

# **STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT**

**TO CONSTRUCT AIR EMISSIONS EQUIPMENT**

## **THIS CERTIFIES THAT**

Alternative Energy Development Copiah LLC  
19120 Highway 51 South  
Hazlehurst, Mississippi  
Copiah 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**

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**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Issued:** \_\_\_\_\_

**Permit No.: 0600-00075**

Draft/Proposed

## 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).)

**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.

| <b>Emission Point</b> | <b>Description</b>  |
|-----------------------|---|
| AA-000                | Facility-Wide   |
| AA-001                | Fugitive Emissions from Green Wood Storage and Handling   |
| AA-002                | Log Debarking   |
| AA-003                | Log Chipping  |
| AA-004                | Bark Hog  |
| AA-005                | Green Wood Chip Screening   |
| AA-006                | Oversized Green Wood Chipping   |
| AA-007                | Planer Hog  |
| AA-008                | Wood Drying and Pellet Mill Control System: one (1) electrostatic precipitator (WESP) followed by one (1) regenerative thermal oxidizer (RTO) with one (1) natural gas- fired burner (6 MMBTU/hr) |
| AA-008a               | Wood Chip Rotary Dryer (140 MMBtu/hr Wood-fired Furnace) followed by two (2) cyclones (product recovery); emissions controlled by AA-008  |
| AA-008b               | Wood Chip Rotary Dryer Furnace Bypass Stack   |
| AA-008c               | Wood Chip Rotary Dryer Bypass Stack   |
| AA-009                | Six (6) Hammermills followed by six (6) cyclones (product recovery); emissions controlled by three (3) baghouses followed by AA-008   |
| AA-010                | Twelve (12) Pelletizers and Two (2) Pellet Coolers exhaust to two (2) cyclones (product cooling); emissions controlled by AA-008  |
| AA-011                | Plant Air System Baghouse controls emissions from the dried wood chip storage bin and pellet screener   |
| AA-012                | Eight (8) Pellet Storage Silos; emissions controlled by AA-013  |
| AA-013                | Pellet Storage and Loading Baghouse   |
| AA-014                | Fugitive Emissions from Paved Plant Roadways  |

**SECTION 3**  
**EMISSION LIMITATIONS AND STANDARDS**

| <b>Emission Point</b> | <b>Applicable Requirement</b>                                   | <b>Condition Number(s)</b> | <b>Pollutant/Parameter</b>                                     | <b>Limitation/Standard</b>                   |
|-----------------------|---|----------------------------|--|--|
| 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.D(1)(a).                     | 3.3                        | PM   | 0.6 lb/ MMBTU                                |
|                       | 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).                        | 3.4                        | PM   | $E = 4.1 p^{0.67}$                           |
|                       | 11 Miss. Admin. Code Pt. 2, R. 1.3.C.                           | 3.5                        | PM   | General Nuisance Clause                      |
|                       | 11 Miss. Admin. Code Pt. 2, R. 1.4.B.(1).                       | 3.6                        | SO <sub>2</sub>  | 500 parts per million (by volume)            |
|                       | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).<br>PSD Avoidance Limit | 3.7                        | PM (filterable only)   | 245.0 tpy (Rolling 12-Month Period)          |
|                       | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).<br>PSD Avoidance Limit | 3.7                        | PM <sub>10</sub> /PM <sub>2.5</sub> (filterable + condensable) | 245.0 tpy (Rolling 12-Month Period)          |
|                       | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).<br>PSD Avoidance Limit | 3.7                        | NOx  | 245.0 tpy (Rolling 12-Month Period)          |
|                       | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).<br>PSD Avoidance Limit | 3.7                        | CO   | 245.0 tpy (Rolling 12-Month Period)          |
|                       | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).<br>PSD Avoidance Limit | 3.7                        | VOC  | 245.0 tpy (Rolling 12-Month Period)          |
|                       | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).                        | 3.8                        | HAP  | 24.0 tpy / 9.0 tpy (Rolling 12-Month Period) |
| AA-005<br>AA-006      | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).                      | 3.9                        | Softwood Usage Restriction                                     | ≤ 85% Softwood Processed (by Weight)         |
|                       | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).                      | 3.10                       | Green Wood Chip Throughput                                     | 473,040 ODT / Year (Rolling 12-Month Period) |



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|                                      |  |      |  |  |
|--------------------------------------|--|------|--|--|
| AA-006                               | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.11 | Green Wood Chip Throughput   | 94,608 ODT/ Year (Rolling 12-Month Period)   |
| AA-008a                              | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.12 | Dried Wood Chip Throughput   | 473,040 ODT /Year (Rolling 12-Month Period)  |
|                                      | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.13 | VOCs   | 10% or Greater Final Moisture Content (Dried Wood Chips) (Monthly Average)   |
|                                      | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.14 | Fuel Source Restriction  | Uncontaminated Wood Waste Only   |
| AA-008a<br>AA-008b<br>AA-008c        | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). | 3.15 | PM / PM <sub>10</sub> / PM <sub>2.5</sub><br><br>NO <sub>x</sub><br>CO<br>VOCs | Operational Requirements<br><br>Start-Up and Shutdown Requirements:<br>Bypass Emissions for ≤ 100 Hours (Rolling 12-Month Period)<br><br>Idle Mode Requirements:<br>Bypass Emissions for ≤ 500 Hours (Rolling 12-Month Period) |
| AA-008                               | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.16 | VOC<br>HAP<br>PM<br>PM <sub>10</sub><br>PM <sub>2.5</sub>                      | Always operate the WESP and RTO when the wood chip rotary dryer, hammermills, pelletizers and pellet coolers are in operation  |
|                                      | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.17 | VOC<br>HAP   | 95% Control Efficiency (RTO), measured as VOCs   |
| AA-010                               | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.18 | Wood Pellet Production   | 473,040 ODT / Year (Rolling 12-Month Period)   |
| AA-009<br>AA-011<br>AA-012<br>AA-013 | 11 Miss. Admin. Code Pt. 2, R.2.2.B(10).   | 3.19 | PM / PM <sub>10</sub> / PM <sub>2.5</sub>                                      | Always operate the baghouses while the process units are in operation and during loading and/or off-loading operations.  |

3.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided below:

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3)

startups per stack in any twenty-four (24) hour period.

- (b) Emissions resulting from soot blowing 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 one 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, equivalent to that provided in Condition 3.1. 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), for installations of less than 10 million BTU per hour heat input, emission of ash and/or Particulate Matter (PM) from fossil fuel burning shall not exceed 0.6 pounds per million BTU per hour heat input.

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

- 3.4 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 following 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. 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).)

- 3.5 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 and cause a nuisance to a property other than the

one from which it originated or any other provision of this regulation is violated, the MDEQ may order 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.)

- 3.6 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 SO<sub>2</sub>) from any process equipment in excess of five hundred (500) parts per million by volume (ppmv).

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

- 3.7 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total emission of particulate matter (PM; filterable only), particulate matter less than 10 microns (µm) in diameter (PM<sub>10</sub>; filterable + condensable), particulate matter less than 2.5 µm in diameter (PM<sub>2.5</sub>; filterable + condensable), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and volatile organic compounds (VOCs) 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-000 (Facility-Wide), the permittee shall limit the total emissions of hazardous air pollutants (HAPs) from all applicable emission sources to less than 9.0 tons per year, on a twelve-month rolling total, for any individual HAP, and 24.0 tons per year, on a rolling 12-month period, for all HAPs combined.

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

- 3.9 For Emission Points AA-005 (Green Wood Chip Screening) and AA-006 (Oversized Green Wood Chipping), 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).)

- 3.10 For Emission Points AA-005 (Green Wood Chip Screening) and AA-006 (Oversized Green Wood Chipping) combined, the permittee shall limit the throughput of green wood chips processed to no more than 473,040 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).)

- 3.11 For Emission Point AA-006 (Oversized Green Wood Chipping), the permittee shall limit the throughput of green wood chips processed through the oversized chipper to no more

than 94,608 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).)

- 3.12 For Emission Point AA-008a (Wood Chip Rotary Dryer), the permittee shall limit the throughput of green wood chips dried to no more than 473,040 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 Point AA-008a (Wood Chip Rotary Dryer), the permittee shall limit the final moisture content of wood chips dried on-site to ten percent (10 %) or greater.

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

- 3.14 For Emission Point AA-008a (Wood Chip Rotary 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 (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 Point AA-008a (Wood Chip Rotary Dryer), the permittee shall always direct emissions from the furnace to the Wood Chip Rotary Dryer and from the Wood Chip Rotary Dryer to the WESP/RTO, 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 Points AA-008b) for no more than fifty (50) hours during any rolling 12-month period. Once 50 hours are attained, the permittee shall either direct furnace emissions to the Wood Chip Rotary 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 Furnace Bypass Stack 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 Wood Chip Rotary Dryer (if fully operational) or cease all operations (including periods of idle mode) from the furnace.

- (c) During periods of furnace start-up and shutdown, the permittee may vent the emissions from the Wood Chip Rotary Dryer to the Wood Chip Rotary Dryer Bypass Stack (Emission Points AA-008c) for no more than fifty (50) hours during any rolling 12-month period. Once 50 hours are attained, the permittee shall either direct Wood Chip Rotary Dryer emissions to the WESP/RTO (if fully operational) or cease all operations (including periods of start-up and shutdown) from the Wood Chip Rotary Dryer.

Use of the Furnace Bypass Stack and the Rotary Dryer Bypass Stack 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); 11 Miss. Admin. Code Pt. 2, R. 1.10.B.)

- 3.16 For Emission Point AA-008 (WESP-RTO), the permittee shall operate the WESP-RTO at all times when the Wood Chip Rotary Dryer (AA-008a), Six (6) Hammermills (AA-009) and Twelve (12) Pelletizer and Two (2) Pellet Coolers (AA-010) are in operation. If the WESP-RTO malfunction or become non-operational, the permittee shall cease operation of the related production equipment until the WESP-RTO are fully operational.

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

- 3.17 For Emission Point AA-008 (WESP-RTO), the permittee shall operate the regenerative thermal oxidizer (RTO) in such a manner as to achieve (at a minimum) ninety-five (95%) control efficiency of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) emissions, measured as (VOCs).

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

- 3.18 For Emission Point AA-010 (Pelletizers and Pellet Coolers), the permittee shall limit the total production of wood pellets to no more than 473,040 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).)

- 3.19 For Emission Points AA-009 (Hammermills), AA-011 (Baghouse controlling emissions from the Wood Chip Bin and Pellet Screener), AA-012 (Pellet Silos) and AA-013 (Baghouse controlling emissions from Pellet Silos, Pellet Screener and Truck Loadout), the permittee shall operate the baghouses, at all times, while the process units are in operation and during loading and/or off-loading operations.

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

**SECTION 4**  
**WORK PRACTICES**

*“THIS SECTION WAS INTENTIONALLY LEFT BLANK SINCE NO WORK PRACTICE  
STANDARDS APPLY TO THIS PERMIT ACTION.”*

**SECTION 5**  
**MONITORING AND RECORDKEEPING REQUIREMENTS**

| <b>Emission Point</b> | <b>Applicable Requirement</b>       | <b>Condition Number(s)</b> | <b>Pollutant/Parameter</b>   | <b>Monitoring/Recordkeeping Requirement</b>   |
|-----------------------|-------------------------------------|----------------------------|--|---|
| AA-000                | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.1                        | Recordkeeping  | Maintain Records for a Minimum of Five (5) Years  |
|                       | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.2                        | PM / PM <sub>10</sub> / PM <sub>2.5</sub>  | Develop and Implement a Dust Management Plan  |
|                       | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.3                        | PM<br>PM <sub>10</sub><br>PM <sub>2.5</sub><br>NO <sub>x</sub><br>CO<br>VOCs<br>HAPs | Calculate the Total Emission of Applicable Pollutants (Monthly and Rolling 12-Month Period)   |
| AA-005<br>AA-006      | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.4                        | Green Wood Chip Throughput   | Monitor and Calculate the Green Wood Chip Throughput (Monthly and Rolling 12-Month Period)  |
|                       | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.5                        | Wood Type (Softwood and Hardwood)  | Monitor the Quantity of Each Wood Type Used in Wood Pellet Production (Monthly and Rolling 12-Month Period)   |
| AA-006                | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.6                        | Green Wood Chip Throughput   | Monitor and Calculate the Green Wood Chip Throughput through the oversized chipper (Monthly and Rolling 12-Month Period)  |
| AA-008a               | 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)   |
|                       | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.8                        | Final Moisture Content   | Monitor Moisture Content of All Wood Chips Dried On-Site (Daily)<br>Calculate Moisture Content on Monthly Average   |
| AA-008b               | 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<br><br>Calculate Total Duration of All Start-up and Shutdown Periods (Rolling 12-Month Period) |
|                       | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.10                       | Hours of Duration  | Monitor and Record Date, Time, and Duration of Idle Mode Periods<br><br>Calculate Total Duration of All Idle Mode Periods (Rolling 12-Month Period)                         |

|                            |   |      |  |   |
|----------------------------|---|------|--|---|
| AA-008<br>AA-011<br>AA-013 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).  | 5.11 | PM<br>Opacity  | Conduct Weekly Emission Observations / Evaluations  |
| AA-008                     | 11 Miss. Admin. Code Pt. 2, R. 2.9.   | 5.12 | Secondary Voltage<br><br>Combustion Chamber Temperature  | Install, Calibrate, Monitor, Operate, and Inspect Continuous Monitoring/Recording System for Operating Parameters |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.9.   | 5.13 |  | Air Pollution Control Device Operational Specifications   |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).<br><br>11 Miss. Admin. Code Pt. 2, R. 1.8. | 5.14 | HAPs<br>PM<br>(filterable only)<br>PM <sub>10</sub> / PM <sub>2.5</sub><br>(filterable + condensable)<br>NO <sub>x</sub><br>CO         | Performance Test Requirements   |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.9.   | 5.15 | PM / PM <sub>10</sub> / PM <sub>2.5</sub><br>NO <sub>x</sub><br>CO<br>VOCs<br>HAPs   | Establish Site-Specific Emission Factors  |
| AA-008c                    | 11 Miss. Admin. Code Pt. 2, R. 2.9.   | 5.16 | PM / PM <sub>10</sub> / PM <sub>2.5</sub><br>VOCs<br>HAPs  | Establish Site-Specific Emission Factors for Dryer Bypass Stack   |
| AA-008                     | 11 Miss. Admin. Code Pt. 2, R. 2.9.   | 5.17 | PM<br>(filterable only)<br>PM <sub>10</sub> / PM <sub>2.5</sub><br>(filterable + condensable)<br>NO <sub>x</sub><br>CO<br>VOCs<br>HAPs | Conduct Subsequent Performance Testing  |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.9.<br><br>11 Miss. Admin. Code Pt. 2, R. 1.8.        | 5.18 | VOCs<br><br>HAPs   | Establish a Minimum Combustion Chamber Temperature for the RTO  |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.9.<br><br>11 Miss. Admin. Code Pt. 2, R. 1.8.        | 5.19 | Combustion Chamber Temperature   | Continuously Monitor the Combustion Chamber Temperature for the RTO (3-Hour Block Average)                        |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.9.   | 5.20 | PM / PM <sub>10</sub> / PM <sub>2.5</sub>  | Establish Secondary Voltage Range for WESP  |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.9.   | 5.21 | Secondary Voltage  | Continuously Monitor the Secondary Voltage for Each WESP (3-Hour Block Average)                                   |
|                            |   |      |  |   |



|                            |  |      |                        |  |
|----------------------------|--|------|------------------------|--|
| AA-010                     | 11 Miss. Admin. Code Pt. 2, R. 2.9.        | 5.22 | Wood Pellet Production | Monitor Total Production On-Site (Monthly and Rolling 12-Month Period) |
| AA-009<br>AA-011<br>AA-013 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). | 5.23 | PM                     | Conduct Weekly Inspections of Each Baghouses                           |
|                            | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). | 5.24 | Opacity                | Evaluate Pressure Drop for Each Baghouse Daily                         |

- 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 “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.)

- 5.3 For Emission Point AA-000 (Facility-Wide), the permittee shall calculate and record the total emission of particulate matter (PM), particulate matter less than 10 microns ( $\mu\text{m}$ ) in diameter ( $\text{PM}_{10}$ ), particulate matter less than 2.5  $\mu\text{m}$  in diameter ( $\text{PM}_{2.5}$ ), nitrogen oxides ( $\text{NO}_x$ ), carbon monoxide (CO), volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) 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 5.15 and 5.16 are approved, the permittee shall calculate emissions from the WESP/RTO Control System (Emission Point AA-008) and the Rotary Dryer Bypass Stack (Emission Point AA-008c) 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 WESP/RTO Control System (Emission Point AA-008) and the Rotary Dryer Bypass Stack (Emission Point AA-008c) 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.)

- 5.4 For Emission Points AA-005 (Green Wood Chip Screening) and AA-006 (Oversized Green Wood Chipping), the permittee shall monitor and record the throughput of green wood chips processed in oven-dried tons (ODT) both monthly and on a rolling 12-month period.

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

- 5.5 For Emission Points AA-005 (Green Wood Chip Screening) and AA-006 (Oversized Green Wood Chipping), the permittee shall demonstrate compliance with the softwood usage restriction outlined in Condition 3.9 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.)

- 5.6 For Emission Point AA-006 (Oversized Green Wood Chipping), the permittee shall monitor and record the throughput of green wood chips processed in oven-dried tons (ODT) both monthly and on a rolling 12-month period.

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

- 5.7 For Emission Point AA-008a (Wood Chip Rotary Dryer), the permittee shall monitor and calculate the throughput of dried wood chips from the 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 Point AA-008a (Wood Chip Rotary Dryer), the permittee shall demonstrate compliance with the final moisture content limit specified in Condition 3.13 by monitoring the moisture content of all dried wood chips produced by the 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-008b (Furnace Bypass Stack) and AA-008c (Rotary Dryer Bypass Stack), the permittee shall monitor and record the date, time, and duration of

every start-up and shutdown period experienced by the furnace and the dryer that resulted in emissions being diverted to the bypass stacks. Additionally, the permittee shall calculate and record the total duration of start-up and shutdown periods for the furnace and the 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 Point AA-008b (Furnace Bypass Stack), the permittee shall monitor and record the date, time, and duration of every period that the furnace operates in idle mode. 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 period.

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 hourly heat input rate based on a 3-hour block average.

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

- 5.11 For Emission Points AA-008, AA-011 and AA-013(WESP/ RTO Control System, Plant Air System Baghouse and Pellet Storage and Loading Baghouse), 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).)

- 5.12 For Emission Point AA-008 (WESP/RTO Control System), 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).

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

- 5.13 For Emission Point AA-008 (WESP/RTO Control System), the permittee shall operate and maintain each air pollution control device in accordance with the specified

manufacturer's instructions/recommendations until such a time when the applicable operating parameters required by Conditions 5.18 and 5.20 are established.

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

- 5.14 For Emission Point AA-008 (WESP/RTO Control System), the permittee shall demonstrate compliance with the control efficiency requirements, specified in Condition 3.17, for VOC and hazardous air pollutants (HAPs) [measured as volatile organic compounds (VOCs)] and the following individual HAPs: methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde and phenol by conducting an initial performance test no later than one hundred eighty (180) days after the initial start-up of the WESP/RTO control system.

In addition to the above-mentioned initial compliance demonstration, the permittee shall also conduct performance testing on the RTO for particulate matter (PM; filterable only), PM<sub>10</sub> (filterable + condensable), PM<sub>2.5</sub> (filterable + condensable), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and hydrogen chloride by the deadline specified above. The testing for NO<sub>x</sub> 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 the 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.

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 the control system, the permittee shall conduct the initial performance testing while operating at the maximum achievable capacity up to that point. Thereafter, the permittee shall conduct subsequent performance testing in accordance with the specifications of this condition no later than ninety (90) days after satisfying at least one of the following stipulations:

- (1) The monthly average dried wood production from the 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 the dryer decreases by more than one (1) percentage point below the moisture content measured during the prior performance testing (not to decrease below ten percent (10 %) moisture content).
- (c) The permittee shall monitor and record hourly throughput data on the green wood chips processed in Emission Points AA-005 (Green Wood Chip Screening) and AA-006 (Oversized Green Wood Chipping) and wood chips dried by Emission Point AA-008a (Wood Chip Rotary Dryer) during a performance test.
- (d) For Emission Point AA-010 (Pelletizers and Pellet Coolers), 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.)

5.15 For Emission Point AA-008(WESP/RTO Control System), upon completing a performance test as required by Condition 5.14, the permittee shall utilize both the test results and applicable throughput data collected during the testing event to determine site-specific emission factors for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, VOCs, total HAPs, methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, phenol and hydrogen chloride in pounds per oven-dried tons (ODT). The permittee shall establish these emission factors in accordance with the following specifications:

- (a) For the WESP/RTO Control System, the permittee shall establish a VOC site-specific emission factor for the 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) Unit-specific emission factors shall be based on the pounds of pollutant per ODT of dried wood chips from the Wood Chip Rotary Drum Dryer (Emission Point AA-008a); and pounds of pollutant per ODT of green wood chips processed in the Green Wood Screening and Overs Chipping (Emission Points AA-005 and A-006); and pounds of pollutant per ODT of wood pellets produced in the Pelletizers and Pellet Coolers (Emission Point AA-010)

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

- 5.16 For Emission Point AA-008c (Rotary Dryer Bypass Stack), the permittee shall utilize controlled dryer emissions data collected during performance testing, the vendor-guaranteed control efficiency specified for the WESP (95%), and the vendor-guaranteed control efficiency specified the RTO (95%) to derive uncontrolled, site-specific emission factors (in pounds per hour) for particulate matter (PM), particulate matter less than 10 microns ( $\mu\text{m}$ ) in diameter ( $\text{PM}_{10}$ ), particulate matter less than 2.5  $\mu\text{m}$  in diameter ( $\text{PM}_{2.5}$ ), volatile organic compounds (VOCs), hazardous air pollutants (HAPs), methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, phenol and hydrogen chloride from the Rotary Dryer Bypass Stack.

The uncontrolled, site-specific VOC emission factor for the Rotary 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;

$\overline{M}_{Acetaldehyde}$  = 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.)

- 5.17 For Emission Point AA-008(WESP/RTO Control System), unless otherwise required herein, the permittee shall conduct subsequent performance testing on the exhaust of the regenerative thermal oxidizer (RTO) for PM (filterable only), PM<sub>10</sub> (filterable + condensable), PM<sub>2.5</sub> (filterable + condensable), NO<sub>x</sub>, CO, VOC and HAPs emissions no later than twenty-four (24) months after the previous performance test.

The testing for NO<sub>x</sub> and CO shall be performed during the same test runs. Moreover, all testing shall be conducted in accordance with the specifications outlined in Condition 5.14 (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 5.15. 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 6.5. 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 6.5.

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

- 5.18 For Emission Point AA-008 (WESP/RTO Control System), during the initial performance testing, the permittee shall establish a minimum combustion chamber temperature for the RTO (in degrees Fahrenheit) that corresponds to the control efficiency requirement specified in Condition 3.17.

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 5.14.

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

- 5.19 For Emission Point AA-008(WESP/RTO Control System), the permittee shall continuously monitor and record the combustion chamber temperature for the 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.)

- 5.20 For Emission Point AA-008 (WESP/RTO Control System), during the initial performance testing, the permittee shall establish an operational range for the secondary voltage (in volts) on the WESP to maximize the control of particulate matter emissions

(i.e. PM, PM<sub>10</sub>, and PM<sub>2.5</sub>). 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 5.14.

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

- 5.21 For Emission Point AA-008 (WESP/RTO Control System), the permittee shall continuously monitor and record the secondary voltage (in volts) for the WESP based on a 3-hour block average.

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

- 5.22 For Emission Point AA-010 (Pelletizers and Pellet Coolers), 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.)

- 5.23 For Emission Points AA-009 (Hammermills), AA-011 (Baghouse controlling emissions from the Wood Chip Bin and Pellet Screener) and AA-013 (Baghouse controlling emissions from Pellet Silos, Pellet Screener and Truck Loadout), 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).)

- 5.24 For Emission Points AA-009 (Hammermills), AA-011 (Baghouse controlling emissions from the Wood Chip Bin and Pellet Screener) and AA-013 (Baghouse controlling emissions from Pellet Silos, Pellet Screener and Truck Loadout), 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).)



## 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                 | 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 Dust Management Plan for Review / Approval                                  |
|                   | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).  | 6.4                 | Submit Notification of Initial-Start-Up  |
| AA-008<br>AA-008c | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).  | 6.5                 | Submit Site-Specific Emission Factors for Review / Approval                            |
| AA-008            |   |                     | Submit Performance Testing Protocol  |
|                   | 11 Miss. Admin. Code Pt. 2, R. 2.6.B.(5).   | 6.6                 | Submit 10-Day Notification of Performance Testing Event                                |
|                   | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).  | 6.7                 | Submit Notification of Satisfying Stipulation(s) for Subsequent Performance Testing    |
|                   | 11 Miss. Admin. Code Pt. 2, R. 2.6.B.(6).<br>11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). | 6.8                 | Submit Performance Test Results and Additional Information                             |

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 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year for the preceding six-month period that contains the following information:

- (a) The total emission of PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, VOCs and HAPs 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 Overs Chipping (Emission Point AA-006) and the green wood chip throughput from the Green Wood Screening and Overs Chipping together (Emission Points AA-005 and A-006) 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 the Wood Chip Rotary Dryer (Emission Point AA-008a) in oven-dried tons (ODT) both monthly and on a rolling 12-month period;
- (e) The final moisture content of all wood chips dried based on a rolling 12-month period;
- (f) The pellet throughput from the Pelletizers and Pellet Coolers (Emission Point AA-010) in oven-dried tons (ODT) both monthly and on a rolling 12-month period.
- (g) The total duration of all start-up and shutdown periods experienced by the Furnace Bypass Stack (Emission Point AA-008b) and the Dryer Bypass Stack (Emission Point AA-008c) both monthly and on a rolling 12-month period;
- (h) The total duration of all idle mode periods experienced by the Furnace Bypass Stack (Emission Point AA-008b) 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 initial “Dust Management Plan” (DAP) required by Condition 5.2 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 31<sup>st</sup> and July 31<sup>st</sup> 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 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).)

- 6.5 For Emission Point AA-008(WESP/RTO Control System) and AA-008c (Rotary Dryer Bypass Stack), the permittee shall submit the developed site-specific emission factors required by Conditions 5.15 and 5.16 for review and approval by the MDEQ no later than ninety (90) days after completing the performance testing required by Condition 5.14.

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

- 6.6 For Emission Point AA-008 (WESP/RTO Control System), the permittee shall notify the MDEQ in writing upon triggering additional testing as specified in Condition 5.14(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).)

- 6.7 For Emission Point AA-008 (WESP/RTO Control System), the permittee shall submit a written performance test protocol for the testing required by Conditions 5.14 and 5.16 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).)

- 6.8 For Emission Point AA-008(WESP/RTO Control System), 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 (O<sub>2</sub>) concentration data.

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