STATE OF MISSISSIPPI
AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Enviva Pellets Lucedale, LLC
7197 Highway 198 East
Lucedale, George 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.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krystal Rudolph

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: July 9, 2019 **Permit No.: 0840-00022**

Modified: June 16, 2021; February 15, 2022

SECTION 1

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only.

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

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

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

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).)

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).)

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).)

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).)

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).)

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).)

9. The permittee shall furnish to the MDEQ 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).)

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.)

11. *Solids Removal*: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits.

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

12. *Diversion and Bypass of Air Pollution Controls*: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10 – "Provisions for Upsets, Start-Ups, and Shutdowns".

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

13. *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).)

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 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) At reasonable times 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 emissions.

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

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:

    (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.)

16. *Public Record and Confidential Information*: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared 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)

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.)

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).)

19. *Permit Expiration*: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more.

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

21. *Beginning Operation*: Except as prohibited in Condition 24 of Section 1, 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).)

22. *Application for a Permit to Operate*: Except as otherwise specified in Condition 24 of Section 1, 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).)

23. *Operating Under a Permit to Construct*: Except as otherwise specified in Condition 24, of Section 1, 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).)

24. *Application Requirements for a Permit to Operate for Moderate Modifications*: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to "net" out of Prevention of Significant Deterioration / New Source Review (PSD / NSR), the applicable Title V Permit to Operate

or State Permit to Operate must be modified prior to beginning operation of the modified facilities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7).)

25. *General Duty*: All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

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

26. *Deviation Reporting*: Except as otherwise specified herein, 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. Said report shall be made within five (5) working days of the time the deviation began.

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

27. *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 / modify and operate, upon certification of construction, air emissions equipment, as described in the following table:

EMISSION POINT	DESCRIPTION
AA-000	Facility-Wide (Enviva Pellets Lucedale, LLC)
AA-100	**Raw Material Handling & Processing**
AA-101	Debarker
AA-102	Log Chipping Operations
AA-103	Bark Hog
AA-104	Green Wood Handling Operations
AA-105	Bark Storage Pile
AA-106	Green Wood Chip Storage Piles
AA-107	Three (3) Green Screens [fully enclosed]
AA-108	Five (5) Green Hammer Mills [emissions are routed to the No. 1 Wood Drying Control System (primary) or the No. 2 Wood Drying Control System (back-up)]
AA-200	**Wood Drying Operations**
AA-201a	No. 1 Rotary Drum Dryer [emissions are routed to the No. 1 Wood Drying Control System]
AA-201b	No. 1 Rotary Drum Dryer Bypass Stack
AA-201c	No. 1 Wood Waste-Fired Furnace [max. heat input: 168 MMBTU / hour; diesel fuel may be used for start-up activities]
AA-201d	No. 1 Wood Waste-Fired Furnace Bypass Stack
AA-201e	No. 1 Wood Drying Control System [includes (in series) one (1) wet electrostatic precipitator (WESP), and one (1) regenerative thermal oxidizer (RTO) with two (2) natural gas-fired burners (max. heat input: 8.0 MMBTU / Hour each) and direct natural gas injection at a max. rate of 4.0 MMBTU / hour]

EMISSION POINT	DESCRIPTION
AA-202a	No. 2 Rotary Drum Dryer [emissions are routed to the No. 2 Wood Drying Control System]
AA-202b	No. 2 Rotary Drum Dryer Bypass Stack
AA-202c	No. 2 Wood Waste-Fired Furnace [max. heat input: 168 MMBTU / hour; diesel fuel may be used for start-up activities]
AA-202d	No. 2 Wood Waste-Fired Furnace Bypass Stack
AA-202e	No. 2 Wood Drying Control System [includes (in series) one (1) wet electrostatic precipitator (WESP), and one (1) regenerative thermal oxidizer (RTO) with two (2) natural gas-fired burners (max. heat input: 8.0 MMBTU / hour each) and direct natural gas injection at a max. rate of 4.0 MMBTU / hour]
AA-203a	No. 3 Rotary Drum Dryer [emissions are routed to the No. 3 Wood Drying Control System]
AA-203b	No. 3 Rotary Drum Dryer Bypass Stack
AA-203c	No. 3 Wood Waste-Fired Furnace [Max. Heat Input: 168 MMBTU / Hour; diesel fuel may be used for start-up activities]
AA-203d	No. 3 Wood Waste-Fired Furnace Bypass Stack
AA-203e	No. 3 Wood Drying Control System [includes (in series) one (1) wet electrostatic precipitator (WESP), and one (1) regenerative thermal oxidizer (RTO) with two (2) burners (max. heat input: 8.0 MMBTU / hour each) and direct natural gas injection at a max. rate of 4.0 MMBTU / hour]
AA-204	Off-Spec. and Fire Dump Management Operations [dried material exiting the dryers that does not meet moisture specifications is diverted from the process to small storage piles and then transferred to feed storage piles for reintroduction into the process; this action is also performed in the event a spark is detected in the post-dryer conveyor systems]
AA-300	**Wood Pellet Production Operations**
AA-301	Dry Hammer Mill Feed Silo [emissions are routed to the No. 1 Pellet Mill Control System]
AA-302	Dry Shavings Silo [emissions are controlled by a baghouse]
AA-303	Forty-Eight (48) Dry Hammer Mills and Conveyors [emissions are routed to the No. 1 and No. 2 Pellet Mill Control System]
AA-304	Eighteen (18) Pellet Mills [steam is supplied to the pellet mills via electric-powered boilers; emissions are routed to the No. 1 and No. 2 Pellet Mill Control System]
AA-305	Nine (9) Pellet Coolers and Cyclones [emissions are routed to the No. 1 and No. 2 Pellet Mill Control System]

EMISSION POINT	DESCRIPTION
AA-306	No. 1 Pellet Mill Control System [includes one (1) regenerative thermal oxidizer (RTO) that can also function as a regenerative catalytic oxidizer (RCO); equipped with four (4) natural gas-fired burners (max. heat input: 6.2 MMBTU / hour each)]
AA-307	No. 2 Pellet Mill Control System [includes one (1) regenerative thermal oxidizer (RTO) that can also function as a regenerative catalytic oxidizer (RCO); equipped with two (2) natural gas-fired burners (max. heat input: 6.2 MMBTU / hour each)]
AA-310	Pellet Mill Housekeeping Vacuum System [includes a baghouse; used to prevent accumulation of dust within the building that houses the Dry Hammer Mills and the Pellet Mills]
AA-400	**Finished Pellet Product Handling and Storage**
AA-401	Finished Product Handling and Loading [emissions are routed to a baghouse]
AA-402	Pellet Storage Silo No. 1 [emissions are controlled by a bin vent filter]
AA-403	Pellet Storage Silo No. 2 [emissions are controlled by a bin vent filter]
AA-404	Pellet Storage Silo No. 3 [emissions are controlled by a bin vent filter]
AA-500	**Auxiliary Equipment**
AA-501a	300-Gallon Aboveground Diesel Fuel Storage Tank
AA-501b	500-Gallon Aboveground Diesel Fuel Storage Tank
AA-501c	10,000-Gallon Aboveground Diesel Fuel Storage Tank
AA-501d	500-Gallon Aboveground Diesel Fuel Storage Tank
AA-501e	500-Gallon Aboveground Diesel Fuel Storage Tank
AA-502	762 HP (568 kW) Diesel-Fired Emergency Generator Engine No. 1
AA-503	157 HP Diesel-Fired Emergency Fire Water Pump Engine
AA-505	762 HP (568 kW) Diesel-Fired Emergency Generator Engine No. 2
AA-506	671 HP (500 kW) Diesel-Fired Emergency Generator Engine No. 3

EMISSION POINT	DESCRIPTION
AA-507	Six (6) 2.5 MMBTU / Hour Natural Gas-Fired Dryer Line Duct Burners

SECTION 3
EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity	≤ 40% (from smoke)
	11 Miss. Admin. Code Pt. 2. R. 1.3.B.	3.2		≤ 40%
	11 Miss. Admin. Code Pt. 2, R.1.3.F.(1).	3.3	PM (filterable)	$E = 4.1 \cdot (p^{0.67})$
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.4		General Nuisance Clause
	11 Miss. Admin. Code Pt. 2, R. 1.8.A. 11 Miss. Admin. Code Pt. 2, R. 8.1 40 CFR Part 63, Subpart B – Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j) 40 CFR 63.40(b) and 63.43(g)(24)(iv); Subpart B 40 CFR Part 63, Subpart A – General Provisions	3.5	HAPs	General Applicability
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). **(PSD Avoidance Limits)**	3.6	(a) NO_X	245.0 tpy (Rolling 12-Month Total)
			(b) PM (filterable)	245.0 tpy (Rolling 12-Month Total)
			(c) PM_{10} / $PM_{2.5}$ (filterable + condensable)	245.0 tpy (Rolling 12-Month Totals)
			(d) VOCs (as WPP1)	245.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R.2.2.B.(10)., as established in the Permit to Construct issued July 9, 2019 and modified June 16, 2021 **(PSD Avoidance Limit)**	3.7	CO	246.0 tpy (Rolling 12-Month Total)

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
AA-108	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.8	PM / PM_{10} / $PM_{2.5}$ VOCs	Emissions Control Requirement
	11 Miss. Admin. Code Pt. 2, R.2.2.B.(10)., as established in the Permit to Construct issued July 9, 2019 and modified June 16, 2021	3.9	Green Wood Chip Throughput	1,103,760 ODT / Year (Rolling 12-Month Total)
AA-201a AA-202a AA-203a	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). 11 Miss. Admin. Code Pt. 2, R. 1.10.B.	3.10	NO_X PM / PM_{10} / $PM_{2.5}$ CO VOCs	Operational Requirements *Start-Up and Shutdown Requirements*: Bypass Emissions for ≤ 50 Hours Total from Each Dryer (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.11	Dried Wood Chip Throughput	367,920 ODT / Year (Each Dryer; Rolling 12-Month Total)
		3.12	VOCs	5.0% or Greater Final Moisture Content (Dried Wood Chips) (Monthly Average)
AA-201c AA-202c AA-203c	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.13	Fuel Source Restriction	Only Combust Uncontaminated Wood Waste (diesel fuel may be used during start-up activities)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). 11 Miss. Admin. Code Pt. 2, R. 1.10.B.	3.14	NO_X PM / PM_{10} / $PM_{2.5}$ CO VOCs	Operational Requirements *Start-Up and Shutdown Requirements*: Bypass Emissions for ≤ 50 Hours Total from Each Furnace (Rolling 12-Month Total) *Idle Mode Requirements*: Bypass Emissions for ≤ 500 Hours from Each Furnace (Rolling 12-Month Total)
AA-201e AA-202e AA-203e	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). 11 Miss. Admin. Code Pt. 2, R. 1.8.A. and C.	3.15	HAPs	95.0% Control Efficiency (RTO), measured as VOCs
AA-300	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.16	Wood Pellet Production	1,420,539 ODT / Year (Rolling 12-Month Total)
AA-301 AA-302 AA-310 AA-401 through AA-404	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.17	PM / PM_{10} / $PM_{2.5}$	Operational Requirements

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.18	VOCs PM / PM_{10} / $PM_{2.5}$	Operational Requirements
	11 Miss. Admin. Code Pt. 2, R. 1.8.A. and C. 11 Miss. Admin. Code Pt. 2, R.2.2.B.(10)., as established in the Permit to Construct issued July 9, 2019 and modified June 16, 2021	3.19	HAPs	95.0% Control Efficiency (RTO / RCO), measured as VOCs
AA-502 AA-503 AA-505 AA-506	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).	3.20	PM	0.6 Pounds / MMBTU per Hour
	40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6590(b) and (c); Subpart ZZZZ	3.21	HAPs	General Applicability
	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Combustion Engines 40 CFR 60.4200(a)(2); Subpart IIII	3.22	NMHC + NO_X CO PM	General Applicability
	40 CFR 60.4207(b); Subpart IIII	3.23	Fuel Requirement	15 ppm Sulfur Content (Max.) 40 Cetane Index (Min.) or 35% Aromatic Content (Max. – by volume)
	40 CFR 60.4209(a); Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.24	Hours of Operation	Install Non-Resettable Hour Meter
	40 CFR 60.4211(f)(1) – (3); Subpart IIII	3.25	Operational Requirements	100 Hours / Calendar Year for Maintenance and Readiness Testing; 50 Hours / Calendar Year for Non-Emergency Situations
AA-502 AA-505 AA-506	40 CFR 60.4205(b), 60.4202(a)(2), and 60.4206; Subpart IIII	3.26	NMHC + NO_X	4.0 Grams / Kilowatt-Hour
			CO	3.5 Grams / Kilowatt-Hour
			PM	0.20 Grams / Kilowatt-Hour

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-502 AA-505 AA-506	40 CFR 60.4205(b), 60.4202(a)(2), and 60.4206; Subpart IIII	3.26	Opacity (Smoke)	20% During Acceleration Mode 15% During Lugging Mode 50% During Peaks in Either Acceleration or Lugging Modes
AA-503	40 CFR 60.4205(c) – Table 4 and 60.4206; Subpart IIII	3.27	NMHC + NO_X	4.0 Grams / Kilowatt-Hour (or 3.0 Grams / Horsepower-Hour)
			PM	0.30 Grams / Kilowatt-Hour (or 0.22 Grams / Horsepower-Hour)

3.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall not cause or allow the emission of smoke into the open air from a point source or from any manufacturing / industrial process on-site, which exceeds forty percent (40%) opacity subject to the exceptions provided in paragraphs (a) and (b):

(a) Start-up operations may produce emissions, which exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.

(b) Emissions resulting from soot blowing (i.e. ash removal) operations shall be permitted provided such emissions do not exceed 60% opacity and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any (1) one hour.

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

3.2 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 40% opacity. This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.3 For Emission Point AA-000 (Facility-Wide), except as otherwise specified 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 relationship:

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

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).)

3.4 For Emission Point AA-000 (Facility-Wide), the permittee shall not cause 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.

Additionally, the permittee shall not cause the handling, transporting, or storage of any material in a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne.

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 this regulation, the MDEQ may order such corrected in a way that all air and gases or air and gas-borne 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.)

3.5 For Emission Point AA-000 (Facility-Wide), the permittee is a major source of hazardous air pollutants (HAPs) subject to the case-by-case maximum achievable control technology (MACT) requirements of Section 112(g) of the Federal Clean Air Act. The permittee shall comply with the requirements of Section 112(g) in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 8, Rule 8.1 and 40 CFR Part 63, Subpart B – Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j).

The permittee is also subject to and shall comply with applicable requirements found in 40 CFR Part 63, Subpart A – General Provisions.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.A. and 11 Miss. Admin. Code Pt. 2, R. 8.1.)
(Ref.: 40 CFR 63.40(b) and 63.43(g)(2)(iv); Subpart B)

3.6 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total respective emission of nitrogen oxides (NO_X), particulate matter (PM; filterable only), particulate matter less than 10 microns (µm) in diameter (PM_{10}; filterable + condensable), particulate matter less than 2.5 µm in diameter ($PM_{2.5}$; filterable + condensable), and volatile organic compounds as determined by Wood Products Protocol 1 (VOCs as WPP1) from all applicable emission sources to no more than 245.0 tons per year (tpy) based on a rolling 12-month total.

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

3.7 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total emission of carbon monoxide (CO) from all applicable emission sources to no more than 246.0 tons per year (tpy) based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B.(10)., as established in the Permit to Construct issued July 9, 2019 and modified June 16, 2021 – PSD Avoidance Limit)

3.8 For Emission Point AA-108 (Green Hammer Mills), the permittee shall operate the No. 1 Wood Drying Control System (i.e. Emission Point AA-201e) at all times that the Green Hammer Mills are in operation, except as outlined below:

(a) In the event that Emission Point AA-201e malfunctions or becomes non-operational, emissions from the Green Hammer Mills shall be routed to the No. 2 Wood Drying Control System (i.e. Emission Point AA-202e).

(b) If both Emission Points AA-201e and AA-202e malfunction or become non-operational simultaneously, the permittee shall cease operation of the Green Hammer Mills until either control system is fully operational.

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

3.9 For Emission Point AA-108 (Green Hammer Mills) the permittee shall limit the throughput of green wood chips processed to no more than 1,103,760.0 oven-dried tons (ODT) per year based on a rolling 12-month total.

For the purpose of this permit, an "*oven-dried ton*" equates to a ton of wood at zero percent (0%) moisture.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B.(10)., as established in the Permit to Construct issued July 9, 2019 and modified June 16, 2021)

3.10 For Emission Points AA-201a, AA-202a, and AA-203a (Rotary Drum Dryers), the permittee shall direct dryer emissions to the corresponding Wood Drying Control System (i.e. Emission Points AA-201e, AA-202e, and AA-203e) at all times, except during periods of dryer start-up and shutdown.

During periods of dryer start-up and shutdown, the permittee may vent the emissions from each Rotary Drum Dryer to the corresponding Dryer Bypass Stack (i.e. Emission Points AA-201b, AA-202b, and AA-203b) in accordance with the work practice standards outlined in Condition 4.1.

The total duration for all periods in which emissions are vented to a corresponding Furnace Bypass Stack **and** Dryer Bypass Stack (i.e. Emission Points AA-201b and AA-201d; AA-

202b and AA-202d; AA-203b and AA-203d) shall not exceed fifty (50) hours during any rolling 12-month period.

Once 50 hours are attained, the permittee shall either direct dryer emissions to the corresponding Wood Drying Control System (if fully operational) or cease all operations (including periods of start-up and shutdown) from the Rotary Drum Dryer.

Use of the Dryer Bypass Stacks for any purpose other than the start-up or shutdown of the dryers constitutes a deviation of this permit and is subject to the deviation reporting requirements specified in Condition 1.26.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.B.)

3.11 For Emission Points AA-201a, AA-202a, and AA-203a (Rotary Drum Dryers), the permittee shall limit the throughput of green wood chips dried in each dryer to no more than 367,920.0 ODT per year based on a rolling 12-month total.

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

3.12 For Emission Points AA-201a, AA-202a, AA-203a (Rotary Drum Dryers), the permittee shall limit the final moisture content of wood chips dried on-site to five percent (5%) or greater based on a monthly average.

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

3.13 For Emission Points AA-201c, AA-202c, and AA-203c (Wood Waste-Fired Furnaces), the permittee shall only utilize uncontaminated wood waste as the primary fuel source for any furnace.

Additionally, the permittee may utilize diesel fuel as an accelerant for any cold start-up of a furnace. The permittee shall minimize the volume of diesel fuel used during any cold start-up to the best extent practicable.

For the purpose of this permit, "*uncontaminated wood waste*" is defined as any by-product generated from the processing of harvested timber to produce wood pellets (bark, green wood chips, dried wood chips, sawdust, wood pellets that do not meet customer specifications, etc.) that does not possess an artificial coating or residue.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B.(10)., as established in the Permit to Construct issued July 9, 2019 and modified June 16, 2021)

3.14 For Emission Points AA-201c, AA-202c, and AA-203c (Wood Waste-Fired Furnaces), the permittee shall direct furnace emissions to the corresponding Rotary Drum Dryers (i.e. Emission Points AA-201a, AA-202a, and AA-203a) at all times, except during periods of furnace start-up, shutdown, or idle mode as outlined below:

(a) During periods of furnace start-up and shutdown, the permittee may vent the emissions from each furnace to the corresponding Furnace Bypass Stack (i.e. Emission Points AA-201d, AA-202d, and AA-203d) in accordance with the work practice standards outlined in Condition 4.1.

(b) The total duration for all periods in which emissions are vented to a corresponding Furnace Bypass Stack **and** Dryer Bypass Stack (i.e. Emission Points AA-201b and AA-201d; AA-202b and AA-202d; AA-203b and AA-203d) shall not exceed fifty (50) hours during any rolling 12-month period.

Once 50 hours are attained, the permittee shall either direct furnace emissions to the corresponding Rotary Drum Dryer (if fully operational) or cease all operations (including periods of start-up and shutdown) from the furnace.

(c) During periods of furnace idle mode, the permittee may vent the emissions from each furnace to the corresponding Furnace Bypass Stack in accordance with the work practice standards outlined in Condition 4.1 and for no more than five hundred (500) hours during any rolling 12-month period. For the purpose of this permit, "*idle mode*" is defined as the operation of a furnace at a heat input rate not to exceed ten (10) MMBTU per hour.

Once 500 hours are attained, the permittee shall either direct furnace emissions to the corresponding Rotary Drum Dryer (if fully operational) or cease all operations (including periods of idle mode) from the furnace.

Use of the Furnace Bypass Stacks for any purpose other than start-up, shutdown, or idle mode constitutes a deviation of this permit and is subject to the deviation reporting requirements specified in Condition 1.26.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.B.)

3.15 For Emission Points AA-201e, AA-202e, and AA-203e, (Wood Drying Control Systems) the permittee shall operate each regenerative thermal oxidizer (RTO) in such a manner as to achieve (at a minimum) ninety-five (95.0) percent control efficiency of hazardous air pollutant (HAP) emissions, measured as VOCs, across each RTO.

The use of the RTO to achieve 95.0% control efficiency (at a minimum) of hazardous air pollutants (HAPs) has been determined to satisfy the case-by-case MACT requirements of Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.8.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.A. and C.)

3.16 For Emission Point AA-300 (Wood Pellet Production Operations), the permittee shall limit the total production of wood pellets to no more than 1,420,539.0 oven-dried tons (ODT) per year based on a rolling 12-month total.

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

3.17 For Emission Points AA-301 (Dry Hammer Mill Feed Silo), AA-302 (Dry Shaving Silo), AA-310 (Pellet Mill Housekeeping Vacuum System), and AA-401 through AA-404 (Finished Pellet Product Handling and Storage**)**, the permittee shall at all times operate the control device associated with each process unit when applicable loading and/or off-loading operations are conducted.

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

3.18 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), the permittee shall direct the emissions generated by the following process unit groupings to the indicated control systems at all times:

(a) No 1. Pellet Mill Control System [i.e. Emission Point AA-306]

(1) Thirty-six (36) Dry Hammer Mills and Conveyors (Emission Point AA-303);

(2) Twelve (12) Pellet Mills (Emission Point AA-304); and

(3) Six (6) Pellet Coolers and Cyclones (Emission Point AA-305).

(b) No. 2 Pellet Mill Control System [i.e. Emission Point AA-307]

(1) Twelve (12) Dry Hammer Mills and Conveyors (Emission Point AA-303);

(2) Six (6) Pellet Mills (Emission Point AA-304); and

(3) Three (3) Pellet Coolers and Cyclones (Emission Point AA-305).

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

3.19 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), the permittee shall operate each RTO / RCO control device [which can operate as either a RTO or a regenerative catalytic oxidizer (RCO)] in such a manner as to achieve (at a minimum) ninety-five (95.0) percent control efficiency of hazardous air pollutant (HAP) emissions, measured as volatile organic compounds (VOCs), across each control device.

The use of the RTO / RCO control device to achieve 95.0% control efficiency (at a minimum) of hazardous air pollutants (HAPs) has been determined to satisfy the case-by-case MACT requirements of Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.8.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.A. and C.)

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B.(10)., as established in the Permit to Construct issued July 9, 2019 and modified June 16, 2021)

3.20 For Emission Points AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), except as otherwise specified or limited herein, the maximum permissible emission of ash and / or particulate matter (PM) from each referenced emergency engine unit shall not exceed 0.60 pounds per MMBTU per hour heat input.

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

3.21 For Emission Points AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). A 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 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)

3.22 For Emission Points AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), 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.

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

3.23 For Emission Points AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), the permittee shall only use diesel fuel in each engine that meets the following requirements (on a per-gallon basis):

(a) A maximum sulfur content of 15 parts per million (ppm); and

(b) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent (vol. %).

(Ref.: 40 CFR 60.4207(b); Subpart IIII)

3.24 For Emission Points AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), the permittee shall install a non-resettable hour on each engine regardless of whether the permittee is required to do so by a Federal regulation.

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

3.25 For Emission Points AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), operation of an engine for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for greater than 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 referenced 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 providing coverage on the engine. Maintenance checks and readiness testing of an engine are 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)

3.26 For Emission Points AA-502, AA-505, and AA-506 (Emergency Engines), the permittee shall not discharge into the atmosphere any gases that contain the following pollutants in excess of the corresponding emission standards:

(a) Non-Methane Hydrocarbons + Nitrogen Oxides (NMHC + NO_X): 4.0 grams per kilowatt-hour;

(b) Carbon Monoxide (CO): 3.5 grams per kilowatt-hour; and

(c) Particulate Matter (PM): 0.20 grams per kilowatt-hour.

Additionally, the permittee shall not discharge into the atmosphere any smoke exhaust that exceeds the following opacity standards:

(d) 20 percent (20%) during the acceleration mode;

(e) 15 percent (15%) during the lugging mode; and

(f) 50 percent (50%) during the peaks in either the acceleration or lugging modes.

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

(Ref.: 40 CFR 60.4202(a)(2), 60.4205(b), 60.4206, and 60.4211(c); Subpart IIII)

3.27 For Emission Point AA-503, the permittee shall not discharge into the atmosphere any gases that contain the following pollutants in excess of the corresponding emission standards:

(a) Non-Methane Hydrocarbons + Nitrogen Oxides (NMHC + NO_X): 4.0 grams per kilowatt-hour (or 3.0 grams per horsepower-hour); and

(b) Particulate Matter (PM): 0.30 grams per kilowatt-hour (or 0.22 grams per horsepower-hour).

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 60.421(c); Subpart IIII)

SECTION 4
WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant / Parameter	Work Practice(s)
AA-000	40 CFR 63.6(e)(1)(i) – (ii); Subpart A 11 Miss. Admin. Code Pt. 2, R. 1.10.B.	4.1	HAPs	General Duty Clause
AA-502 AA-503 AA-505 AA-506	40 CFR 60.4211(a); Subpart IIII	4.2	HAPs	Best Management Practices

4.1 For Emission Point AA-000 (Facility-Wide), the permittee shall operate and maintain all emission sources (including associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times (including periods of start-up, shutdown, and malfunction).

During a period of start-up, shutdown, or malfunction, this general duty to minimize emissions requires that the permittee reduce emissions from an emission source to the greatest extent, which is consistent with safety and good air pollution control practices. However, the general duty to minimize emissions during a period of start-up, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ that may include (but not limited to) monitoring results, review of operation and maintenance procedures (including the "Start-up, Shutdown, and Malfunction Plan" required in Condition 5.2), review of operation and maintenance records, and inspection of the source.

Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a start-up, shutdown, or malfunction, the permittee shall comply by minimizing emissions during such a start-up, shutdown, malfunction, and shakedown event consistent with safety and good air pollution control practices.

(Ref.: 40 CFR 63.6(e)(1)(i) – (ii); Subpart A and 11 Miss. Admin. Code Pt. 2, R. 1.10.B.)

4.2 For Emission Points AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), the permittee shall adhere to the following practices:

(a) Operate and maintain each engine and control device (if any) according to 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 Parts 1068 (as applicable).

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

SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain Records for a Minimum of Five (5) Years
	40 CFR 63.6(e)(3)(i); Subpart A	5.2	HAPs	Develop and Implement a Start-Up, Shutdown, & Malfunction Plan
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.3	PM / PM_{10} / $PM_{2.5}$	Develop and Implement a Dust Management Plan
		5.4	NO_X PM / PM_{10} / $PM_{2.5}$ VOCs CO	Calculate the Total Emission of Applicable Pollutants (Monthly and Rolling 12-Month Totals)
AA-108	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.5	Green Wood Chip Throughput	Monitor and Calculate the Green Wood Chip Throughput (Monthly and Rolling 12-Month Total)
AA-108 AA-200 AA-300	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.6	Wood Type (Softwood and Hardwood)	Monitor the Quantity of Each Wood Type Used in Wood Pellet Production (Monthly and Rolling 12-Month Total)
AA-201a AA-202a AA-203a	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.7	Dried Wood Chip Throughput	Monitor and Calculate the Total Throughput for Each Dryer (Rolling 12-Month Period)
		5.8	Final Moisture Content	Monitor Moisture Content of All Wood Chips Dried On-Site (Daily) Calculate Moisture Content on Monthly Average
AA-201b AA-202b AA-203b	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.9	Hours of Duration	Monitor and Record Date, Time, and Duration of Start-Up and Shutdown Periods Calculate Total Duration of All Start-up and Shutdown Periods (Rolling 12-Month Period)
		5.10	NO_X PM / PM_{10} / $PM_{2.5}$ CO VOCs	Establish Site-Specific Emission Factors

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-201d AA-202d AA-203d	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.11	Hours of Duration	Monitor and Record Date, Time, and Duration of Start-Up and Shutdown Periods Calculate Total Duration of All Start-up and Shutdown Periods (Rolling 12-Month Period)
		5.12		Monitor and Record Date, Time, and Duration of Idle Mode Periods Calculate Total Duration of All Idle Mode Periods (Rolling 12-Month Period)
AA-201e AA-202e AA-203e AA-302 AA-306 AA-307 AA-310 AA-401 through AA-404	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.13	PM Opacity	Conduct Weekly Visible Emission Observations
AA-201e AA-202e AA-203e AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.14	Secondary Voltage Combustion Chamber Temperature	Install, Calibrate, Monitor, Operate, and Inspect Continuous Monitoring / Recording System for Operating Parameters
		5.15		Air Pollution Control Device Operational Specifications
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). 11 Miss. Admin. Code Pt. 2, R. 1.8.	5.16	PM (filterable) PM_{10} / $PM_{2.5}$ (filterable + condensable) CO HAPs NO_X	Performance Test Requirements
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	5.17		Conduct Subsequent Performance Testing
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.18	PM / PM_{10} / $PM_{2.5}$ VOCs CO NO_X	Establish Site-Specific Emission Factors
AA-201e AA-202e AA-203e	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). 11 Miss. Admin. Code Pt. 2, R. 1.8.	5.19	VOCs HAPs	Establish a Minimum Combustion Chamber Temperature for Each RTO

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-201e AA-202e AA-203e	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). 11 Miss. Admin. Code Pt. 2, R. 1.8.	5.20	Combustion Chamber Temperature	Continuously Monitor the Combustion Chamber Temperature for Each RTO (3-Hour Block Average)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.21	PM / PM_{10} / $PM_{2.5}$	Establish Secondary Voltage Range for WESP
		5.22	Secondary Voltage	Continuously Monitor the Secondary Voltage for Each WESP (3-Hour Block Average)
AA-300	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.23	Wood Pellet Production	Monitor Total Production On-Site (Monthly and Rolling 12-Month Total)
AA-302 AA-310 AA-401 through AA-404	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.24	PM Opacity	Conduct a Weekly Inspection of Each Baghouse and Bin Vent
		5.25		Evaluate the Pressure Drop for Each Baghouse and Bin Vent Daily
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). 11 Miss. Admin. Code Pt. 2, R. 1.8.	5.26	VOCs HAPs	Establish Minimum Combustion Chamber Temperature for the RTO / RCO
		5.27	Combustion Chamber Temperature	Continuously Monitor the Combustion Chamber Temperature the RTO / RCO (3-Hour Block Average)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). 11 Miss. Admin. Code Pt. 2, R. 1.8.	5.28	VOCs HAPs	Conduct Routine Testing to Determine Apparent Media Density and Percent Saturation of Catalytic Media in the RCO
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.29	Hours of Operation	Monitor the Total Duration for Each Oxidizer Mode (Monthly)
AA-502 AA-503 AA-505 AA-506	40 CFR 60.4214(b), Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.30	Emergency Engine Status	Record Hours of Operation (Emergency and Non-Emergency)
	40 CFR 60.4214(a)(2)(i) – (iii); Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.31	$NMHC + NO_X$ CO PM	Recordkeeping Requirements
	40 CFR 60.4211(g)(2) and (3); Subpart IIII	5.32		Perform Compliance Actions (As Applicable)

5.1 Except as otherwise specified or limited herein, 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. Supporting information includes all calibration and maintenance records, all original strip-chart recordings or other data from 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-000 (Facility-Wide), the permittee shall develop, maintain, and implement a "Start-Up, Shutdown, and Malfunction Plan" (SSMP) that details the procedures for operating and maintaining the applicable emissions equipment during periods of start-up, shutdown, and malfunction, and a program of corrective action(s) for any malfunctioning equipment (i.e. air pollution control equipment, monitoring equipment, and/or process equipment) used to comply with the case-by-case MACT determination under Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.8.A.

The purpose of the SSMP is to ensure the following actions:

(a) At all times, the permittee shall operate and maintain all applicable emission sources (including all associated air pollution control and monitoring equipment) in a manner which satisfies the general duty to minimize emissions established in Condition 4.1;

(b) The permittee is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants (HAPs); and

(c) Reduce the reporting burden associated with periods of start-up, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(Ref.: 40 CFR 63.6(e)(3)(i); Subpart A)

5.3 For Emission Point AA-000 (Facility-Wide), the permittee shall develop, maintain, and implement a "Dust Management Plan" that details the procedures for operating and maintaining emission sources to minimize the emission of fugitive particulate matter.

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

5.4 For Point AA-000 (Facility-Wide), the permittee shall calculate and record the total respective emission of nitrogen oxides (NO_X), particulate matter (PM), particulate matter less than 10 microns (µm) in diameter (PM_{10}), particulate matter less than 2.5 µm in diameter ($PM_{2.5}$), volatile organic compounds (VOCs), and carbon monoxide (CO) from all applicable emission sources in tons both on a monthly and rolling 12-month total basis in accordance with the following specifications:

(a) Beginning on the date of initial start-up and ending on the date in which the emission factors required by Conditions 5.10 and 5.18 are approved, the permittee shall calculate emissions from the Dryer Bypass Stacks (i.e. Emission Points AA-201b, AA-202b, and AA-203b), the Wood Drying Control Systems (i.e. Emission Points AA-201e, AA-202e, and AA-203e), and the Pellet Mill Control Systems (i.e. Emission Points AA-306 and AA-307) using the applicable emission factors presented in the Permit to Construct application for this permitted project.

(b) Upon approval of the site-specific emission factors, the permittee shall calculate and record emissions from the Dryer Bypass Stacks, the Wood Drying Control Systems, and the Pellet Mill Control Systems using collected production data, collected parametric monitoring data, and the established site-specific emission factors. Additionally, the permittee shall revise and update the monthly emissions and rolling 12-month total emissions calculated in accordance with paragraph (a) of this condition to reflect the approved site-specific emission factors.

(c) For all other emission sources, when determining compliance with the emission limitations specified in Conditions 3.6 and 3.7, the permittee shall either assume actual emissions are equivalent to potential emissions or shall maintain actual data (e.g. throughput) and use the emission factors in the Permit to Construct application to determine actual emissions on a monthly basis and rolling 12-month basis.

(d) Unless otherwise specified herein, the permittee shall maintain records of all reference data utilized to validate calculated emissions (operational data, applicable emission factors, engineering judgement determinations, etc.).

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

5.5 For Emission Point AA-108 (Green Hammer Mills), the permittee shall monitor and record the throughput of green wood chips processed in oven-dried tons (ODT) both on a monthly and rolling 12-month total basis.

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

5.6 For Emission Points AA-200 (Wood Drying Operations), and AA-300 (Wood Pellet Production Operations), the permittee shall monitor and record the respective quantity of softwood and hardwood used as a feedstock in short-tons both on a monthly and rolling 12-month total basis.

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

5.7 For Emission Points AA-201a, AA-202a, and AA-203a (Rotary Drum Dryers), the permittee shall monitor and calculate the throughput of dried wood chips from each dryer in oven-dried tons (ODT) both on a monthly and on a rolling 12-month total basis.

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

5.8 For Emission Points AA-201a, AA-202a, and AA-203a (Rotary Drum Dryers), the permittee shall demonstrate compliance with the final moisture content limit specified in Condition 3.12 by monitoring the moisture content of all dried wood chips produced by each dryer daily. This monitoring data shall also be utilized to determine the moisture content of the dried wood chips based on a monthly average.

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

5.9 For Emission Points AA-201b, AA-202b, and AA-203b (Dryer Bypass Stacks), the permittee shall monitor and record the date, time, and duration of every start-up and shutdown period experienced by each dryer (in which emissions are diverted to the corresponding bypass stack). Additionally, the permittee shall calculate and record the total duration of all start-up and shutdown periods for each dryer in hours per year based on a rolling 12-month period.

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

5.10 For Emission Points AA-201b, AA-202b, and AA-203b (Dryer Bypass Stacks), the permittee shall utilize controlled dryer emissions data collected during performance testing required by Condition 5.16, the vendor-guaranteed control efficiency specified for the wet electrostatic precipitator (95.0%), and the vendor-guaranteed control efficiency specified for the regenerative thermal oxidizer (95.0%) on each corresponding Wood Drying Control System (i.e. Emission Points AA-201e, AA-202e, and AA-203e) to determine uncontrolled, site-specific emission factors (in pounds per hour) for PM, PM_{10}, $PM_{2.5}$, and VOCs from each Dryer Bypass Stack.

The uncontrolled, site-specific VOC emission factor for each Dryer Bypass Stack shall be specifically derived using the applicable percent control efficiency and a modified EPA OTM-26:

$$EF_{VOC} = \left(\bar{M}_{VOC\ (as\ propane)} + \bar{M}_{Methanol} + \bar{M}_{Formaldehyde} + \bar{M}_{Acetaldehyde}\right) - 0.65(\bar{M}_{Methanol})$$

Where:

EF_{VOC} = the site-specific emission factor for VOCs, pounds per hour;

$\bar{M}_{VOC\ (as\ propane)}$ = the average mass flow rate of volatile organic compound (as propane) emissions from applicable performance testing, pounds per hour;

$\bar{M}_{Methanol}$ = the average mass flow rate of methanol emissions from applicable performance testing, pounds per hour;

$\bar{M}_{Formaldehyde}$ = the average mass flow rate of formaldehyde emissions from applicable performance testing, pounds per hour;

$\bar{M}_{Acetaldehyde}$ = the average mass flow rate of acetaldehyde emissions from applicable performance testing, pounds per hour;

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

5.11 For Emission Points AA-201d, AA-202d, and AA-203d (Furnace Bypass Stacks), the permittee shall monitor and record the date, time, and duration of every start-up and shutdown period experienced by each furnace that resulted in emissions being diverted to the corresponding bypass stack. Additionally, the permittee shall calculate and record the total duration of all start-up and shutdown periods for each furnace in hours per year based on a rolling 12-month period.

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

5.12 For Emission Points AA-201d, AA-202d, and AA-203d (Furnace Bypass Stacks), the permittee shall monitor and record the date, time, and duration of every period that each furnace operates in idle mode. Additionally, the permittee shall calculate and record the total duration of all idle mode periods for each furnace in hours per year based on a rolling 12-month period.

During any period that a furnace operates in idle mode, the permittee shall monitor the number of fuel pushes and calculate the hourly heat input rate based on a 3-hour block average.

For the purpose of this permit, a "*fuel push*" is defined as the conveyance of a definitive volume of wood waste onto the furnace grate.

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

5.13 For Emission Points AA-201e, AA-202e, AA-203e, AA-302, AA-306, AA-307, AA-310, and AA-401 through AA-404 (Wood Drying Control Systems, Dry Shavings Silo, Pellet Mill Control Systems, Pellet Mill Housekeeping Vacuum System, and Finished Pellet Product Handling and Storage), the permittee shall perform and record a weekly visible emission observation in accordance with EPA Test Method 22 on the exhaust of each denoted point source 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. However, in lieu of performing a VEE, the permittee may assume that the visual opacity of emissions from a point source exceed the applicable limitation (i.e. Condition 3.1 or 3.2) and immediately implement corrective actions.

In the event that a VEE is required but cannot be conducted, 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 EPA Test Method 22 and/or EPA Test Method 9, any corrective actions taken to prevent or minimize emissions as a result of the evaluation, and the date / time when each observation / evaluation was conducted.

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

5.14 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), the permittee shall install, calibrate, operate, maintain, and inspect a continuous monitoring system for the operating parameter specified for each control device grouping below in accordance with the manufacturer's recommendations:

(a) *Wet Electrostatic Precipitator (WESP)* – secondary voltage (in volts);

(b) *Regenerative Thermal Oxidizer (RTO)* – combustion chamber temperature (in degrees Fahrenheit); and

(c) *Regenerative Thermal Oxidizer / Regenerative Catalytic Oxidizer (RTO / RCO)* – combustion chamber temperature (in degrees Fahrenheit).

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

5.15 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), the permittee shall operate and maintain each air pollution control device within the noted control systems in accordance with the specified manufacturer's instructions / recommendations until such a time as the applicable operating parameters required by Condition 5.19, 5.21, and 5.26 are established.

Additionally, the permittee shall maintain documentation that details the manufacturer's instructions / recommendations for each control device.

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

5.16 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), the permittee shall demonstrate compliance with the HAP control efficiency requirements [measured as VOCs] specified in Conditions 3.15 and 3.19 by conducting an initial performance test on the respective control devices no later than one hundred eighty (180) days after the initial start-up of each specified control system.

In addition to the aforementioned initial compliance demonstration, and unless otherwise specified herein, the permittee shall also conduct performance testing on the RTOs and the

RTO / RCOs for NO_X, CO, PM (filterable), PM_{10} (filterable + condensable), and $PM_{2.5}$ (filterable + condensable) at the respective exhaust points by the deadline specified above. The testing for NO_X and CO shall be performed during the same test runs.

All testing shall be conducted in accordance with the following requirements:

(a) All performance testing shall be conducted in accordance with applicable EPA-approved test methods or alternative test methods approved by the MDEQ and the U.S. EPA prior to the testing event.

(b) The permittee shall conduct a minimum of three (3) separate test runs for a performance stack test as specified in 40 CFR 63.7(e)(3); Subpart A.

(c) Initial performance testing shall be conducted while dried wood chip production and/or wood pellet production is at no less than ninety percent (90.0%) of the maximum permitted equipment production capacity (in oven-dried tons per hour) and no less than one hundred percent (100%) by weight of softwood usage as a feedstock. The actual production rate and the weight percent of softwood as a feedstock will be determined individually for each unit during the performance test.

If the permittee has not achieved 90.0% of the maximum permitted equipment production capacity or 100% by weight of softwood usage as a feedstock within 180 days after the initial start-up of a corresponding control system, the permittee shall conduct the initial performance testing while operating at the maximum achievable capacities up to that point. Thereafter, the permittee shall conduct subsequent performance testing in accordance with the specifications of this condition no later than 90 days after satisfying at least one of the following stipulations:

(1) The monthly average dried wood production from a dryer or wood pellet production increases by more than ten (10) percentage points above the capacity established during the prior performance testing (until achieving no less than 90.0% of the maximum permitted equipment production capacity);

(2) The monthly average weight percent of softwood as a feedstock increases by more than 10 percentage points above that measured during the prior performance testing (until achieving no less than 100% by weight of softwood usage as a feedstock); or

(3) The monthly average moisture content of the dried wood from a dryer decreases by more than one (1) percentage point below the moisture content measured during the prior performance testing [not to decrease below five percent (5.0%) moisture content].

(d) For the Wood Drying Control Systems, the permittee shall not inject natural gas directly into the pollutant stream during the initial performance testing for NO_X emissions.

(e) For the No. 1 Wood Drying Control System (Emission Point AA-201e), the permittee shall monitor and record hourly throughput data on the green wood chips processed in the Green Hammer Mills (Emission Point AA-108) and wood chips dried by the No. 1 Rotary Drum Dryer (Emission Point AA-201a) during a performance test.

For the No. 2 and No. 3 Wood Drying Control Systems (Emission Points AA-202e and AA-203e), the permittee shall monitor and record hourly throughput data on the wood chips dried by the corresponding Rotary Drum Dryer (Emission Points AA-202a and AA-203a) during a performance test.

(f) For the Pellet Mill Control Systems, the permittee shall monitor and record hourly throughput data in ODT of wood pellets produced during a performance test.

(g) For the Pellet Mill Control Systems, in addition to the above-mentioned requirements, the permittee shall conduct the initial performance testing on the RTO / RCOs in accordance with the following specifications:

(1) The permittee shall demonstrate compliance with the respective HAP control efficiency for each oxidizer control mode. Upon completing the initial compliance demonstration for the oxidizer operating in thermal mode (RTO) or catalytic mode (RCO), the subsequent compliance demonstration is required no later than ninety (90) days after commencing operation of the auxiliary control mode.

(2) The permittee shall evaluate PM, PM_{10}, and $PM_{2.5}$ emissions while operating the oxidizer in thermal mode **or** catalytic mode.

(3) The permittee **must** evaluate NO_X and CO emissions while operating the oxidizer in thermal mode.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

5.17 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), unless otherwise required herein, the permittee shall conduct subsequent performance testing on the exhaust of each RTO and RTO / RCO to evaluate the respective emission of PM (filterable), PM_{10} (filterable + condensable), $PM_{2.5}$ (filterable + condensable), NO_X, CO, and VOCs no later than twenty-five (25) months after the previously completed performance test.

The testing for NO_X and CO shall be performed during the same test runs. Moreover, all testing shall be conducted in accordance with the specifications outlined in Condition 5.16(a), (b), (e), and (f) (as applicable).

The permittee shall utilize both the test results and applicable throughput data collected during the testing event to create site-specific emission factors for noted pollutants in pounds per oven-dried tons (ODT) in accordance with Condition 5.18. If the converted results exceed any of the already approved site-specific emission factors, the permittee **shall** submit the new emission factors in accordance with Condition 6.11.

If the converted results are lower than the approved site-specific emission factors, the permittee **may** submit the new emission factors in accordance with Condition 6.11.

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

5.18 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), upon completing a performance test as required by Conditions 5.16, the permittee shall utilize both the test results and applicable throughput data collected during the testing event to determine site-specific emission factors for PM, PM_{10}, $PM_{2.5}$, VOCs, NO_X, and CO in pounds per oven-dried tons (ODT). The permittee shall establish these emission factors in accordance with the following specifications:

(a) For the Wood Drying Control Systems and the Pellet Mill Control Systems, the permittee shall establish a VOC site-specific emission factor for each control system based on a modified EPA OTM-26:

$$EF_{VOC} = \frac{\left(\bar{M}_{VOC\ (as\ propane)} + \bar{M}_{Methanol} + \bar{M}_{Formaldehyde} + \bar{M}_{Acetaldehyde}\right) - 0.65(\bar{M}_{Methanol})}{\bar{M}_{Throughput}}$$

Where:

EF_{VOC} = the site-specific emission factor for VOCs, pounds per ODT;

$\bar{M}_{VOC\ (as\ propane)}$ = the average mass flow rate of volatile organic compound (as propane) emissions from applicable performance testing, pounds per hour;

$\bar{M}_{Methanol}$ = the average mass flow rate of methanol emissions from applicable performance testing, pounds per hour;

$\bar{M}_{Formaldehyde}$ = the average mass flow rate of formaldehyde emissions from applicable performance testing, pounds per hour;

$\bar{M}_{Acetaldehyde}$ = the average mass flow rate of acetaldehyde emissions from applicable performance testing, pounds per hour;

$\bar{M}_{Throughput}$ = the average throughput rate of applicable material (i.e. green wood chips processed, dried wood chips, wood pellets) during performance testing, ODT per hour.

(b) For the No. 1 Wood Drying Control System, all site-specific emission factors shall be based on the pounds of pollutant per combined ODT of dried wood chips from the No. 1 Rotary Drum Dryer (Emission Point AA-201a) and green wood chips processed in the Green Hammer Mills (Emission Point AA-108).

For the No. 2 and No. 3 Wood Drying Control Systems, all site-specific emission factors shall be based on the pounds of pollutant per ODT of dried wood chips from each corresponding Rotary Drum Dryer.

(c) For the Pellet Mill Control Systems, all site-specific emission factors shall be based on the pounds of pollutant per ODT of wood pellets produced.

(d) For the Pellet Mill Control Systems, the unit-specific emission factors for NO_X and CO shall be based on testing conducted while operating the oxidizer in thermal mode.

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

5.19 For Emission Points AA-201e, AA-202e, and AA-203e (Wood Drying Control Systems), during the initial performance testing, the permittee shall establish a minimum combustion chamber temperature for each RTO (in degrees Fahrenheit) that demonstrates continuous compliance with the HAP control efficiency specified in Condition 3.15.

The minimum combustion chamber temperature shall be the average temperature measured over the span of the corresponding performance test. The minimum combustion chamber temperature may be modified based on subsequent performance testing that demonstrates compliance with the minimum HAP control efficiency in accordance with the specifications outlined in Condition 5.16.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

5.20 For Emission Points AA-201e, AA-202e, and AA-203e (Wood Drying Control Systems), the permittee shall continuously monitor and record the combustion chamber temperature for each RTO (in degrees Fahrenheit) based on a 3-hour block average.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

5.21 For Emission Points AA-201e, AA-202e, and AA-203e (Wood Drying Control Systems), during the initial performance testing, the permittee shall establish an operational range for the secondary voltage (in volts) on each wet electrostatic precipitator (WESP) to maximize the control of particulate matter emissions.

The permittee may establish a different operational range for the secondary voltage by conducting a repeat performance test in accordance with the provisions specified in Condition 5.16.

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

5.22 For Emission Points AA-201e, AA-202e, and AA-203e (Wood Drying Control Systems), the permittee shall continuously monitor and record the secondary voltage (in volts) for each WESP based on a 3-hour block average.

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

5.23 For Emission Point AA-300 (Wood Pellet Production Operations), the permittee shall monitor and record the total production of wood pellets in ODT both on a monthly and rolling 12-month total basis.

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

5.24 For Emission Points AA-302 (Dry Shavings Silo), AA-310 (Pellet Mill Housekeeping Vacuum System), and AA-401 through AA-404 (Finished Pellet Product Handling and Storage), the permittee shall perform a weekly inspection of each baghouse and bin vent. If any problem is noted during an inspection, the permittee shall perform the necessary maintenance activities to ensure operation of the baghouse or bin vent as originally designed. Additionally, preventative maintenance shall be performed (as necessary) to maintain proper operation of a baghouse or bin vent.

The permittee shall maintain documentation that details the date / time each inspection is performed, any noted problem experienced, any maintenance (either corrective or preventative) performed to return a control device to operation as originally designed, and any periods of time (including date and duration) in which a control device was non-operational during active operations.

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

5.25 For Emission Points AA-302 (Dry Shavings Silo), AA-310 (Pellet Mill Housekeeping Vacuum System), and AA-401 through AA-404 (Finished Pellet Product Handling and Storage), the permittee shall monitor and record the differential pressure drop (in inches of water) across each baghouse and bin vent daily during active corresponding operations. If a monitored recording is outside the differential pressure drop range outlined by the manufacturer's specifications / recommendations, the permittee shall perform and record necessary maintenance to return the baghouse or bin vent to normal operation.

Additionally, the permittee shall maintain documentation for each baghouse and bin vent that details the recommended differential pressure drop range specified by the respective manufacturer.

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

5.26 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), during the initial performance testing, the permittee shall establish the minimum combustion chamber temperature (in degrees Fahrenheit) of each RTO / RCO that demonstrates continuous compliance with the HAP control efficiency specified in Condition 3.19.

The minimum combustion chamber temperature shall be the average temperature measured over the span of the corresponding performance test. The minimum combustion chamber temperature may be modified based on subsequent performance testing that demonstrates compliance with the minimum HAP control efficiency in accordance with the specifications outlined in Condition 5.16.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

5.27 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), the permittee shall continuously monitor and record the combustion chamber temperature of each RTO / RCO (in degrees Fahrenheit) based on a 3-hour block average.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

5.28 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), in accordance with the manufacturer's recommendations, the permittee shall monitor the effective life of the catalytic media in the RTO / RCO when operating in catalytic oxidization mode by determining the apparent density (in grams per cubic centimeter) and percent saturation no later than sixteen (16) months after the initial start-up of the RTO / RCO in catalytic oxidization mode. Thereafter, the permittee shall perform subsequent apparent density testing on the catalytic media in the RTO / RCO no later than 16 months after the previously completed test.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

5.29 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), the permittee shall monitor and record the total duration (in hours) of the operation of each oxidizer mode (thermal or catalytic) on a monthly basis.

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

5.30 For Emission Point AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), 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, 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)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

5.31 For Emission Point AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), the permittee shall maintain records that detail the following information:

(a) All notifications submitted to comply with 40 CFR Part 60, Subpart IIII;

(b) Any maintenance conducted on an engine;

(c) The manufacturer's emission-related written instructions for an engine; and

(d) Documentation from the manufacturer that indicates an engine is certified to meet the respective emission standards specified in Condition 3.26 and 3.27.

(Ref.: 40 CFR 60.4214(a)(2)(i) – (iii); Subpart IIII)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

5.32 For Emission Point AA-502, AA-503, AA-505, and AA-506 (Emergency Engines), if the permittee does not operate and maintain an 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, the permittee shall demonstrate compliance with the respective emission standards specified in Conditions 3.26 and 3.27 through the following actions:

(a) Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions.

(b) For Emission Point AA-503, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one (1) year of start-up, or within one (1) year after each engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer;

(c) For Emission Point AA-502, AA-505, AA-506, in addition to paragraphs (a) and (b) of this condition, the permittee shall conduct subsequent performance testing every 8,760 hours or three (3) years (whichever comes first).

Any required performance test shall be conducted in accordance with the procedures outlined in 40 CFR 60.4212(a) – (c); Subpart IIII (as applicable).

(Ref.: 40 CFR 60.4211(g)(2) and (3); Subpart IIII)

SECTION 6
REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Reporting Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Submit Documents Certified by a Responsible Official
		6.2	Report a Deviation from Requirements Within Five (5) Days
	11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).	6.3	Submit a Notification When Construction Does Not Begin Within 18 Months (As Applicable)
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(1). and (3).	6.4	Submit a Notification on the Completion of Construction
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).	6.5	Submit a Notification on a Change in Approved Construction Plans / Specifications
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.6	Submit a Semi-Annual Monitoring Report of Emissions and Operational Data
		6.7	Submit the Start-Up, Shutdown, and Malfunction Plan
		6.8	Submit the Dust Management Plan for Review / Approval
		6.9	Submit a Notification on the Initial-Start-Up of On-Site Operations
AA-201b AA-202b AA-203b AA-201e AA-202e AA-203e AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.10	Submit Site-Specific Emission Factors for Review / Approval
AA-201e AA-202e AA-203e	11 Miss. Admin. Code Pt. 2, R. 2.6.B.(5) and 2.2.B.(11).	6.11	Submit Performance Testing Protocol Submit 10-Day Notification of Performance Testing Event
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11) and 2.6.B.(5).	6.12	Submit Performance Test Results and Additional Information

Emission Point(s)	Applicable Requirement	Condition Number	Reporting Requirement
AA-201e AA-202e AA-203e AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.13	Submit a Notification Upon Satisfying Stipulation(s) for Subsequent Performance Testing
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.14	Submit Results of Apparent Density Testing

6.1 Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a Responsible Official (RO) that affirms, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

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

6.2 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective action(s) and/or preventive measures taken. The report shall be submitted to the MDEQ within five (5) working days of the time the deviation began.

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

6.3 For Emission Point AA-000 (Facility-Wide), the permittee shall notify the MDEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for 18 months or more.

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

6.4 For Emission Point AA-000 (Facility-Wide), upon the completion of construction / installation of all permitted emission sources and prior to commencing operation, the permittee shall notify the MDEQ in writing that construction / installation has been completed in accordance with the approved plans and specifications on file no later than fifteen (15) days after completing the actual construction / installation.

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

6.5 For Emission Point AA-000 (Facility-Wide), the MDEQ shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the MDEQ 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).)

6.6 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a semi-annual monitoring report (SMR) no later than January 31 and July 31 of each calendar year for the preceding six-month period that contains the following information (at a minimum):

(a) The total emission of PM, PM_{10}, $PM_{2.5}$, VOCs, NO_X, and CO from all applicable emission sources in tons both on a monthly and rolling 12-month total basis;

(b) The weight percent (wt.%) of softwood and hardwood utilized as feedstock in short-tons both on a monthly and rolling 12-month total basis;

(c) The green wood chip throughput from the Green Hammer Mills (i.e. Emission Point AA-108) in oven-dried tons (ODT) both on a monthly and rolling 12-month total basis (including supporting moisture content data);

(d) The dried wood chips throughput from each Rotary Drum Dryer (i.e. Emission Points AA-201a, AA-202a, and AA-203a) in ODT both on a monthly and rolling 12-month total basis;

(e) The total duration of all combined start-up and shutdown periods experienced by each Rotary Drum Dryer both on a monthly and rolling 12-month total basis;

(f) The total duration of all start-up and shutdown periods experienced by each Wood Waste-Fired Furnace (i.e. Emission Points AA-201c, AA-202c, and AA-203c) both on a monthly and rolling 12-month total basis;

(g) The total duration of all idle mode periods experienced by each Wood Waste-Fired Furnace both on a monthly and rolling 12-month total basis;

(h) The final moisture content of all wood chips dried on-site based on a rolling 12-month period;

(i) A summary for each parametric continuous monitoring and recording system (CMRS) that provides the following information:

(1) *Operation Outside Established Range* – the specific emission point / control equipment, the date, the beginning and ending times, the cause(s) for each excursion; and any corrective action taken as a result of the excursion; and

(2) *CMRS Downtime* – the specific emission point / control equipment, the date, the beginning and ending times, the cause(s) for each downtime event; and any corrective action taken as result of a downtime event.

(j) The hours of operation for each emergency engine (including a summary on how many hours are spent for emergency operation, what classified the operation as an emergency situation, how many hours are spent for non-emergency operation, and the circumstance(s) for non-emergency operation).

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

6.7 For Emission Point AA-000 (Facility-Wide), the permittee shall submit the "Start-Up, Shutdown, and Malfunction Plan" (SSMP) required by Condition 5.2 for review by the MDEQ no later than sixty (60) days after certifying completion of construction.

Thereafter, the permittee shall include in the SMR required by Condition 6.6 a summary of any revision(s) made to the SSMP during the preceding six-month period.

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

6.8 For Emission Point AA-000 (Facility-Wide), the permittee shall submit the initial "Dust Management Plan" (DAP) required by Condition 5.3 for review and approval by the MDEQ with the notification certifying completion of construction.

Thereafter, the permittee shall include in SMR required by Condition 6.7 a summary of any revision(s) made to the DAP during the preceding six-month period.

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

6.9 For Emission Point AA-000 (Facility-Wide), the permittee shall notify the MDEQ in writing of the initial start-up of on-site operations no later than fifteen (15) days after the actual start-up date.

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

6.10 For Emission Points AA-201b, AA-202b, AA-203b, AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Dryer Bypass Stacks, Wood Drying Control Systems, and Pellet Mill Control Systems), the permittee shall submit the developed site-specific emission factors required by Conditions 5.10, 5.17, and 5.18 for review and approval by the MDEQ no later than ninety (90) days after completing the performance testing required by Conditions 5.16 and 5.17.

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

6.11 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), the permittee shall submit a written performance test protocol for testing required by Conditions 5.16 and 5.17 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.

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).)

6.12 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), the permittee shall submit the results for any conducted performance test no later than sixty (60) days after completing the testing event. The report, at a minimum, shall include the information specified in Condition 1.27(c) and the following site-specific information (as applicable):

(a) Applicable parametric monitoring data that corresponds to a specified pollutant(s) and supporting documentation;

(b) The hourly throughput data for all applicable process units;

(c) The feedstock ratio of softwood and hardwood used during a performance test;

(d) The moisture content data for wood chips dried during a performance test;

(e) Oxygen (O_2) concentration data;

(f) A comparison of results (i.e. the average pollutant emission rates, the average softwood feedstock ratios, and the applicable production rates) to all prior applicable results in the previous five (5) years; and

(g) For Emission Points AA-306 and AA-307 – the control method being utilized during a performance test (i.e. thermal or catalytic mode).

(Ref.: 11 Miss. Admin. Code Pt.2, R. 2.2.B.(11) and 2.6.B.(6).)

6.13 For Emission Points AA-201e, AA-202e, AA-203e, AA-306, and AA-307 (Wood Drying Control Systems and Pellet Mill Control Systems), the permittee shall notify the MDEQ in writing upon triggering additional testing as specified in Condition 5.16(b) no later than thirty (30) days after the applicable percentage point increase(s) and/or decrease occur.

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

6.14 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), the permittee shall submit the results of an apparent density test required by Condition 5.28 no later than thirty (30) days after completing the testing event.

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