

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

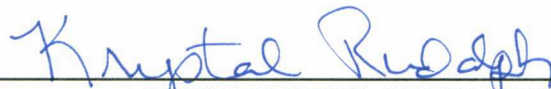
TO CONSTRUCT AIR EMISSIONS EQUIPMENT

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



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: JUL 09 2019

Permit No.: 0840-00022

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 an 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. Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

(a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.):

- (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:

- (i) An upset occurred and that the source can identify the cause(s) of the upset;

- (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than twenty-four (24) hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
 - (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third-party enforcement actions.
- (b) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.):
- (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups and shutdowns are defined by an applicable rule, regulation, or permit.
 - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this Regulation 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B.(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during start-up or shutdown, see the upset requirements above.

(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 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 Operating 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 11 Miss. Admin. Code Pt. 2, R. 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 Operating 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 Operating 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 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).)

B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun.

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

2. The permittee must notify DEQ 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).)

3. Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board.

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

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

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

SECTION 2 EMISSION POINT DESCRIPTION

The permittee is authorized to construct and operate, upon certification of construction completed, 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 Handling Operations
AA-105	Bark Storage Pile
AA-106	Green Wood Chip Storage Pile
AA-107	Green Screen
AA-108	Five (5) Green Hammer Mills [emissions are routed to the No. 1 Wood Drying Gas Control System]
AA-200	Wood Drying Operations
AA-201a	No. 1 Rotary Drum Dryer [includes two (2) ducts each heated by one (1) natural gas / propane-fired burner (Max. Heat Input Capacity: 2.5 MMBTU / Hour); 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 Capacity: 168 MMBTU / Hour]
AA-201d	No. 1 Wood Waste-Fired Furnace Bypass Stack

EMISSION POINT	DESCRIPTION
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 four (4) burners (Max. Heat Input Capacity: 6.2 MMBTU / Hour each)]
AA-202a	No. 2 Rotary Drum Dryer [includes two (2) ducts each heated by one (1) natural gas / propane-fired burner (Max. Heat Input Capacity: 2.5 MMBTU / Hour); 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 Capacity: 168 MMBTU / Hour]
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 four (4) burners (Max. Heat Input Capacity: 6.2 MMBTU / Hour each)]
AA-203a	No. 3 Rotary Drum Dryer [includes two (2) ducts each heated by one (1) natural gas-fired burner (Max. Heat Input Capacity: 2.5 MMBTU / Hour); 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 Capacity: 168 MMBTU / Hour]
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 four (4) burners (Max. Heat Input Capacity: 6.2 MMBTU / Hour each)]
AA-300	Wood Pellet Production Operations
AA-301	Dry Hammer Mill Feed Silo
AA-302	Dry Shavings Silo [emissions are routed to a baghouse]
AA-303	Forty-Eight (48) Dry Hammer Mills and Conveyors
AA-304	Eighteen (18) Pellet Mills

EMISSION POINT	DESCRIPTION
AA-305	Nine (9) Pellet Coolers and Cyclones
AA-306	No. 1 Pellet Mill Control System [includes (in series) one (1) wet scrubber, and one (1) regenerative catalytic oxidizer (RCO) with 1 burner (Max. Heat Input Capacity: 10.1 MMBTU / Hour)]
AA-307	No. 2 Pellet Mill Control System [includes (in series) one (1) wet scrubber, and one (1) regenerative catalytic oxidizer (RCO) with 1 burner (Max. Heat Input Capacity: 10.1 MMBTU / Hour)]
AA-308	Additive Storage and Handling Operations [emissions are routed to a baghouse]
AA-400	Finished Pellet Product Handling
AA-401	Finished Product Handling and Loading [emissions are routed to a baghouse]
AA-500	Auxiliary Equipment
AA-501a	185-Gallon Above-Ground Diesel Fuel Storage Tank
AA-501b	500-Gallon Above-Ground Diesel Fuel Storage Tank
AA-501c	5,000-Gallon Above-Ground Diesel Fuel Storage Tank
AA-502	671 HP Diesel Fuel-Fired, Compression-Ignition Emergency Generator Engine
AA-503	131 HP Diesel Fuel-Fired, Compression-Ignition Emergency Fire Water Pump Engine
AA-504	1.00 MMBTU / Hour Liquefied Propane Gas (LPG) Vaporizer

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	$\leq 40\%$
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 1.3.F.(1).	3.3	PM	$E = 4.1 (p^{0.67})$
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.4		General Nuisance Clause
	11 Miss. Admin. Code Pt. 2, R. 1.4.B.(1).	3.5	SO ₂	500 parts per million (by volume)
	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	3.6	HAPs	Applicability
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). PSD Avoidance Limit	3.7	NO _x	245.0 tpy (Rolling 12-Month Period)
			PM (filterable only)	245.0 tpy (Rolling 12-Month Period)

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. 2.2.B.(10). PSD Avoidance Limit	3.7	PM ₁₀ / PM _{2.5} (filterable + condensable)	245.0 tpy (Rolling 12-Month Period)
			VOCs	245.0 tpy (Rolling 12-Month Period)
			CO	245.0 tpy (Rolling 12-Month Period)
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
		3.9	Green Wood Chip Throughput	1,390,475 ODT / Year (Rolling 12-Month Period)
AA-200 AA-300	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.10	Softwood Usage Restriction	≤ 85% Softwood Processed (by Weight)
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.	3.11	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 Period)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.12	Dried Wood Chip Throughput	367,920 ODT / Year for Each Dryer (Rolling 12-Month Period)
		3.13	VOCs	5% 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).	3.14	Fuel Source Restriction	Uncontaminated Wood Waste Only
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). 11 Miss. Admin. Code Pt. 2, R. 1.10.B.	3.15	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 Period) Idle Mode Requirements: Bypass Emissions for ≤ 500 Hours from Each Furnace (Rolling 12-Month Period)

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
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.	3.16	HAPs	95% Control Efficiency (RTO), measured as VOCs
AA-300	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.17	Wood Pellet Production	1,420,539 ODT / Year (Rolling 12-Month Period)
AA-302 AA-308 AA-401	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.18	PM / PM ₁₀ / PM _{2.5}	Operational Requirements
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.19	VOCs PM / PM ₁₀ / PM _{2.5}	Operational Requirements
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). 11 Miss. Admin. Code Pt. 2, R. 1.8.A. and C.	3.20	HAPs	96.3% Control Efficiency (RCO), measured as VOCs
AA-502 AA-503	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).	3.21	PM	0.6 pounds per MMBTU / Hour
	11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).	3.22	SO ₂	4.8 pounds per MMBTU
	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Combustion Engines 40 CFR 60.4200(a)(2); Subpart IIII	3.23	HAPs	Applicability
	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			

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
AA-502 AA-503	40 CFR 60.4207(b); Subpart III	3.24	Fuel Requirement	15 ppm Sulfur Content (Max.) 40 Cetane Index (Min.) or 35% Aromatic Content (Max. – by volume)
	40 CFR 60.4211(f)(1–3); Subpart III	3.25	Non-Emergency Operation	100 Hours per Calendar Year (for Each Engine)
	40 CFR 60.4209(a); Subpart III 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.26	Hours of Operation	Non-Resettable Hour Meter Installation Requirement
AA-502	40 CFR 60.4205(b), 60.4202(a)(2), and 40 CFR 60.4206; Subpart III	3.27	NMHC + NO _x	4.0 Grams per Kilowatt-Hour
			CO	3.5 Grams per Kilowatt-Hour
			PM	0.20 Grams per Kilowatt-Hour
			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 40 CFR 4206; Subpart III	3.28	NMHC + NO _x	4.0 Grams per Kilowatt-Hour (or 3.0 Grams per Horsepower-Hour)
			PM	0.30 Grams per Kilowatt-Hour (or 0.22 Grams per 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 from a point source into the open air or from any manufacturing or industrial process on-site, which exceeds forty percent (40%) opacity subject to the exceptions provided in Parts (a) and (b):

- (a) Startup operations may produce emissions, which exceed 40% opacity for up to fifteen (15) minutes per start-up in any one 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:

$$E = 4.1 (p^{0.67})$$

Where "E" is the emission rate in pounds per hour and "p" is the process weight input rate in tons per hour.

(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), except as otherwise provided herein, the permittee shall not cause the emission of gas containing sulfur oxides (measured as sulfur

dioxide or SO₂) from any process equipment in excess of five hundred (500) parts per million by volume (ppm_v).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.B.(1).)

- 3.6 Emission Point AA-000 (Facility-Wide) 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 112(g) in accordance with 11 Miss. Admin. Code Pt. 2, R. 8.1 and 40 CFR Part 63, Subpart B.

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 40 CFR 63.43(g)(2)(iv); Subpart B)

- 3.7 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total emission of nitrogen oxides (NO_x), particulate matter (PM; filterable only), particulate matter less than 10 microns (µm) in diameter (PM₁₀; filterable + condensable), particulate matter less than 2.5 µm in diameter (PM_{2.5}; filterable + condensable), volatile organic compounds (VOCs), and carbon monoxide (CO) from all applicable emission sources to no more than 245.0 tons per year (tpy) based on a rolling 12-month period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).; 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 1,390,475 oven-dried tons (ODT) per year based on a rolling 12-month period. 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).)

- 3.10 For Emission Points AA-108 (Green Hammer Mills), AA-200 (Wood Drying Operations), and AA-300 (Wood Pellet Production Operations), the permittee shall limit the total quantity of softwood utilized to no more than eighty-five (85) weight percent (wt.%) of all wood processed based on a rolling 12-month period.

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

- 3.11 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 and for no more than fifty (50) hours in total 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.)

- 3.12 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 oven-dried tons (ODT) per year based on a rolling 12-month period. 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).)

- 3.13 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.

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

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

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).)

- 3.15 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 and for no more than fifty (50) hours in total 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.

- (b) 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 five (5) million BTU (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.)

- 3.16 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%) control efficiency of hazardous air pollutant (HAP) emissions, measured as volatile organic compounds (VOCs), across each RTO.

The use of the RTO to achieve 95% control efficiency (at a minimum) of hazardous air pollutants (HAPs) has been determined to satisfy the case-by-case MACT requirements of Regulation 11 Miss. Admin. Code Pt. 2, R. 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.)

- 3.17 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 oven-dried tons (ODT) per year based on a rolling 12-month period. 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).)

- 3.18 For Emission Points AA-302 (Dry Shaving Silo), AA-308 (Additive Storage and Handling), and AA-401 (Finished Product Handling and Loading), the permittee shall operate the corresponding baghouses at all times while loading and/or off-loading operations are being performed.

(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 only 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-two (32) 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) Sixteen (16) 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).)

- 3.20 For Emission Points AA-306 and AA-307 (Pellet Mills Control Systems), the permittee shall operate each regenerative catalytic oxidizer (RCO) in such a manner as to achieve (at a minimum) 96.3% control efficiency of hazardous air pollutant (HAP) emissions, measured as volatile organic compounds (VOCs), across each RCO.

The use of the RCO to achieve 96.3% control efficiency (at a minimum) of hazardous air pollutants (HAPs) has been determined to satisfy the case-by-case MACT requirements of Regulation 11 Miss. Admin. Code Pt. 2, R. 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.)

- 3.21 For Emission Points AA-502 and AA-503 (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).)

- 3.22 For Emission Points AA-502 and AA-503 (Emergency Engines), except as otherwise specified or limited herein, the maximum discharge of sulfur oxides from each referenced emergency engine unit shall not exceed 4.8 pounds (measured as sulfur dioxide or SO₂) per MMBTU heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).)

- 3.23 Emission Points AA-502 and AA-503 (Emergency Engines) are subject to and shall comply with applicable requirements found in 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

By providing an initial notification of applicability to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, Emission Point AA-502 has satisfied all applicable requirements of this subpart.

By complying with the applicable requirements of Subpart IIII, Emission Point AA-503 shall also demonstrate compliance with Subpart ZZZZ.

(Ref.: 40 CFR 60.4200(a)(2); Subpart IIII and 40 CFR 63.6590(b) and (c); Subpart ZZZZ)

3.24 For Emission Points AA-502 and AA-503 (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 III and 40 CFR 80.510(b); Subpart I)

3.25 For Emission Points AA-502 and 503 (Emergency Engines), any operation of an engine for other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year, as outlined in Parts (a) through (c) below, is prohibited. If an engine is not operated in accordance with the following provisions, 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 accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of one hundred (100) hours per calendar year. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.
- (c) The permittee may operate an engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f)(1–3); Subpart III)

3.26 For Emission Points AA-502 and AA-503 (Emergency Engines), the permittee shall install a non-resettable hour meter on each engine.

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

3.27 For Emission Point AA-502, 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:

- (a) 20 percent (20%) during the acceleration mode;
- (b) 15 percent (15%) during the lugging mode; and
- (c) 50 percent (50%) during the peaks in either the acceleration or lugging modes.

The permittee shall operate / maintain the emergency generator engine in such a manner to achieve the referenced emission and opacity standards over the entire life of the engine.

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

3.28 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 permittee shall operate / maintain the emergency fire pump 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 and 40 CFR 4206; Subpart IIII)

SECTION 4 WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	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	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 shutdown event consistent with safety and good air pollution control practices.

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

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

- (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 89, 94, and / or 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. 2.9.	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 Period)
AA-108	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.5	Green Wood Chip Throughput	Monitor and Calculate the Green Wood Chip Throughput (Monthly and Rolling 12-Month Period)
AA-108 AA-200 AA-300	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.6	Wood Type (Softwood and Hardwood)	Monitor the Quantity of Each Wood Type Used in Wood Pellet Production (Monthly and Rolling 12-Month Period)
AA-201a AA-202a AA-203a	11 Miss. Admin. Code Pt. 2, R. 2.9.	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. 2.9.	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)

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-201b AA-202b AA-203b	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.10	NO _x PM / PM ₁₀ / PM _{2.5} CO VOCs	Establish Site-Specific Emission Factors
AA-201d AA-202d AA-203d	11 Miss. Admin. Code Pt. 2, R. 2.9.	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-308 AA-401	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	5.13	PM Opacity	Conduct Weekly Emission Observations / Evaluations
AA-201e AA-202e AA-203e AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.14	Secondary Voltage	Install, Calibrate, Monitor, Operate, and Inspect Continuous Monitoring / Recording System for Operating Parameters
		5.15	Combustion Chamber Temperature Water Flow Rate	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 only) PM ₁₀ / PM _{2.5} (filterable + condensable) CO HAPs NO _x	Performance Test Requirements

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-201e AA-202e AA-203e AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.17	PM / PM ₁₀ / PM _{2.5} VOCs CO NO _x	Establish Site-Specific Emission Factors
	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.18	PM (filterable only) PM ₁₀ / PM _{2.5} (filterable + condensable) CO VOCs NO _x	Conduct Subsequent Performance Testing
AA-201e AA-202e AA-203e	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.19	VOCs HAPs	Establish a Minimum Combustion Chamber Temperature for Each RTO
	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. 2.9.	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. 2.9.	5.23	Wood Pellet Production	Monitor Total Production On-Site (Monthly and Rolling 12-Month Period)
AA-302 AA-308 AA-401	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	5.24	PM Opacity	Conduct Weekly Inspections of Each Baghouses
		5.25		Evaluate Pressure Drop for Each Baghouse Daily
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.26	VOCs HAPs	Establish Minimum Combustion Chamber Temperature for Each RCO
	11 Miss. Admin. Code Pt. 2, R. 1.8.	5.27	Combustion Chamber Temperature	Continuously Monitor the Combustion Chamber Temperature for Each RCO (3-Hour Block Average)

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.28	PM / PM ₁₀ / PM _{2.5}	Establish Water Flow Rate Range for Each Scrubber
		5.29	Water Flow Rate	Continuously Monitor Water Flow Rate for Each Wet Scrubber (3-Hour Block Average)
	11 Miss. Admin. Code Pt. 2, R. 2.9. 11 Miss. Admin. Code Pt. 2, R. 1.8.	5.30	VOCs HAPs	Conduct Testing Every 16 Months to Determine Apparent Media Density and Percent Saturation of Catalytic Media in Each RCO
AA-502 AA-503	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.31	Sulfur Content Aromatic Content	Maintain Documentation Indicating Diesel Fuel Meets Emissions Standards
	40 CFR 60.4211(c); Subpart III 11 Miss. Admin. Code Pt. 2, R. 2.9.	5.32	NMHC + NO _x CO PM Opacity (Smoke)	Maintain Documentation Indicating Engine Certification
	40 CFR 60.4214(b); Subpart III 11 Miss. Admin. Code Pt. 2, R. 2.9.	5.33	HAPs	Record Hours of Operation (Emergency and Non-Emergency)
	40 CFR 60.4211(g)(2) and (3); Subpart III	5.34	Manufacturer Specifications	Compliance Demonstration Actions (if Engine is Not Installed, Operated, or Maintained According to Specifications)

- 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” or 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 11 Miss. Admin. Code Pt. 2, R. 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 applicable emission sources to minimize the emission of fugitive particulate matter (PM).

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

- 5.4 For Point AA-000 (Facility-Wide), the permittee shall calculate and record the total emission of nitrogen oxides (NO_x), particulate matter (PM), particulate matter less than 10 microns (µm) in diameter (PM₁₀), 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 monthly, on a rolling 12-month period, and 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 5.16 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 proposed project.

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 update the facility-wide emission of applicable pollutants during the initial period specified in Part (a) of this condition both monthly and on a rolling 12-month period.

- (b) Unless otherwise specified herein, the permittee shall include 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. 2.9.)

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

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

- 5.6 For Emission Points AA-200 (Wood Drying Operations), and AA-300 (Wood Pellet Production Operations), the permittee shall demonstrate compliance with the softwood usage restriction outlined in Condition 3.10 by monitoring and recording the quantity of softwood and hardwood used as a feedstock in short-tons both monthly and on a rolling 12-month period.

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

- 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 both monthly and on a rolling 12-month period.

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

- 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 3.13 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. 2.9.)

- 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. 2.9.)

- 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%), and the vendor-guaranteed control efficiency specified for the regenerative thermal oxidizer (95%) on each corresponding Wood Drying Control System (i.e. Emission Points AA-201e, AA-202e, and AA-203e) to derive uncontrolled, site-specific emission factors (in pounds per hour) for particulate matter (PM), particulate matter less than 10 microns (μm) in diameter (PM_{10}), particulate matter less than 2.5 μm in diameter ($\text{PM}_{2.5}$), and volatile organic compounds (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 EPA OTM-26:

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

Where:

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

$\bar{M}_{VOC \text{ (as propane)}}$ = 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. 2.9.)

- 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 of 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. 2.9.)

- 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. 2.9.)

- 5.13 For Emission Points AA-201e, AA-202e, AA-203e, AA-302, AA-306, AA-307, AA-308, and AA-401 (Wood Drying Control Systems, Pellet Mill Control Systems, and Loading / Off-Loading Operations), the permittee shall perform and record a weekly visible emission observation on the exhaust of each noted point source during daylight hours and during representative operating conditions in accordance with EPA Test Method 22.

If visible emissions are detected during an observation period from a point source, the permittee shall then perform and record a Visible Emission Evaluation (VEE) in accordance with EPA Test Method 9 on the point source. In the event that a VEE is required but cannot be conducted on a point source, the permittee shall record a written explanation as to why it was not possible to perform the VEE.

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

- 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 and recording 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);
- (c) *Regenerative Catalytic Oxidizer (RCO)* – Combustion chamber temperature (in degrees Fahrenheit); and
- (d) *Wet Scrubber* – Water flow rate (in gallons per minute).

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

- 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 when the applicable operating parameters required by Condition 5.19, 5.21, 5.26, and 5.28 are established.

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

- 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 control efficiency requirements for hazardous air pollutants (HAPs) [measured as volatile organic compounds (VOCs)] specified in Conditions 3.16 and 3.20 by conducting an initial performance test on the respective pollution control devices no later than one hundred eighty (180) days after the initial start-up of each specified control system.

In addition to the above-mentioned initial compliance demonstration, the permittee shall also conduct performance testing on the RTOs and the RCOs for nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM; filterable only), PM₁₀ (filterable + condensable), and PM_{2.5} (filterable + condensable) 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 specifications:

- (a) All performance testing shall be conducted in accordance with either applicable U.S. EPA-approved test methods found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, Appendix A of 40 CFR Part 63, or an alternative test method approved by the MDEQ and the U.S. EPA prior to the testing event.
- (b) Initial performance testing shall be conducted while dried wood chip production for each dryer and/or wood pellet production is at no less than ninety percent (90%) of its maximum permitted equipment production capacity (in oven-dried tons per hour) and no less than ninety-five percent (95%) of the maximum permitted weight percent for softwood 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% of the maximum permitted equipment production capacity or 95% of the maximum permitted weight percent of softwood 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% 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 95% of the maximum permitted weight percent of softwood 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%) moisture content).
- (c) 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.
- (d) 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). and 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), 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, PM₁₀, 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 EPA OTM-26:

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

Where:

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

$\bar{M}_{VOC \text{ (as propane)}}$ = 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.

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

- 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), unless otherwise required herein, the permittee shall conduct subsequent performance testing on the exhaust of each regenerative thermal oxidizer (RTO) and regenerative catalytic oxidizer (RCO) for PM (filterable only),

PM₁₀ (filterable + condensable), PM_{2.5} (filterable + condensable), NO_x, CO, and VOC emissions no later than twenty-four (24) months after the previous 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), (c), and (d).

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 5.17. 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 6.6.

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 6.6.

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

- 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 corresponds to the control efficiency requirement specified in Condition 3.16.

The permittee may establish a different minimum combustion chamber temperature that satisfies the required control efficiency for the RTO by conducting a repeat performance test in accordance with the provisions outlined in Condition 5.16.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9. and 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. 2.9. and 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 WESP to maximize the control of particulate matter emissions (i.e. PM, PM₁₀, and PM_{2.5}).

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. 2.9.)

- 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. 2.9.)

- 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 monthly and on a rolling 12-month period.

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

- 5.24 For Emission Points AA-302, AA-308, AA-401 (Loading / Off-Loading Operations), the permittee shall conduct weekly inspections of the baghouses. Maintenance shall be performed as necessary to maintain proper operation of the baghouses at all times. Records of the weekly inspections and any maintenance performed shall be kept in log form. The permittee shall also maintain sufficient equipment on-site to conduct any necessary repairs.

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

- 5.25 For Emission Points AA-302, AA-308, and AA-401 (Loading / Off-Loading Operations), the permittee shall monitor and record the pressure drop across each baghouse daily (in inches of water) and compare to the corresponding manufacturer's recommended pressure drop range. If a monitored pressure drop is outside the recommended range for a baghouse, the permittee shall conduct and record any maintenance and/or repairs necessary to return the baghouse to optimal operating condition.

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

- 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 RCO that corresponds to the control efficiency requirement specified in Condition 3.20.

The permittee may establish a different minimum combustion chamber temperature that satisfies the required control efficiency for the RCO by conducting a repeat performance test in accordance with the provisions outlined in Condition 5.16.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9. and 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 for each RCO (in degrees Fahrenheit) based on a 3-hour block average.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9. and 11 Miss. Admin. Code Pt. 2, R. 1.8.)

- 5.28 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), during the initial performance testing, the permittee shall establish an operational range for water flow rate (in gallons per minute) on each wet scrubber to maximize the control of particulate matter emissions (i.e. PM, PM₁₀, and PM_{2.5}).

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

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

- 5.29 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), the permittee shall continuously monitor and record the water flow rate (in gallons per minute) for each wet scrubber based on a 3-hour block average.

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

- 5.30 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 each RCO 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 on-site operations. Thereafter, the permittee shall perform subsequent apparent density testing on the catalytic media in each RCO no later than 16 months after the previous test.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9. and 11 Miss. Admin. Code Pt. 2, R. 1.8.)

- 5.31 For Emission Points AA-502 and AA-503 (Emergency Engines), the permittee shall maintain documentation that demonstrates the diesel fuel utilized by each emergency engine complies with the fuel standards referenced in Condition 3.24.

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

- 5.32 For Emission Point AA-502 and AA-503 (Emergency Engines), the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation monthly for each emergency engine during the respective occasions of emergency and non-emergency service. The permittee shall also detail what classified each operational occasion either as an emergency or a non-emergency.

(Ref.: 40 CFR 60.4245(b); Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.9.)

- 5.33 For Emission Points AA-502 and AA-503 (Emergency Engines), the permittee shall maintain documentation that identifies each emergency engine as certified for the applicable emission standards referenced in Conditions 3.27 and 3.28. Additionally, the

permittee shall maintain records that demonstrates each emergency engine was installed and configured to the manufacturer's emission-related specifications.

(Ref.: 40 CFR 60.4211(c); Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.9.)

5.34 For Emission Points AA-502 and AA-503 (Emergency Engines), if the permittee does not operate and maintain each engine according to 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 through the following actions:

- (a) Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions;
- (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 1 year after an 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, the permittee shall adhere to the requirements specified in Section (b) of this condition and conduct a subsequent performance test every 8,760 hours of operation or three (3) years (whichever comes first) thereafter to demonstrate compliance with the applicable emission standards.

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

SECTION 6 REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Reporting Requirement(s)
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.1	Submit Documents Certified by a Responsible Official or Duly Authorized Representative
	11 Miss. Admin. Code Pt. 2, R. 2.9.	6.2	Submit Semi-Annual Summary of Emissions and Operational Data
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.3	Submit the Start-Up, Shutdown, and Malfunction Plan
		6.4	Submit the Dust Management Plan for Review / Approval
		6.5	Submit Notification of Initial-Start-Up
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).	6.6	Submit Site-Specific Emission Factors for Review / Approval
AA-201e AA-202e AA-203e AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.6.B.(5).	6.7	Submit Performance Testing Protocol Submit 10-Day Notification of Performance Testing Event
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.8	Submit Notification of Satisfying Stipulation(s) for Subsequent Performance Testing
	11 Miss. Admin. Code Pt. 2, R. 2.6.B.(6). 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.9	Submit Performance Test Results and Additional Information
AA-306 AA-307	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.10	Submit Results of Apparent Density Testing
AA-502 AA-503	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.11	Submit Semi-Annual Report on Hours of Operation (Non-Emergency and Emergency)

- 6.1 For Emission Point AA-000 (Facility-Wide), any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official or duly authorized representative stating that, 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), the permittee shall submit a semi-annual report no later than January 31st and July 31st of each calendar year for the preceding six-month period that contains the following information:
- (a) The total emission of PM, PM₁₀, PM_{2.5}, VOCs, NO_x, and CO from all applicable emission sources in tons both monthly and on a rolling 12-month period;
 - (b) The weight percent (wt.%) of softwood and hardwood utilized as feedstock in short-tons both monthly and on a rolling 12-month period;
 - (c) The green wood chip throughput from the Green Hammer Mills (Emission Point AA-108) in oven-dried tons (ODT) both monthly and on a rolling 12-month period (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 oven-dried tons (ODT) both monthly and on a rolling 12-month period;
 - (e) The final moisture content of all wood chips dried on-site based on a rolling 12-month period;
 - (f) The total duration of all combined start-up and shutdown periods experienced by each Rotary Drum Dryer both monthly and on a rolling 12-month period;
 - (g) 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 monthly and on a rolling 12-month period;
 - (h) The total duration of all idle mode periods for experienced by each Wood Waste-Fired Furnace both monthly and 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 result of the excursion.
- (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.

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

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

Thereafter, the permittee shall submit a semi-annual notification that summarizes any revision(s) made to the SSMP no later than January 31st and July 31st of each calendar year for the preceding six-month period. If an amendment is made to the plan in any six-month period, the permittee shall include the revision(s) within the corresponding semi-annual monitoring report

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

- 6.4 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 submit a semi-annual notification that summarizes any revision(s) made to the DAP no later than January 31st and July 31st of each calendar year for the preceding six-month period. If an amendment is made to the plan in any six-month period, the permittee shall include the revision(s) within the corresponding semi-annual monitoring report.

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

- 6.5 For Emission Point AA-000 (Facility-Wide), the permittee shall notify the MDEQ in writing of the initial start-up for 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).)

- 6.6 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 5.18.

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

- 6.7 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).)

- 6.8 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 the testing required by Conditions 5.16 and 5.18 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. 2.6.B.(5).)

- 6.9 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 report 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 27(c) of Section 1 and following site-specific information:
- (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 (if applicable);

- (e) 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
- (f) Oxygen (O₂) concentration data.

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

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

- 6.10 For Emission Points AA-306 and AA-307 (Pellet Mill Control Systems), the permittee shall submit the results of each apparent density test required by Condition 5.30 no later than thirty (30) days after completing the testing event.

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

- 6.11 For Emission Point AA-502 and AA-503 (Emergency Engines), the permittee shall submit a semi-annual report that details the hours of operation for the engine by July 31st and January 31st of each calendar year for the preceding six-month period. The report shall document 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).)