bark Hog and Hog Fuel Storage Pile		
AA-103	Sawmill Operations [consists of (but not limited to) a log processing merchandiser, two (2) saw lines, a green trimmer, green lumber sorting, and green lumber stacking]		
AA-104	Sawmill Green Chipper [receives green trimmings from Sawmill Operations]		
AA-200	Dry Lumber Operations		
AA-201	Continuous Direct-Fired Drying Kiln (CDK No. 1) [equipped with a 45 MMBTU/hr natural gas-fired burner]		
AA-202	Continuous Direct-Fired Drying Kiln (CDK No. 2) [equipped with a 45 MMBTU/hr natural gas-fired burner]		
AA-203	Continuous Direct-Fired Drying Kiln (CDK No. 3) [equipped with a 45 MMBTU/hr dual wood waste and natural gas-fired burner]		
AA-204	Planer Mill Process and Planer Shavings Cyclofilter (a combination cyclone with baghouse unit)		
AA-206	Chip Screens No. 1 and 2 (with associated chip pile and sawdust pile) [sorts collected chips and sawdust from the Sawmill Green Chipper and the Planer Mill Dry Chipper]		
AA-207	Planer Mill Shavings Truck Bins [includes the receipt, conveyance, and loading of dry wood shavings into trucks for off-site shipment]		
AA-208	Continuous Direct-Fired Drying Kiln (CDK No. 4) [equipped with a 45 MMBTU/hr dual wood waste and natural gas-fired burner]		
AA-300	Miscellaneous Emissions		
AA-301	Fugitive Emissions from Paved Haul Roads		
AA-302	274 HP Diesel-Fired Emergency Fire Water Pump Engine [max. heat input: 2.47 MMBTU/hr; manufactured after 2006]		
AA-303	10,000-Gallon Diesel Storage Tank		

# SECTION 3. EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
A A 000	11 Miss. Admin. Code Pt. 2. R. 1.3.B.	3.1	Opacity	40%
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.2	PM (filterable)	$E = 4.1(p^{0.67})$
AA-103	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued March 31, 2021	3.3	PM (filterable) PM <sub>10</sub> / PM <sub>2.5</sub> (filterable only)	Operational Requirement (Enclosures)
	40 CFR Part 63, Subpart DDDD  - NESHAP for Plywood and Composite Wood Products  40 CFR 63.2231(a) and (b); Subpart DDDD	3.4	HAPs	General Applicability
	11 Miss. Admin. Code Pt. 2. R. 1.3.D(1)(b).	3.5	PM	$E = 0.8808(I^{-0.1667})$
AA-201 AA-202 AA-203 AA-208	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 31, 2021 and modified [DATE]  (PSD BACT Limits)	3.6	VOCs (as WPP1)	4.43 lb/MBF (for Each Kiln); 886.0 tpy (for Combined Kilns; Rolling 12-Month Total)
		3.7	Dried Lumber Throughput VOCs PM (filterable) PM <sub>10</sub> / PM <sub>2.5</sub> (filterable and condensable)	400.0 MMBF/yr (for Combined Kilns; Rolling 12-Month Total)
AA-204	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued March 31, 2021	3.8	PM (filterable) PM <sub>10</sub> / PM <sub>2.5</sub> (filterable only)	Operational Requirement (Planer Shavings Cyclofilter)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.9	PM <sub>2.5</sub> (filterable only)	0.33 tpy (Rolling 12-Month Total)
AA-302	40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6585(a), (b) and 63.6590(c)(7); Subpart ZZZZ	3.10	HAPs	General Applicability

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60.4200(a)(2)(ii); Subpart IIII	3.11	NMHC + NO <sub>X</sub> PM CO	General Applicability
AA-302	40 CFR 60.4205(c) – Table 4, 60.4206, and 60.4211(c); Subpart IIII	3.12	NMHC + NO <sub>X</sub>	4.0 g/KW-hr (or 3.0 g/HP-hr)
			СО	3.5 g/KW-hr (or 2.6 g/HP-hr)
			PM	0.20 g/KW-hr (or 0.15 g/HP-hr)
	40 CFR 60.4209(a); Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.13	Hours of Operation	Install Non-Resettable Hour Meter
	40 CFR 60.4211(f)(1) – (3); Subpart IIII	3.14	Operational Requirements	100 Hours per Calendar Year for Maintenance and Readiness Testing; 50 Hours per Calendar Year for Non- Emergency Situations
	11 Miss. Admin. Code Pt. 2, R. 1.3.D.1(a).	3.15	PM (filterable)	0.6 lb/MMBTU/hr Heat Input
AA-303	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued March 31, 2021	3.16	Surface Coating Requirement	Apply "Light" or "White" Coating

3.1 For Emission Point AA-000 (Facility-Wide), the permittee shall not discharge into the ambient air from a point source any contaminant of such opacity as to obscure an observer's view to a degree in excess of forty (40) percent opacity. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: 11 Miss. Admin. Code Pt. 2. R. 1.3.B.)

3.2 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein or limited herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the following relationship:

$$\boldsymbol{E} = 4.1 \cdot (\boldsymbol{p}^{0.67})$$

Where "E" is the emission rate in pounds per hour and "p" is the process weight input rate in tons per hour. Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).)

3.3 For Emission Point AA-103, the permittee shall ensure that the structural integrity of the buildings and the enclosures that contain the referenced air emissions equipment are sustained as a partial enclosure for the merchandiser and as a total enclosure for the sawing process.

For the purpose of this permit, "partial enclosure" shall be defined as any structure comprised of walls or partitions on at least three sides or three-quarters of the perimeter surrounding process equipment to prevent the entrainment of filterable particulate matter (i.e., PM, PM<sub>10</sub>, and PM<sub>2.5</sub>) into the air at a minimum of ninety (90) percent control efficiency.

For the purpose of this permit, "total enclosure" shall be defined as any containment building that is completely enclosed with a floor, walls, and a roof to prevent the entrainment of filterable particulate matter (i.e., PM, PM<sub>10</sub>, and PM<sub>2.5</sub>) into the air at one hundred (100) percent control efficiency. The total enclosure must provide an effective barrier against fugitive dust emissions such that the direction of air flow through any openings is inward.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the PSD Permit to Construct issued March 31, 2021)

3.4 For Emission Points AA-201 through AA-203 and AA-208, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart DDDD – National Emission Standards for Hazardous Air Pollutants (NESHAP): Plywood and Composite Wood Products and 40 CFR Part 63, Subpart A – General Provisions (as required in Table 9 of Subpart DDDD).

(Ref.: 40 CFR 63.2231(a) and (b); Subpart DDDD)

3.5 For Emission Points AA-201 through AA-203 and AA-208, the emission of particulate matter (PM) from each kiln burner shall not exceed an emission rate as determined by the following relationship:

$$E = 0.8808 \cdot (I^{-0.1667})$$

Where "E" is the emission rate in pounds per MMBTU per hour heat input and "I" is the heat input in MMBTU per hour. For the purpose of this condition, Emission Points AA-

203 and AA-208 are subject to this requirement <u>only if</u> the respective burner combusts natural gas.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).)

- 3.6 For Emission Points AA-201 through AA-203 and AA-208, the permittee shall limit emission of volatile organic compounds as determined by "Wood Products Protocol 1" (VOCs as WPP1) from each lumber drying kiln to no more than 4.43 pounds per thousand board feet (lb/MBF). Additionally, VOC emissions from the combined lumber drying kilns shall not exceed 886.0 tons per year (tpy) based on a rolling 12-month total.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 31, 2021 and modified [DATE] PSD BACT Limits)
- 3.7 For Emission Points AA-201 through AA-203 and AA-208, the permittee shall limit the total throughput of dried lumber produced from the combined kilns to no more than 400.0 million board feet (MMBF), or 400,000.0 thousand board feet (MBF), per year based on a rolling 12-month total.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 31, 2021 and modified [DATE] PSD BACT Limits)
- 3.8 For Emission Point AA-204, the permittee shall operate, at all times, the noted cyclofilter while the corresponding air emissions equipment are in active operation. If the cyclofilter malfunctions or stops operating, the permittee shall cease operation of the applicable air emissions equipment until the cyclofilter is returned to service.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.9 For Emission Point AA-204, the permittee shall limit the emission of filterable particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) to no more than 0.33 tons per year (tpy) based on a rolling 12-month total.
  - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.10 For Emission Point AA-302, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR Part 63, Subpart A General Provisions (as required in Table 8 in Subpart ZZZZ).
  - Stationary RICE is "new" if construction or reconstruction commenced on or after June 12, 2006. For stationary RICE that are new, the permittee shall comply with Subpart ZZZZ by complying with the requirements found in 40 CFR Part 60, Subpart IIII. No further requirements apply for such engines under Subpart ZZZZ.

(Ref.: 40 CFR 63.6585(a), (b), and 63.6590(c)(7); Subpart ZZZZ)

3.11 For Emission Point AA-302, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 60, Subpart A – General Provisions (as required in Table 8 of Subpart IIII).

(Ref.: 40 CFR 60.4200(a)(2)(ii); Subpart IIII)

- 3.12 For Emission Point AA-302, the permittee shall purchase an engine that complies with the following emission standards:
  - (a) Non-Methane Hydrocarbons + Nitrogen Oxides (NMHC + NO<sub>X</sub>): 4.0 grams per kilowatt-hour (g/KW-hr) [or 3.0 grams per horsepower-hour (g/HP-hr)]; and
  - (b) Carbon Monoxide (CO): 3.5 grams per kilowatt-hour (g/kW-hr) (or 2.6 grams per horsepower-hour (g/HP-hr)]; and
  - (b) Particulate Matter (PM): 0.20 grams per kilowatt-hr (g/KW-hr) [or 0.15 grams per horsepower-hour (g/HP-hr)].

The engine shall be installed and configured in accordance with the manufacturer's emission-related specifications. Additionally, the permittee shall operate and maintain the engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4205(c) – Table 4, 60.4206, and 60.4211(c); Subpart IIII)

3.13 For Emission Point AA-302, the permittee shall install a non-resettable hour meter on the engine regardless of whether the permittee is required to do so by a Federal regulation.

(Ref.: 40 CFR 60.4209(a); Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.14 For Emission Point AA-302, any operation of the engine for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year is prohibited. If an engine is not operated in accordance with paragraphs (a) through (c) of this condition, the engine will not be considered an emergency engine under the applicable regulation and shall meet all requirements for a corresponding non-emergency engine.
  - (a) There is no time limit on the use of an engine in emergency situations.
  - (b) The permittee may operate an engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of one hundred (100) hours per calendar year. The permittee may

petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.

(c) The permittee may operate an engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f)(1) - (3); Subpart IIII)

3.15 For Emission Point AA-302, the maximum permissible emission of ash and/or particulate matter (PM; filterable) from any fossil fuel burning installation with a maximum heat input rate less than ten (10) million BTU per hour (MMBTU/hr) shall not exceed 0.6 pounds per MMBTU per hour (lb/MMBTU/hr) heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)

3.16 For Emission Point AA-303, the permittee shall only apply a surface coating to the referenced storage tank with a coloring either described as "light" or "white".

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the PSD Permit to Construct issued March 31, 2021)

#### **SECTION 4. WORK PRACTICES**

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Work Practice Standard
			$NMHC + NO_X$	
AA-302	40 CFR 60.4211(a); Subpart IIII	4.1	PM	Perform Compliance Practices
			CO	

- 4.1 For Emission Point AA-302, the permittee shall comply with the following practices to maintain compliance with the emission standards specified in Condition 3.12:
  - (a) Operate and maintain the engine and control device (if any) in accordance with the manufacturer's emission-related written instructions;
  - (b) Change only those emission-related settings that are permitted by the manufacturer; and
  - (c) Meet the requirements of 40 CFR Part 1068 (as applicable).

(Ref.: 40 CFR 60.4211(a), Subpart IIII)

# SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-000 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain Records for a Minimum of Five (5) Years
AA-103	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	Opacity PM / PM <sub>10</sub> / PM <sub>2.5</sub>	Perform a Weekly Visible Emissions Observation
AA-201 AA-202	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.3	Operational Parameters	Develop, Implement, and Maintain a Maintenance and Inspection Plan for Kiln Maintenance
AA-203 AA-208		5.4	Dried Lumber Throughput VOCs	Monitor the Total Throughput and Total Emissions from the Combined Kilns (Monthly and Rolling 12-Month Total)
AA-204	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.5	PM / PM <sub>10</sub> / PM <sub>2.5</sub>	Perform a Weekly Inspection of the Cyclofilter
		5.6	Opacity	Perform a Weekly Visible Emissions Observation
		5.7	Differential Pressure Drop	Monitor the Pressure Drop Across the Cyclofilter Daily
		5.8	PM <sub>2.5</sub> (filterable only)	Conduct an Initial Performance Test and Establish a Site-Specific Emission Factor
		5.9	Lumber Throughput	Monitor the Lumber Throughput and Calculate Total Emissions (Monthly and Rolling 12-Month Total)
	40 CFR 60.4114(a)(2); Subpart IIII	5.10	$NMHC + NO_X$ $PM$	Recordkeeping Requirements
AA-302	40 CFR 60.4211(g)(2), Subpart IIII	5.11		Conduct Compliance Demonstration Actions (As Applicable)
	40 CFR 60.4214(b), Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.12	СО	Record Hours of Operation (Emergency and Non-Emergency)
AA-303	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.13	VOCs	Maintain Documentation on any Surface Coating Applied

5.1 For Emission Point AA-000 (Facility-Wide), the permittee shall retain all required records, monitoring data, supporting information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes (but is not limited to) all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to the MDEQ as required by "Applicable Rules and Regulations" of this permit upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

5.2 For Emission Point AA-103, the permittee shall perform a weekly visible emissions observation in accordance with EPA Test Method 22 on the ambient air outside each enclosure for the merchandiser and the sawing process during daylight hours and during representative operating conditions. Each observation shall be conducted for a minimum period of six (6) consecutive minutes.

If visible emissions are detected during an observation, the permittee shall determine the cause of the visible emissions and implement the necessary corrective actions to prevent further emissions.

The permittee shall maintain documentation pertaining to all visual observations, the nature and cause of any visible emissions, any corrective actions taken to prevent emissions, and the date and time when visual emission observations were conducted. Additionally, the permittee shall maintain all documentation that details any maintenance actions (preventative, corrective, etc.) performed on an enclosure to maintain the applicable control efficiency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.3 For Emission Points AA-201 through AA-203 and AA-208, the permittee shall develop, implement, and maintain a "Maintenance and Inspection Plan" that establishes work practice standards in accordance with the manufacturer's specifications for continuous direct-fired kiln operations. The plan shall establish a routine for conducting preventative maintenance on the kilns that includes the following actions (at a minimum):
  - (a) Conducting walk-around inspections;
  - (b) Confirming proper wet-bulb operation;
  - (c) Conducting entrance/exit baffle and damper inspections;
  - (d) Checking wet-bulb wicks for integrity;
  - (e) Greasing the kiln cart wheels and fan shaft bearings;

- (f) Conducting circulation, exhaust, and combustion air fan inspections;
- (g) Checking hydraulic oil levels;
- (h) Calibrating moisture content equipment (as applicable);
- (i) Calibrating temperature probe equipment;
- (i) Conducting burner clean-outs and tune-ups;
- (k) Checking for leaks in kiln pipe-work; and
- (l) Checking shaft seals at wall penetrations (as applicable).

All inspections and maintenance actions shall be conducted on the specified schedule as required by the plan. If any problem is noted during an inspection, the permittee shall perform and record the necessary maintenance to ensure operation of the kiln as originally designed.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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5.4 For Emission Points AA-201, AA-202, AA-203, and AA-208, the permittee shall monitor and record the total throughput of dried lumber produced by the combined kilns in thousand board feet (MBF), on both a monthly and a rolling 12-month total basis.

Additionally, the permittee shall utilize the throughput data and the emission factor specified in Condition 3.6 to calculate and record the total emission of volatile organic compounds (VOCs) from the combined kilns, on both a monthly and a rolling 12-month total basis.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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5.5 For Emission Point AA-204, the permittee shall conduct a weekly inspection on the major components related to the cyclofilter. If a problem is noted during an inspection, the permittee shall perform the necessary maintenance to ensure operation of the cyclofilter as originally designed. Additionally, the permittee shall also maintain sufficient equipment on-site as is necessary to repair the cyclofilter.

The permittee shall maintain documentation that details the date and time of each inspection performed, any problem(s) experienced during an inspection, and any maintenance (either corrective or preventative) performed to return the cyclofilter to operation as originally designed.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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5.6 For Emission Point AA-204, the permittee shall perform a weekly visible emissions observation in accordance with EPA Test Method 22 on the exhaust of the cyclofilter during daylight hours and during representative operating conditions. Each observation shall be conducted for a minimum period of six (6) consecutive minutes.

If visible emissions are detected during an observation, the permittee shall immediately perform a visible emissions evaluation (VEE) in accordance with EPA Test Method 9. In the event that a VEE is required but cannot be conducted on the cyclofilter, the permittee shall record a written explanation as to why it was not possible to perform the VEE.

The permittee shall maintain all documentation and information specified by Method 22 and/or Method 9, the nature and cause of any visible emissions, any corrective action(s) taken to prevent or minimize emissions, and the date and time when each observation/evaluation was conducted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.7 For Emission Point AA-204, the permittee shall monitor and record the differential pressure drop (in inches of water) across the cyclofilter once on a daily basis. If a monitored pressure drop is outside the manufacturer's recommended range for the cyclofilter, the permittee shall conduct and record any corrective measures taken to return the cyclofilter to the recommended pressure drop range.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.8 For Emission Point AA-204, the permittee shall conduct an initial performance test for PM<sub>2.5</sub> (filterable only) no later than one hundred eighty (180) days after the initial start-up of CDK No. 4 (Emission Point AA-208) and in accordance with the following requirements:
  - (a) The permittee shall conduct a performance test in accordance with an applicable EPA Test Method found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, Appendix A of 40 CFR Part 63, or an alternative test method approved by the EPA prior to the testing event.
  - (b) The permittee shall conduct a minimum of three (3) separate test runs at a duration of least one (1) hour for a performance test.
  - (c) The permittee shall monitor and record the total quantity (in MBF) of lumber processed in the planer during each test run of a performance test.
  - (d) Based on the results of the performance test and the planer lumber throughput monitored during the test, the permittee shall establish a site-specific PM<sub>2.5</sub> emission factor (in lb/MBF) for Emission Point AA-204.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.9 For Emission Point AA-204, the permittee shall demonstrate compliance with the PM<sub>2.5</sub> emission limit specified in Condition 3.9 by:
  - (a) Monitoring and recording the total quantity (in MBF) of lumber processed in the planer, on both a monthly and a rolling 12-month total basis; and
  - (b) Utilizing the emission factor established in accordance with Condition 5.8(d) to calculate the annual PM<sub>2.5</sub> emissions in tons per year (tpy), on a rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.10 For Emission Point AA-302, the permittee shall maintain documentation that details the following information:
  - (a) All notifications submitted must comply with Subpart IIII;
  - (b) Any maintenance conducted on the engine; and
  - (c) Documentation from the manufacturer that indicate an engine is certified to meet the emission standards specified in Condition 3.12.

(Ref.: 40 CFR 60.4114(a)(2); Subpart IIII)

- 5.11 For Emission Point AA-302, the permittee shall demonstrate compliance through the following actions <u>if</u> the permittee does not operate and maintain the engine in accordance with the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer:
  - (a) Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
  - (b) Conduct an initial performance test to demonstrate compliance with the applicable emission standards in accordance with the procedures outlined in 40 CFR 60.4212(a) (c); Subpart IIII (as applicable) and the following deadlines:
    - (1) Within one (1) year of start-up;
    - (2) Within one (1) year after an engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions; or
    - (3) Within one (1) year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer.

(Ref.: 40 CFR 60.4211(g)(2), Subpart IIII)

5.12 For Emission Point AA-302, the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation for each engine on a monthly basis for both emergency and non-emergency service.

Additionally, the permittee shall detail (in writing) and maintain what classified each occurrence as either an emergency or a non-emergency.

(Ref.: 40 CFR 60.4214(b); Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.13 For Emission Point AA-303, the permittee shall maintain applicable documentation that indicates the surface coating applied to the storage tank complies with the color requirement specified in Condition 3.16.

(Ref.: 11 Miss. Admin. Code, Pt. 2, R. 2.2.B(11).)

### **SECTION 6. REPORTING REQUIREMENTS**

- 6.1 General Reporting Requirements:
  - (a) The permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. The report shall be made within five (5) working days of the time the deviation began.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
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(b) Beginning upon issuance of this permit and lasting until issuance of the applicable operating permit, the permittee shall submit reports of any required monitoring by July 31 and January 31 of each calendar year for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with Mississippi Administrative Code, Title 11, Part 2, Chapter 2, Rule 2.1.C.

Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration. For any air emissions equipment not yet constructed and/or operating the report shall so note and include an estimated date of commencement of construction and/or start-up (whichever is applicable).

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)
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(c) Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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(d) Within fifteen (15) days of beginning actual construction, the permittee must notify MDEQ in writing that construction has begun.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).)
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(e) The permittee must notify MDEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)
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(f) Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the

approved plans and specifications on file with the Permit Board no later than fifteen (15) days after completing construction / installation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).)

(g) The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).)

#### **Specific Reporting Requirements:**

Emission Point(s)	Applicable Requirement	Condition Number	Reporting Requirement
AA-000 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.2	Submit a Semi-Annual Monitoring Report (SMR)
AA-201 AA-202 AA-203 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.3	Submit the Updated Maintenance and Inspection Plan
	11 Miss Admin. Code Pt. 2, R. 2.2.B(11). and 2.6.B(5).	6.4	Submit a Performance Testing Protocol Submit a 10-Day Notification of Performance Testing Event
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.5	Submit the Performance Test Results
AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.6	Submit a Notification on the Initial Start-Up
AA-302	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.7	Submit an Annual Summary on Hours of Operation (Non-Emergency and Emergency)

- 6.2 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a semi-annual monitoring report (SMR) in accordance with Condition 6.1(b) that details the following information:
  - (a) A summary of the revision(s) made to the Maintenance and Inspection Plan for the continuous direct-fired kilns;

- (b) <u>For Emission Point AA-103</u>: Any maintenance actions performed on the applicable enclosures in order to maintain the reduction efficiencies specified in Condition 3.3;
- (d) <u>For Emission Points AA-201, AA-202, AA-203, and AA-208</u>: The total dried lumber throughput produced from the combined kilns in thousand board feet (MBF) on both a monthly and rolling 12-month total basis;
- (e) <u>For Emission Point AA-204</u>: Any occurrence (and the corresponding duration) in which the cyclofilter malfunctions and/or becomes non-operational during active planer mill operations as well as any maintenance actions performed to restore the cyclofilter to its normal manner of operation.

The permittee shall also submit the following information:

- (1) Any occurrence when a visible emissions evaluation (VEE) was necessary but not conducted and an explanation as to why it was not performed;
- (2) Any occurrence when the result of a VEE indicates non-compliance with the referenced opacity limit and the determined cause(s) of the exceedance; and
- (3) Any corrective action(s) taken to minimize emissions as a result of an opacity exceedance; and
- (4) The total quantity (in MBF) of lumber processed in the planer, on both a monthly and rolling 12-month total basis; and
- (5) The calculated annual  $PM_{2.5}$  emissions in tons per year (tpy), on a rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.3 For Emission Points AA-201, AA-202, AA-203, and AA-208, the permittee shall submit the updated "Maintenance and Inspection Plan" required by Condition 5.3 to the MDEQ no later than sixty (60) days after certifying construction as complete for CDK No. 4 (Emission Point AA-208).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.4 For Emission Point AA-204, the permittee shall submit a written performance test protocol for testing required by Condition 5.8 that details the procedures and test methods to be implemented during the actual testing event no later than thirty (30) days prior to the intended testing date.

Additionally, the permittee shall notify the MDEQ in writing at least ten (10) days prior to the intended testing date so that a representative from the MDEQ may be afforded the opportunity to observe the stack testing.

If deemed necessary by the MDEQ, a conference may be required prior to the intended testing date to discuss the proposed test methods and procedures outlined in the performance testing protocol.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). and 2.6.B(5).)

6.5 For Emission Point AA-204, the permittee shall submit a report for any conducted performance test no later than sixty (60) days after completing the actual test. The report shall include the information specified in Condition 1.26(c), the hourly lumber throughput (in MBF per hour) from the planer during the performance test, and the PM<sub>2.5</sub> emission factor established based on the results of the performance test.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.6 For Emission Point AA-208, the permittee shall submit a notification to the MDEQ that details the initial start-up of CDK No. 4 no later than fifteen (15) days after the actual start-up date.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.7 For Emission Point AA-302, the permittee shall submit a summary within the semi-annual monitoring report (SMR) postmarked by January 31 that details the hours of operation for the engine during the preceding calendar year. The report shall include how many hours are spent for emergency operation, what classified the operation as an emergency, how many hours are spent for non-emergency operation, and the reason for the non-emergency operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)