STATE OF MISSISSIPPI
AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Mohegan Renewable Energy, MS LLC
252 Hickory Street
Quitman, Clarke County, Mississippi

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

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

_____

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: December 9, 2010 **Permit No.: 0440-00063**

Modified: June 6, 2014; _____

SECTION 1

A. GENERAL CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

14. *Right of Entry*: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:

    (a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and

    (b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions.

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

15. *Permit Modification or Revocation*: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

    (a) Persistent violation of any of the terms or conditions of this permit;

    (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

    (c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

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

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

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

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

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

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

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

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

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

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

21. *Beginning Operation*: Except as prohibited in 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 Mississippi Administrative Code, Part 2, Title 11, Chapter 2, Rule 2.13.G.

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

22. *Application for a Permit to Operate*: Except as otherwise specified in 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 Prevention of Significant Deterioration / New Source Review (PSD/NSR), the applicable Title V Permit to Operate

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

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

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

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

26. *Deviation Reporting*: Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) working days of the time the deviation began.

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

27. *Compliance Testing*: Regarding compliance testing:

(a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations of this permit and in units of mass per time.

(b) Compliance testing will be performed at the expense of the permittee.

(c) Each emission sampling and analysis report shall include but not be limited to the following:

(1) Detailed description of testing procedures;

(2) Sample calculation(s);

(3) Results; and

(4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

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

SECTION 2
EMISSION POINT DESCRIPTION

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

EMISSION POINT	DESCRIPTION
AA-000	Facility-Wide (Mohegan Renewable Energy MS, LLC)
AA-201	Green Wood Hammermill and Green Wood Silo [emissions are routed to the Wood Chip Dryer]
AA-202 (formerly Emission Point AC-001)	Wood Chip Rotary Dryer (Facility Ref. No. WC1) with multiclone (Facility Ref. No. WB1);
AA-203	Three (3) White Chip Hammermills and one (1) Wood Fuel Hammermill [emissions from each hammermill are routed to a corresponding baghouse and then the Wood Chip Dryer]
AA-204	Dry Wood Silos [emissions routed to the White Chip Hammermill]
AA-205 (formerly Emission Point AC-002)	Wood Fuel Storage Bin with Bag Filter (Facility Ref. No. BF11)
AA-206 (formerly Emission Point AC-001)	75 MMBTU / Hour Wood Dust Burner [emissions routed to Wood Chip Dryer]
AA-207 (formerly Emission Point AC-007)	Four (4) Small Pellet Mills (Facility Ref. No. PM1 – PM5) and One (1) Associated Pellet Cooler [emissions are routed to a bag filter (Facility Ref. No. BF2)]
AA-208 (formerly Emission Point AC-003)	Three (3) Large Pellet Mills (Facility Ref. Nos. LPM1- LPM5) with One (1) Large Pellet Cooler [emissions are routed to a baghouse (Facility Ref. No. BF-12)]

SECTION 3
EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	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	$E = 4.1\ (p^{0.67})$
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.4	Any Contaminant	General Nuisance Provision
	11 Miss. Admin. Code Pt. 2, R.2.2.B(10). **(MACT Avoidance Limits)**	3.5	HAPs	24.90 tpy (Total) 9.0 tpy (Individual) (Rolling 12-Month Totals)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). **(PSD Avoidance Limits)**	3.6	NO_X	249.0 tpy (Rolling 12-Month Total)
			PM (filterable only)	249.0 tpy (Rolling 12-Month Total)
			PM_{10} / $PM_{2.5}$ (filterable + condensable)	249.0 tpy (Rolling 12-Month Total)
			VOCs	249.0 tpy (Rolling 12-Month Total)
			CO	249.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.7	Softwood Usage Restriction	≤ 85% Softwood Processed (by Weight)
AA-201 AA-203 AA-205 AA-206	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.8	PM / PM_{10} / $PM_{2.5}$ VOCs HAPs	Emissions Control Requirement

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-202 AA-203 AA-205 AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.9	PM / PM_{10} / $PM_{2.5}$	Operate Air Pollution Control Devices During Active Operations
AA-206	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.10	Fuel Source Restriction	Combust Uncontaminated Wood Waste and Natural Gas
AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.11	Wood Pellet Production	130,000 ODT / Year (Rolling 12-Month Total)

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 below:

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

(b) Emissions resulting from soot blowing (i.e. ash removal) operations shall be permitted provided such emissions do not exceed 60% opacity and provided further that 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 or allow the discharge into the ambient air from any point source 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 not allow the emission of particulate matter in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the relationship:

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

Where "*E*" is the emission rate in pounds per hour and "*p*" is the process weight input rate in tons per hour. 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 the emission of all hazardous air pollutants (HAPs) in total to no more than 24.9 tons per year (tpy) and any individual HAP to no more than 9.0 tpy from all applicable emission sources based on rolling 12-month totals.

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

3.6 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total emission of nitrogen oxides (NO_X), particulate matter (PM; filterable only), particulate matter less than 10 microns (µm) in diameter (PM_{10}; filterable + condensable), particulate matter less than 2.5 µm in diameter ($PM_{2.5}$; filterable + condensable), volatile organic compounds (VOCs), and carbon monoxide (CO) from all applicable emission sources to no more than 249.0 tons per year (tpy) per each pollutant, based on rolling 12-month totals.

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

3.7 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total quantity of softwood utilized to no more than eighty-five (85) weight percent (wt.%) of all wood processed based on rolling 12-month totals.

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

3.8 For Emission Points AA-201 (Green Wood Hammermill / Green Wood Silo), AA-203 (White Chip / Wood Fuel Hammermills), AA-205 (Wood Fuel Storage Bin), and AA-206 (Wood Dust Burner), the permittee shall direct emissions generated by the noted process equipment to the Wood Chip Rotary Dryer (i.e. Emission Point AA-202) at all times.

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

3.9 For Emission Points AA-202 (Wood Chip Rotary Dryer), AA-203 (White Chip / Wood Fuel Hammermills), AA-205 (Wood Fuel Storage Bin), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooer), the permittee shall operate the air pollution control device(s) that correspond with each noted process equipment at all times during active operations. In the event that a control device fails or becomes non-operational, the permittee shall cease operations at the associated process equipment until such time that the control device is returns to full operation.

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

3.10 For Emission Point AA-206 (Wood Dust Burner), the permittee shall only combust uncontaminated wood waste or natural gas as a fuel source in the burner.

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).)

3.11 For Emission Points AA-207 (Small Pellet Mills / Pellet Cooler) and AA-208 (Large Pellet Mills / Pellet Cooler), the permittee shall limit the total production of wood pellets to no more than 130,000 oven-dried tons (ODT) per year based on a rolling 12-month total.

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

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

SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
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. 2.2.B(11).	5.2	PM / PM_{10} / $PM_{2.5}$	Develop and Implement a Dust Management Plan
		5.3	NO_X PM / PM_{10} / $PM_{2.5}$ VOCs CO HAPs	Calculate the Total Emission of Applicable Pollutants (Monthly and Rolling 12-Month Period)
		5.4	Wood Type (Softwood and Hardwood)	Monitor the Quantity of Each Wood Type Used in Wood Pellet Production (Monthly and Rolling 12-Month Period)
AA-202 AA-205 AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.5	Opacity	Conduct Weekly Emission Observations / Evaluations
AA-202 AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	5.6	NO_X PM (filterable only) PM_{10} / $PM_{2.5}$ (filterable + condensable) CO HAPs VOCs	Initial Performance Testing Requirements
			PM (filterable only) PM_{10} / $PM_{2.5}$ (filterable + condensable) HAPs VOCs	Subsequent Performance Testing Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-202 AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.8	NO_X PM / PM_{10} / $PM_{2.5}$ CO VOCs HAPs	Establish Site-Specific Emission Factors
AA-203 AA-205 AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.9	PM / PM_{10} / $PM_{2.5}$	Conduct Weekly Inspection of Each Baghouse
AA-203 AA-205 AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.10	PM / PM_{10} / $PM_{2.5}$	Evaluate Pressure Drop for Each Baghouse Daily
AA-206	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.11	PM / PM_{10} / $PM_{2.5}$ NO_X CO VOCs HAPs	Monitor and Record the Consumption of Each Fuel Source
AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2. 2.B(11).	5.12	Wood Pellet Production	Monitor Total Wood Pellet Production

5.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall retain all required records, monitoring data, supporting information, and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records, all original strip-chart recordings or other data from continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to the MDEQ as required by "Applicable Rules and Regulations" of this permit upon request.

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

5.2 For Emission Point AA-000 (Facility-Wide), the permittee shall develop, maintain, and implement a "*Dust Management Plan*" that details the procedures for operating and maintaining applicable emission sources to minimize the emission of fugitive particulate matter (PM, PM_{10}, and $PM_{2.5}$).

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

5.3 For Point AA-000 (Facility-Wide), the permittee shall calculate and record the total emission of nitrogen oxides (NO_X), particulate matter (PM), particulate matter less than 10 microns (µm) in diameter (PM_{10}), particulate matter less than 2.5 µm in diameter ($PM_{2.5}$), volatile organic compounds (VOCs), carbon monoxide (CO), each individual hazardous air pollutant (HAP), and all HAPs combined in tons from all sources that can reasonably emit the pollutant(s) in tons both on a monthly basis and on a rolling 12-month total basis in accordance with the following specifications:

(a) Upon issuance of this permit and ending on the date in which the emission factors required by Condition 5.8 are approved, the permittee shall calculate emissions from the Wood Chip Rotary Dryer (Emission Point AA-202), the Small Pellet Mills / Pellet Cooler (Emission Point AA-207), and the Large Pellet Mills / Pellet Cooler (Emission Point AA-208) using the applicable emission factors presented in the Permit to Construct modification application for this permitted project.

(b) Upon approval of the site-specific emission factors, the permittee shall calculate and record emissions from the Wood Chip Rotary Dryer (Emission Point AA-202), the Small Pellet Mills / Pellet Cooler (Emission Point AA-207), and the Large Pellet Mills / Pellet Cooler (Emission Point AA-208) using collected production data, collected parametric monitoring data, and the established site-specific emission factors. Additionally, the permittee shall revise and update the monthly emissions and 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 emission limitations specified in Conditions 3.5 and 3.6 , 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 modification application to determine actual emissions on a monthly basis and rolling 12-month basis.

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

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

5.4 For Point AA-000 (Facility-Wide), the permittee shall demonstrate compliance with the softwood usage restriction outlined in Condition 3.7 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. 2.2.B(11).)

5.5 For Emission Points AA-202 (Wood Chip Rotary Dryer), AA-205 (Wood Fuel Storage Bin), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet

Cooler), the permittee shall perform and record a weekly visible emission observation in accordance with EPA Test Method 22 on the exhaust of each noted point source during daylight hours and during representative operating conditions.

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(11).)

5.6 For Emission Points AA-202 (Wood Chip Rotary Dryer), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooler), the permittee shall conduct initial performance testing on the exhaust of the noted point sources no later than one hundred eighty (180) days after certifying completion of construction in accordance with the following requirements:

(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 EPA / MDEQ prior to the testing event.

(b) The permittee shall conduct a minimum of three (3) separate test runs for a performance stack test using 40 CFR 63.7(e)(3), Subpart A as reference for the test conduct.

(c) Initial performance testing shall be conducted while dried wood chip production for and/or wood pellet production is at no less than ninety percent (90%) of its maximum permitted equipment production capacity (in ODT per hour) and no less than ninety-five percent (95%) of the maximum permitted weight percent for softwood as a feedstock. The actual production rate and the weight percent of softwood used will be determined individually during the performance test.

If the permittee has not achieved 90% of the maximum permitted equipment production capacity or 95% of the maximum permitted weight percent of softwood as a feedstock within 180 days after the initial start-up of a corresponding control system, the permittee shall conduct the initial performance testing while operating at the maximum achievable capacities up to that point. Thereafter, the permittee shall conduct subsequent performance testing in accordance with the specifications of this condition no later than ninety (90) days after satisfying at least one of the following stipulations:

(1) The monthly average dried wood production 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); or

(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).

(d) *For Emission Points AA-202*: The permittee shall evaluate (at the exhaust point) the emission of PM (filterable only), PM_{10} (filterable + condensable), $PM_{2.5}$ (filterable + condensable), nitrogen oxides (NO_X), carbon monoxide (CO), volatile organic compounds (VOCs), and the following individual hazardous air pollutants (HAPs): methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, phenol, and hydrogen chloride. Moreover, the testing for NO_X and CO shall be performed during the same test runs.

(e) *For Emission Points AA-202*: The permittee shall monitor and record hourly throughput data on the wood chips dried by the Woodchip Rotary Dryer during a performance test.

(f) *For Emission Points AA-207 and AA-208*: The permittee shall evaluate (at each exhaust point) the emission of PM (filterable only), PM_{10} (filterable + condensable), $PM_{2.5}$ (filterable + condensable), VOCs, and the following individual HAPs: methanol, acetaldehyde, and formaldehyde.

(g) *For Emission Points AA-207 and AA-208*: The permittee shall monitor and record hourly throughput data in oven-dried tons (ODT) of wood pellets produced from each point source during a performance test.

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

5.7 For Emission Points AA-202 (Wood Chip Rotary Dryer), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooler), unless otherwise required herein, the permittee shall conduct subsequent performance testing on the exhaust of the noted point sources to evaluate the emission of PM (filterable only), PM_{10} (filterable + condensable), $PM_{2.5}$ (filterable + condensable), VOCs, methanol, acetaldehyde, formaldehyde no later than twenty-five (25) months after the previously completed performance test.

Moreover, all testing shall be conducted in accordance with the specifications outlined in Condition 5.6(a), (b), (e), and (g).

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 (lbs/ODT) in accordance with Condition 5.8. 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 6.9.

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 6.9.

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

5.8 For Emission Points AA-202 (Wood Chip Rotary Dryer), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooler), upon completing a performance test in accordance with Conditions 5.6 and 5.7, 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, PM_{10}, $PM_{2.5}$, VOCs, NO_X, CO, methanol, acetaldehyde, and formaldehyde in pounds per oven-dried tons (lbs. / ODT). The permittee shall establish these emission factors in accordance with the following specifications:

(a) For each noted point source, 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 lbs. / ODT;

$\bar{M}_{VOC(as\,propane)}$ is the average mass flow rate of volatile organic compound (as propane) emissions from applicable performance testing in lbs. / hr as determined by EPA Test Method 25A;

$\bar{M}_{Methanol}$ is the average mass flow rate of methanol emissions from applicable performance testing in lbs. / hr;

$\bar{M}_{Formaldehyde}$ is the average mass flow rate of formaldehyde emissions from applicable performance testing in lbs. / hr;

$\bar{M}_{Acetaldehyde}$ is the average mass flow rate of acetaldehyde emissions from applicable performance testing in lbs. / hr; and

$\bar{M}_{Throughput}$ is the average throughput rate of applicable material (i.e. wood chips dried or wood pellets produced) during performance testing in ODT / hr.

(b) For Emission Point AA-202, all site-specific emission factors shall be based on the pounds of pollutant per ODT of wood chips dried.

(c) For Emission Points AA-207 and AA-208, 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).)

5.9 For Emission Points AA-203 (White Chip Hammermills / Wood Fuel Hammermill), AA-205 (Wood Fuel Storage Bin), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooler), the permittee shall conduct a weekly inspection of the each baghouse / bag filter. Additionally, maintenance shall be performed as necessary to maintain proper operation of each baghouse / bag filter at all times.

The records of the weekly inspections and any maintenance performed shall be kept in log form (option for electronic form) and made available to the 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).)

5.10 For Emission Points AA-203 (White Chip Hammermills / Wood Fuel Hammermill), AA-205 (Wood Fuel Storage Bin), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooler), the permittee shall monitor and record the pressure drop across each baghouse / each individual bag filter daily in inches of water (in. H_2O). 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).)

5.11 For Emission Point AA-206 (Wood Dust Burner), the permittee shall monitor and record the amount (either in pounds or cubic feet) of each fuel source combusted in the burner on a monthly basis.

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

5.12 For Emission Points AA-207 (Small Pellet Mills / Pellet Cooler) and AA-208 (Large Pellet Mills / Pellet Cooler), 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).)

SECTION 6
REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Reporting Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Submit Documents Certified by a Responsible Official
		6.2	Report a Deviation from Requirements Within Five (5) Days
	11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).	6.3	Submit a Notification on the Commencement of Construction
	11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).	6.4	Submit a Notification When Construction Does Not Begin Within 18 Months (As Applicable)
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(1). and (3).	6.5	Submit a Notification on the Completion of Construction
	11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).	6.6	Submit a Notification on a Change in Approved Construction Plans / Specifications
	11 Miss. Admin. Code Pt. 2, R. 2.9.	6.7	Submit Semi-Annual Summary of Emissions and Operational Data
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.8	Submit the Dust Management Plan for Review / Approval
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.9	Submit Site-Specific Emission Factors for Review / Approval
AA-202 AA-207 AA-208	11 Miss. Admin. Code Pt. 2, R. 2.6.B(5).	6.10	Submit Performance Testing Protocol Submit 10-Day Notification of Performance Testing Event
	11 Miss. Admin. Code Pt. 2, R. 2.6.B(6). and R. 2.2.B(11).	6.11	Submit Performance Testing Results

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 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), except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective action(s) and/or

preventive measures taken. The report shall be submitted to the MDEQ within five (5) working days of the time the deviation began.

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

6.3 For Emission Point AA-000 (Facility-Wide), the permittee shall notify the MDEQ in writing that construction has begun no later than fifteen (15) days after actual construction commences.

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

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

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

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

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

6.6 For Emission Point AA-000 (Facility-Wide), the MDEQ shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the MDEQ determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

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

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

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

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

(c) The total wood pellet production throughput in oven-dried tons (ODT) both on a monthly basis and on a rolling 12-month total basis, as well as the throughput (annualized to ODT/year) demonstrated during the most recent performance test; and

(d) A summary of any revision(s) made to the "Dust Management Plan."

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

6.8 For Emission Point AA-000 (Facility-Wide), the permittee shall submit the initial "Dust Management Plan" required by Condition 5.2 for review by the MDEQ no later than ninety (90) days after issuance of this permit. 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 6.7. 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).)

6.9 For Emission Point AA-000 (Facility-Wide), within ninety (90) days of completing the initial performance testing required by Condition 5.6, the permittee shall submit the site-specific emission factors established per the procedures in Condition 5.8 for review and approval by the 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.

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. The 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).)

6.10 For Emission Points AA-202 (Wood Chip Rotary Dryer), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooler), the permittee shall submit a written performance test protocol for the testing required by Conditions 5.6 and 5.7 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).)

6.11 For Emission Points AA-202 (Wood Chip Rotary Dryer), AA-207 (Small Pellet Mills / Pellet Cooler), and AA-208 (Large Pellet Mills / Pellet Cooler), 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) Applicable parametric monitoring data that corresponds to a specified pollutant(s) and supporting documentation;

(b) The average weight percent softwood processed during each test run;

(c) The hourly wood chip or pellet throughput data for a point source(s) during each test run;

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

(e) A comparison of current results [noting the average pollutant emission rate and the average applicable throughput] with any prior results from the previous five (5) years.

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