

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Pinnacle Renewable Energy Inc, Newton MS Facility
615 Coliseum Drive
Newton, Mississippi
Newton County

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:_____

Permit No.: 1980-00045

Draft/Proposed – 03/16/2020

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 DEQ within a reasonable time any information the DEQ 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 DEQ 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 DEQ 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. 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 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants."

(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 Section 1, Condition 24 of this permit, 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 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 Section 1, Condition 24 of this permit, 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 Section 1, Condition 24 of this permit, 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 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).)

28. Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, start-ups, 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 cause 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 11 Miss. Admin. Code Pt. 2, Ch. 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 in paragraph (a) above.

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

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 eighteen (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, air emissions equipment, as described in the following table.

Emission Point	Facility ID	Description
AA-000	—	Facility-Wide (Pinnacle Renewable Energy Inc., Newton MS Facility)
AA-100	—	Fugitive Emission Sources
AA-101	F-DB	Log Debarker
AA-102	F-CH	Log Chipper
AA-103	F-MT	Green and Dry Wood Transfer and Handling Operations
AA-104	F-STP1	Green Wood Storage Pile
AA-105	FDCS	Dry Fiber and Chip Storage Tent
AA-200	—	Wood Drying Operations
AA-201	RD WESP RTO1	One (1) Rotary Drum Dryer heated by one (1) wood-fired step grate furnace burner with a maximum heat input capacity of 170 MMBtu/hr; Furnace exhaust is routed to the dryer, and dryer emissions are controlled by one (1) wet electrostatic precipitator (WESP) followed by one (1) regenerative thermal oxidizer (RTO1) with a natural gas-fired burner with maximum heat input capacity of 10 MMBtu/hr
AA-202	—	Dryer bypass stack
AA-203	—	Furnace bypass stack
AA-300	—	Wood Pellet Production Operations
AA-301	HM1-HM4 BAG1	Four (4) Dry Hammermills; combined PM emissions controlled by one (1) cyclofilter baghouse
AA-302	PL1-PL9 BAG2 RTO2	Nine (9) Pellet Lines with nine (9) Pellet Coolers; combined emissions controlled by one (1) cyclofilter baghouse followed by one (1) regenerative thermal oxidizer (RTO2) with a natural gas-fired burner with maximum heat input capacity of 10 MMBtu/hr
AA-400	—	Finished Pellet Storage and Handling
AA-401	PSS1	Pellet Storage Silo
AA-402	TLS	Truck Loadout System

Emission Point	Facility ID	Description
AA-500	—	Emergency Engines
AA-501	ENG1	757 HP Diesel-Fired Compression Ignition Emergency Generator Engine
AA-502	ENG2	449 HP Diesel-Fired Compression Ignition Emergency Generator Engine
AA-503	ENG3	231 HP Diesel-Fired Compression Ignition Emergency Generator Engine
AA-504	ENG4	49 HP Diesel-Fired Compression Ignition Emergency Generator Engine
AA-505	ENG5	49 HP Diesel-Fired Compression Ignition Emergency Generator Engine
AA-506	FWP1	192 HP Diesel-Fired Compression Ignition Emergency Fire Pump Engine

SECTION 3 EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity (smoke)	40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Opacity	40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.3	PM	$E = 4.1p^{0.67}$
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.4	Particles or any contaminants	General Nuisance Provision
	11 Miss. Admin. Code Pt. 2, R.2.2.B(10). MACT Avoidance Limits	3.5	HAPs	24 tpy total HAPs (12-month rolling total) 9 tpy any individual HAP (12-month rolling total)
AA-102	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.6	Green Wood Chip Throughput	1,100,000 tpy (12-month rolling total)
AA-200 AA-300 AA-400 AA-500	11 Miss. Admin. Code Pt. 2, R.2.2.B(10). PSD Avoidance Limits	3.7	Total PM (filterable only)	245 tpy (12-month rolling total)
			PM ₁₀ (filterable + condensable)	245 tpy (12-month rolling total)
			PM _{2.5} (filterable + condensable)	245 tpy (12-month rolling total)
			NO _x	245 tpy (12-month rolling total)
			CO	245 tpy (12-month rolling total)
			VOC	245 tpy (12-month rolling total)
AA-200	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.8	Bypass Restrictions	Bypass Stack Restrictions for periods of startup, shutdown, or idle mode
AA-201	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.9	Dried Wood Chip Throughput	440,000 ODT/yr (12-month rolling total)
	11 Miss. Admin. Code Pt. 2, R. 1.4.B(1).	3.10	SO ₂	500 ppm (by volume)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.11	Fuel Source Restriction	Uncontaminated Wood Waste Only

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-201	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.12	VOC HAP PM PM ₁₀ PM _{2.5}	Operate control system at all times the dryer is operating
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.13	VOC Control Efficiency	≥ 95% control efficiency for RTO1
AA-301	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.14	PM PM ₁₀ PM _{2.5}	Operate baghouse at all times the hammermills are operating
AA-302	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.15	Wood Pellet Production	440,000 ODT/yr (12-month rolling total)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.16	VOC HAP PM PM ₁₀ PM _{2.5}	Operate control system at all times the pellet lines are operating
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.17	VOC Control Efficiency	≥ 95% control efficiency for RTO2
AA-500	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.18	PM	0.6 lb/MMBtu
	40 CFR Part 60, Subpart III – Standards of Performance for Stationary Compression Ignition Combustion Engines 40 CFR 60.4200(a)(2), Subpart III	3.19	NMHC + NO _x , CO PM (filterable)	Applicability
	40 CFR 60.4211(c), Subpart III	3.20		Purchase engines certified to emission standards
	40 CFR 60.4207(b), Subpart III and 40 CFR 80.510(b), Subpart I	3.21	Diesel Fuel Requirement	15 ppm maximum sulfur content 40 minimum cetane index or 35% maximum aromatic content
	40 CFR 60.4211(f)(1)-(3), Subpart III	3.22	Hours of Operation	100 hours per calendar year for maintenance and testing 50 hours per calendar year for non-emergency situations

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-500	40 CFR 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	3.23	HAPs	Applicability

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 paragraph (a) and (b) as follows:

- (a) Startup Operations may produce emissions, which exceed 40% 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 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 one (1) hour.

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

3.2 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air 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 limit the emissions of particulate matter (PM) to no more than the rate determined by the relationship:

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

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 permit, 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 shall limit emissions, from all emission sources, of total Hazardous Air Pollutants (HAPs) to 24 tons per year (tpy) and any individual HAP to 9 tpy, based on a 12-month rolling total.

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

- 3.6 For Emission Point AA-102 (Log Chipper), the permittee shall limit the throughput of green wood chips processed to no more than 1,100,000 tons per year (tpy), based on a rolling 12-month total.

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

- 3.7 For Emission Points AA-200, AA-300, AA-400, and AA-500, the permittee shall limit emissions of total particulate matter (filterable only), PM₁₀ (filterable + condensable), PM_{2.5} (filterable + condensable), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs) from all emission sources to no more than 245 tons per year (tpy), for each pollutant, based on a 12-month rolling total.

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

- 3.8 For Emission Point AA-200 (the Drying Operations), the permittee shall always direct emissions from the furnace to the Dryer and from the Dryer to the control system, 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 the furnace to the Furnace Bypass Stack (Emission Point AA-203) for up to fifty (50) hours per year, based on a rolling 12-month total. Once a total of 50 hours is attained, the permittee shall either direct furnace emissions to the 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 the furnace to the Furnace Bypass Stack (Emission Point AA-203) for up to five hundred (500) hours per year, based on a rolling 12-month total. For the purpose of this permit, “idle mode” is defined as the operation of a furnace at a heat input rate not to exceed seventeen million BTU per hour (17 MMBTU/hr); this is equivalent to 10% of the furnace maximum heat input. Once a total of 500 hours is attained, the permittee shall either direct furnace emissions to the Dryer (if fully operational) or cease all operations (including periods of idle mode) from the furnace.

Use of the Furnace Bypass Stack (Emission Point AA-203) for any purpose other than start-up, shutdown, or idle mode, or use of the Dryer Bypass Stack (Emission Point AA-202) for any purpose, 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).)

- 3.9 For Emission Point AA-201 (the Dryer), the permittee shall limit the throughput of green wood chips dried in the Dryer to no more than 440,000 oven-dried tons (ODT) per year based on a rolling 12-month total. 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 Point AA-201 (the Dryer), except as otherwise provided herein, the permittee shall not cause the emission of gas containing sulfur oxides, measured as sulfur dioxide (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).)

- 3.11 For Emission Point AA-201 (the Dryer), the permittee shall only utilize uncontaminated wood waste as a fuel source for the 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 (i.e. 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).)

- 3.12 For Emission Point AA-201 (the Dryer), the permittee shall operate the control system at all times when the Dryer is in operation. If the control system malfunctions or becomes non-operational, the permittee shall cease operation of the Dryer until the control system is fully operational.

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

- 3.13 For Emission Point AA-201 (the Dryer), the permittee shall operate the regenerative thermal oxidizer (RTO1) in such a manner as to achieve a minimum volatile organic compounds (VOC) control efficiency of ninety-five percent (95%).

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

- 3.14 For Emission Point AA-301 (Dry Hammermills), the permittee shall operate the baghouse at all times when one or more of the Dry Hammermills are in operation. If the baghouse malfunctions or becomes non-operational, the permittee shall cease operation of all Dry Hammermills until the baghouse is fully operational.

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

- 3.15 For Emission Point AA-302 (Pellet Lines), the permittee shall limit the total production of wood pellets to no more than 440,000 oven-dried tons (ODT) based on a 12-month rolling total. 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).)

- 3.16 For Emission Point AA-302 (Pellet Lines), the permittee shall operate the control system at all times the Pellet Lines are in operation. If the control system malfunctions or becomes non-operational, the permittee shall cease operation of the Pellet Lines until the control system is fully operational.

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

- 3.17 For Emission Point AA-302 (Pellet Lines), the permittee shall operate the regenerative thermal oxidizer (RTO2) in such a manner as to achieve a minimum volatile organic compound (VOC) control efficiency of ninety five percent (95%).

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

- 3.18 For Emission Point AA-500 (Emergency Engines), except as otherwise specified or limited herein, the permittee shall limit emissions of ash and/or particulate matter (PM) from each emergency engine to 0.60 pounds per MMBTU per hour heat input.

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

- 3.19 For Emission Point AA-500 (Emergency Engines), the permittee is subject to and shall comply with applicable requirements of 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and the applicable requirements of Subpart A – General Provisions, as noted in Table 8 to Subpart IIII.

(Ref.: 40 CFR 60.4200(a)(2), 60.4218, and Table 8 of Subpart IIII)

- 3.20 For Emission Point AA-500 (Emergency Engines), the permittee shall comply with 40 CFR Part 60, Subpart IIII, by purchasing an engine certified to the emission standards specified in 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications.

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

- 3.21 For Emission Point AA-500 (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 and 40 CFR 80.510(b), Subpart I)

- 3.22 For Emission Point AA-500 (Emergency Engines), any operation of an engine for any purpose other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year, as outlined in paragraphs (a) through (c) of this permit condition, is prohibited. If an engine is not operated in accordance with the following provisions, the engine will not be considered an emergency engine under Subpart IIII and shall meet all requirements under Subpart IIII for non-emergency engines.

- (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, and 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)

- 3.23 For Emission Point AA-500 (Emergency Engines), the engines are considered new stationary RICE located at an area source of HAP. As such, the permittee is subject to and shall comply with applicable requirements of 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines by meeting the requirements of 40 CFR 60, Subpart IIII (Condition 3.19). No further requirements apply for these engines under Subpart ZZZZ.

(Ref.: 40 CFR 63.6585, 63.6590(a)(2)(iiii), and 63.6590(c)(1), Subpart ZZZZ)

**SECTION 4
WORK PRACTICES**

Emission Point	Applicable Requirement	Condition Number(s)	Work Practice
AA-500	40 CFR 60. 4211(a), Subpart III	4.1	Best Management Practices

- 4.1 For Emission Point AA-500 (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).
 - (d) If the permittee does not operate and maintain each engine according to the manufacturer's emission-related written instruction, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance in accordance with 40 CFR 60.4211(g).
- (Ref.: 40 CFR 60.4211(a) and (g), Subpart IIII)

SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.1	Recordkeeping	Maintain Records for a Minimum of Five (5) Years
		5.2	Fugitive PM Emissions	Develop, Maintain, and Implement a Dust Management Plan
		5.3	HAPs	Calculate the total emissions of applicable pollutants (monthly and rolling 12-month totals)
AA-200 AA-300 AA-400 AA-500	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.3	PM PM ₁₀ PM _{2.5} NO _x CO VOCs	
AA-102	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.4	Green wood chip throughput	Monitor and calculate the green wood chip throughput (monthly and rolling 12-month totals)
AA-201	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.5	Dried wood chip throughput	Monitor and calculate the dried wood chip throughput (monthly and rolling 12-month totals)
AA-203	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.6	Hours of Duration	Monitor and record date, time, and duration of start-up and shutdown periods Calculate total duration of all start-up and shut-down periods (rolling 12-month total)
	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.7	Hours of Duration	Monitor and record date, time, and duration of idle mode periods Calculate total duration of all idle mode periods (rolling 12-month total)
AA-201 AA-302	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.8	Secondary Voltage Combustion Chamber Temperature	Air pollution control device operational specifications

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-201 AA-302	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.9	Secondary Voltage Combustion Chamber Temperature	Install, calibrate, monitor, operate, and inspect continuous monitoring/recording systems for operating parameters
AA-201 AA-301 AA-302	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.10	PM Opacity	Conduct weekly visual emissions observations/evaluations
		5.11	VOCs HAPs PM (filterable only)	Performance test requirements
		5.12	PM ₁₀ /PM _{2.5} (filterable + condensable) NO _x CO	
		5.13	PM PM ₁₀ PM _{2.5} NO _x CO VOCs HAPs	Establish site-specific emission factors
AA-201 AA-302	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.14	VOCs HAPs	Establish minimum combustion temperatures for the RTOs
		5.15	Combustion Chamber Temperature	Continuously monitor the combustion temperature for the RTOs (3-hour rolling average)
AA-201	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.16	PM PM ₁₀ PM _{2.5}	Establish minimum secondary voltage for the WESP
AA-201	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.17	Secondary Voltage	Continuously monitor the secondary voltage for each WESP (3-hour rolling average)
AA-301 AA-302	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.18	PM Opacity	Conduct weekly inspections of each baghouse

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-301 AA-302	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.19	Pressure Drop	Evaluate pressure drop for each baghouse daily
AA-302	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.20	Wood Pellet Production	Monitor total wood pellet production
AA-500	40 CFR 60.4209(a), Subpart III and 11 Miss Admin. Code Pt. 2, R. 2. 2.B(11).	5.21	Hours of Operation	Maintain monthly records of hours of operation

- 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. 2.2.B(11).)

- 5.2 For Emission Point AA-000 (Facility-Wide), prior to beginning operation of the facility, 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. 2.B(11).)

- 5.3 The permittee shall calculate and record the total emissions of particulate matter (PM), particulate matter less than 10 microns (μm) in diameter (PM_{10}), particulate matter less than 2.5 μm in diameter ($\text{PM}_{2.5}$), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs) for Emission Points AA-200, AA-300, AA-400 and AA-500 and shall calculate and record emissions of individual and total hazardous air pollutants (HAPs) from the entire facility (AA-000) in tons monthly, and in tons per year for each rolling 12-month period, 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 established in accordance with Condition 5.13 are approved, the permittee shall calculate emissions from Emission Points AA-201, AA-301, and AA-302 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 Emission Points AA-201, AA-301, and AA-302 using collected production data, collected parametric monitoring data, and the established site-specific emission factors. Additionally, the permittee shall revise and update the monthly and 12-month rolling total emissions calculated in accordance with paragraph (a) above to reflect the approved site-specific emission factors.
- (c) For all other emission sources, when determining compliance with the ton per year emission limits, 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 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).)

- 5.4 For Emission Point AA-102 (Log Chipper), the permittee shall monitor and record the throughput of green wood chips processed, in short-tons, monthly and calculate the rolling 12-month total.

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

- 5.5 For Emission Point AA-201 (the Dryer), the permittee shall monitor and record the throughput, in oven-dried tons (ODT), of wood chips dried in the dryer monthly and calculate the rolling 12-month total.

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

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

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

- 5.7 For Emission Point AA-202 (Furnace Bypass Stack), the permittee shall monitor and record the date, time, and duration of every period that the furnace operates in idle mode, resulting in emissions being diverted to the bypass stack. Additionally, the permittee shall calculate and record the total duration of all idle mode periods for the furnace in hours per year, based on a rolling 12-month total.

During any period that the furnace operates in idle mode, the permittee shall monitor the volume of wood waste fed into the furnace and calculate the average hourly heat input rate.

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

- 5.8 For Emission Points AA-201 and AA-302, the permittee shall operate and maintain each pollution control device within the specified manufacturer's instructions/recommendations until such time when the applicable operating parameters are established in accordance with Conditions 5.14 and 5.16.

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

- 5.9 For Emission Points AA-201 and AA-302, the permittee shall install, calibrate, operate, maintain, and inspect a continuous monitoring and recording system for the operating parameter specified for each control device below, in accordance with the manufacturer's recommendations for the monitoring and recording system:

- (a) Wet Electrostatic Precipitator (WESP) – Secondary voltage (in volts);
- (b) Regenerative Thermal Oxidizer (RTO1 and RTO2) – Combustion chamber temperature (in degrees Fahrenheit)

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

- 5.10 For Emission Points AA-201, AA-301, and AA-302, the permittee shall have a certified VEE reader perform weekly visible emission observations on the exhaust of each noted point source for a period of six (6) consecutive minutes during daylight hours and during representative operating conditions using the procedures in EPA Test Method 22.

If visible emissions are observed from a point source, the permittee shall then immediately perform and record a Visible Emission Evaluation (VEE) in accordance with EPA Test Method 9 (i.e., three (3) six-minute observations). In the event that a VEE is required but cannot be conducted on a point source immediately following the initial observation of visible emissions, the permittee shall record a written explanation as to why it was not possible to perform the VEE immediately and shall conduct the VEE as soon as practicable.

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

- 5.11 For Emission Points AA-201, AA-301, and AA-302, the permittee shall conduct initial performance testing no later than one hundred eighty (180) days after initial start-up. Subsequent performance testing shall be conducted no later than twenty-four (24) months after the previous performance test for Emission Points AA-201 and AA-302, and no

later than twelve (12) months after the previous performance test for Emission Point AA-301, in accordance with the following requirements:

- (a) The permittee shall conduct performance testing on Emission Point AA-201 (the Dryer) for particulate matter (PM; filterable only), PM₁₀ (filterable & condensable), PM_{2.5} (filterable & condensable), nitrogen oxides (NO_x), carbon monoxide (CO), Volatile Organic Compounds (VOCs), and the following individual HAPs: methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, hydrogen chloride (HCl), and phenol. The testing for NO_x and CO shall be performed during the same test runs.
- (b) The permittee shall conduct performance testing on Emission Point AA-301 and AA-302 (the Dry Hammermills and Pellet Lines) for particulate matter (PM; filterable only), PM₁₀ (filterable & condensable), PM_{2.5} (filterable & condensable), VOCs, and the following individual HAPs: methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, and phenol.
- (c) For Emission Points AA-201 and AA-302, the permittee shall determine the control efficiencies of both RTO1 and RTO2 by measuring the VOC concentration at both the inlet and outlet of the respective RTO during the initial performance testing, but is not required to do so for subsequent testing.

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

5.12 For Emission Points AA-201, AA-301, and AA-302, the permittee shall conduct all performance testing required by Condition 5.11 in accordance with the following specifications:

- (a) All performance testing shall be conducted according to either applicable EPA-approved test methods found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, or Appendix A of 40 CFR Part 63, or an alternative test method approved by the MDEQ prior to the testing event.
- (b) All performance testing shall be conducted at conditions representative of normal operation and while the weight percent of softwood as feedstock is at least 95%. The weight percent of softwood as feedstock shall be recorded for the respective emission point during the performance test.
- (c) For Emission Point AA-201, during the performance test, the permittee shall monitor and record hourly throughput data on the wood chips dried in the Dryer, determined as oven-dried tons (ODT).
- (d) For Emission Point AA-301, during the performance test, the permittee shall monitor and record hourly throughput data on the dried wood chips processed in the hammermills, determined as oven-dried tons (ODT).

- (e) For Emission Point AA-302, during the performance test, the permittee shall monitor and record hourly throughput data of wood pellets produced, determined as oven-dried tons (ODT).

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

- 5.13 For Emission Points AA-201, AA-301, and AA-302, upon completing a performance test in accordance with Conditions 5.11 and 5.12, the permittee shall utilize both the test results and applicable throughput data collected during the testing event to determine site-specific emission factors for each emission point for PM, PM₁₀, PM_{2.5}, VOCs, NO_x, CO, and individual HAPs in pounds per oven-dried tons (lb/ODT), as applicable. The permittee shall establish these emission factors in accordance with the following specifications:

- (a) For Emission Points AA-201, AA-301, and AA-302, the permittee shall establish a site-specific VOC emission factor for each control system based on EPA OTM-26:

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

Where:

EF_{VOC}	is the site-specific emission factor for VOCs in lb/ODT
$\bar{M}_{VOC(as\ propane)}$	is the average mass flow rate of volatile organic compound (as propane) emissions from applicable performance testing in lb/hr
$\bar{M}_{Methanol}$	is the average mass flow rate of methanol emissions from applicable performance testing in lb/hr
$\bar{M}_{Formaldehyde}$	is the average mass flow rate of formaldehyde emissions from applicable performance testing in lb/hr
$\bar{M}_{Acetaldehyde}$	is the average mass flow rate of acetaldehyde emissions from applicable performance testing in lb/hr
$\bar{M}_{Throughput}$	is the average throughput rate of applicable material (i.e. wood chips dried, dried wood chips processed, wood pellets produced) during performance testing in ODT/hr

- (b) For all other pollutants, site-specific emission factors shall be based on the pounds of pollutant per unit throughput in ODT/hr.

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

- 5.14 For Emission Points AA-201 and AA-302, during the initial performance testing, the permittee shall establish a minimum combustion chamber temperature for RTO1 and RTO2, in degrees Fahrenheit (°F), to demonstrate compliance with the control efficiency requirements in Conditions 3.13 and 3.17. The minimum combustion chamber temperature shall be the average temperature of the combustion chamber measured over the span of the test runs. The minimum combustion chamber temperature may be modified based on subsequent performance tests demonstrating compliance with the minimum VOC control efficiency.

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

- 5.15 For Emission Points AA-201 and AA-302, the permittee shall continuously monitor and record the combustion temperature for each RTO, in degrees Fahrenheit (°F). The permittee shall record four (4) or more temperature readings equally spaced over the hour and calculate an hourly average and 3-hour rolling average temperature.

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

- 5.16 For Emission Point AA-201, during the initial performance test, the permittee shall establish a minimum secondary voltage (in volts) for the WESP indicative of effective control of particulate matter and HCl emissions. The minimum secondary voltage may be modified based on subsequent performance tests resulting in emission factors for PM, PM₁₀, PM_{2.5}, and HCl at or below the factors established and approved following the initial performance test.

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

- 5.17 For Emission Point AA-201, the permittee shall continuously monitor and record the secondary voltage (in volts) for the WESP. The permittee shall record four (4) or more secondary voltage readings equally spaced over the hour and calculate an hourly average and 3-hour rolling average voltage.

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

- 5.18 For Emission Points AA-301 and AA-302, 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 and made available to MDEQ upon request or inspection. The permittee shall also maintain sufficient equipment and replacement filters on-site to conduct any necessary repairs.

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

- 5.19 For Emission Points AA-301 and AA-302, the permittee shall monitor and record the pressure drop across each baghouse daily, in inches of water (in. H₂O). If a monitored pressure drop is outside the manufacturer's recommended range for the baghouse, the permittee shall conduct and record any corrective measures taken to return the baghouse to the recommended pressure drop range.

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

- 5.20 For Emission Point AA-302, the permittee shall monitor and record the total production of wood pellets in oven-dried tons (ODT) monthly and calculate the rolling 12-month total.

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

- 5.21 For Emission Point AA-500 (Emergency Engines), the permittee shall install non-resettable hour meters to monitor the hours of operation of each engine. The permittee shall maintain monthly records of the hours of operation of each engine, and specify the purpose of the operating hours as emergency, maintenance or testing, or other non-emergency use.

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

SECTION 6 REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-000	11 Miss Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Certification by a Responsible Official or Duly Authorized Representative
	11 Miss. Admin. Code Pt. 2, R. 2.9.	6.2	Semiannual Monitoring Report Requirements
	11 Miss Admin. Code Pt. 2, R. 2.2.B(11).	6.3	Submit “Dust Management Plan” for review and approval
	11 Miss Admin. Code Pt. 2, R. 2.2.B(11).	6.4	Notification of initial start-up
AA-201 AA-301 AA-302	11 Miss Admin. Code Pt. 2, R. 2.2.B(11).	6.5	Submit emission factors for approval
	11 Miss. Admin. Code Pt. 2, R. 2.6.B(5).	6.6	Submit Performance Testing Protocol at least 30 days prior to the intended test date Submit notification of performance testing 10 days prior to the scheduled test date
	11 Miss. Admin. Code Pt. 2, R. 2.6.B(6). and R. 2.2.B(11).	6.7	Submit performance testing report no later than 60 days following the actual test date

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 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) For Emission Points AA-200, AA-300, AA-400, and AA-500, the total emissions of PM, PM₁₀, PM_{2.5}, NO_x, CO, and VOCs in tons, for each month and the rolling 12-month totals.
- (b) For Emission Point AA-000, the total emissions of each individual HAP and total HAPs in tons, for each month and the rolling 12-month totals.
- (c) The wood chip throughput at the dryer (Emission Point AA-201) and the hammermills (Emission Point AA-301) and the pellet production throughput from the pellet lines (Emission Point AA-302), in oven-dried tons (ODT), for each month and the rolling 12-month totals, as well as the throughput (annualized to ODT/year) demonstrated during the most recent performance test.
- (d) The total duration of all furnace (Emission Point AA-201) start-up and shutdown periods in which the furnace exhaust was diverted to the furnace bypass stack, for each month and the rolling 12-month totals.
- (e) The total duration of all furnace (Emission Point AA-201) idle mode periods in which the furnace exhaust was diverted to the furnace bypass stack, for each month and the rolling 12-month totals.
- (f) A summary of any revision(s) made to the permittee's "Dust Management Plan."
- (g) For the emergency engines (Emission Point AA-400), the total hours of operation for each engine, specifying whether the purpose of the operation was emergency, maintenance or testing, or other non-emergency use.
- (h) A summary for each parametric continuous monitoring system (CMS) that provides the following information:
 - (1) Operation Outside Established Range – the specific emission point/control equipment, the minimum temperature or secondary voltage established during the performance test, the date and beginning and ending times any 3-hour average fell below the minimum, the cause(s) for each excursion, and any corrective action taken as a result of the excursion.
 - (2) CMS Downtime – the specific emission point/control equipment, the date and beginning and ending times of the CMS downtime, the cause(s) for each downtime event, and any corrective action taken as a result of a downtime event.

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

- 6.3 In conjunction with the notification certifying completion of construction, the permittee shall submit the initial "Dust Management Plan" required by Condition 5.2 for review by

the MDEQ. The MDEQ reserves the right to comment on and request revisions to the Plan, as deemed necessary to prevent nuisance conditions. Any revision(s) to the Plan shall be summarized and included in the SMRs required by Condition 6.2. A copy of the Plan shall be kept on-site and made available for review upon request or inspection.

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

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

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

- 6.5 For Emission Points AA-201, AA-301, and AA-302, within ninety (90) days of completing the initial performance test required by Condition 5.11, the permittee shall submit the site-specific emission factors established per the procedures in Condition 5.13 for review and approval by MDEQ. In the future, should the permittee want to modify the approved site-specific emission factors to account for additional testing, the permittee shall submit a written request with supporting data to MDEQ for review and approval. Written requests shall be submitted to the attention of the Air II Branch Manager of the Environmental Permits Division, with a copy also sent to the Air II Branch Manager of the Environmental Compliance & Enforcement Division. With exception of the emission factors approved initially, which shall be applied from the time of startup forward, any future modification of an emission factor shall become effective on the month specified in the MDEQ approval. MDEQ retains the right to modify the site-specific emission factors based on additional performance testing.

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

- 6.6 For Emission Points AA-201, AA-301, and AA-302, the permittee shall submit a written performance test protocol for the testing required by Condition 5.11 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).)

- 6.7 For Emission points AA-201, AA-301, and AA-302, 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 I and the following information:

- (a) The average combustion chamber temperature of RTO1 and RTO2 for each test run of AA-201 and AA-302, respectively, and the average secondary voltage of the WESP for each test run for AA-201;
- (b) The hourly wood or pellet throughput data for the emission source(s) for each test run, as averaged over the three (3) test runs;
- (c) The average weight percent softwood processed during each test run, noting any weight percent softwood that does not meet the minimum 95% softwood test condition, as an average over the three (3) test runs; and
- (d) A table summarizing the current and past performance test results for each pollutant tested, including the date of the test, average emission rate (lb/hr), throughput (ODT/hr), calculated emission factor (lb/ODT), softwood wt%, and average in-stack oxygen (O₂) concentration.

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