STATE OF MISSISSIPPI
AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Amite BioEnergy, LLC – Wood Pellet Manufacturing Facility
1763 Georgia Pacific Road #2
Gloster, Amite County, Mississippi

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

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krystal Rudolph

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: November 26, 2012 **Permit No.: 0080-00031**

Modified: March 21, 2014; March 9, 2021

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 1, Rule 1.10 – "*Provisions for Upsets, Start-Ups, and Shutdowns*".

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

21. *Beginning Operation*: Except as prohibited in Condition 24 of Section 1, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate (whichever is applicable) is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by Mississippi Administrative Code, Title 11, Part 2, Chapter 2, Rule 2.13.G.

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

22. *Application for a Permit to Operate*: Except as otherwise specified in Condition 24 of Section 1, the application for issuance or modification of the State Permit to Operate or the Title V Permit (whichever is applicable) is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

23. *Operating Under a Permit to Construct*: Except as otherwise specified in Condition 24, of Section 1, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit (whichever is applicable) the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)

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

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

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

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

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

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

27. *Compliance Testing*: Regarding compliance testing:

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

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

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

(1) Detailed description of testing procedures;

(2) Sample calculation(s);

(3) Results; and

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

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

SECTION 2
EMISSION POINT DESCRIPTION

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

EMISSION POINT	DESCRIPTION
AA-000	Facility-Wide (Amite BioEnergy, LLC – Wood Pellet Manufacturing Facility)
AA-100	**Fugitive Emission Sources – Wood Yard Operations**
AA-101	Log Debarker
AA-102	Log Chipper
AA-103	Green and Dry Wood Transfer and Handling Operations
AA-104	Green Wood Storage Pile
AA-105	Dry Fiber and Chip Storage Tent
AA-200	**Wood Drying Operations**
AA-201	One (1) Wet Electrostatic Precipitator (WESP) and one (1) Regenerative Thermal Oxidizer (RTO) with One (1) 24 MMBTU / Hour Natural Gas-Fired Burner [emissions from the Wood Chip Rotary Dryer, the 165 MMBTU / Hour Wood-Fired Furnace are controlled]
AA-202	Five (5) Green Hammermills
AA-203a	165 MMBTU / Hour Wood-Fired Furnace
AA-203b	165 MMBTU / Hour Wood-Fired Furnace Bypass Stack
AA-204a	Wood Chip Rotary Dryer
AA-204b	12.5 MMBTU/hr Wood Chip Rotary Dryer Bypass Stack
AA-300	**Wood Pellet Operations**
AA-301	One (1) Regenerative Catalytic Oxidizer (RCO) with One (1) 14 MMBTU / Hour Natural Gas-Fired Burner [emissions from the Primary Hammermills, the Dry Shavings Hammermills, and the Pellet Mills / Pellet Coolers are controlled]
AA-302	Primary Hammermill Feed Silo with Bin Vent

EMISSION POINT	DESCRIPTION
AA-303	Six (6) Primary Hammermill Pneumatic Systems A – F [each system equipped with a baghouse filter to control particulate matter emissions; emissions from these sources are routed to the RCO (AA-301)]
AA-304	Dry Shavings Truck Dump
AA-305	Dry Fiber Silo No. 1 with Bin Vent
AA-306	Dry Fiber Silo No. 2 with Bin Vent
AA-307	Two (2) Dry Shavings Hammermill Pneumatic Systems A and B [each system equipped with a baghouse filter to control particulate matter emissions; emissions from these sources are routed to the RCO (AA-301)]
AA-308	Eight (8) Pellet Mill / Cooler Pneumatic Systems A – H [each system comprised of two (2) pellet mills and one (1) pellet cooler; each system equipped with a baghouse filter to control particulate matter emissions; emissions from these sources are routed to the RCO (AA-301)]
AA-309	Starch Storage Silo with bin vent [equipped with a baghouse filter]
AA-400	**Finished Pellet Operations**
AA-401	Two (2) Pellet Storage Silos, Screened Materials Return System, and Pellet Truck Loadout System [emissions from all sources are controlled by a common baghouse]
AA-500	**Emergency Engines**
AA-501	250 HP (187 kW) Diesel-Fired Emergency Pump Engine [total heat input: 0.64 MMBTU / hour; manufactured in 2013]
AA-502	402 HP (300 kW) Diesel-Fired Emergency Generator Engine [total heat input: 0.81 MMBTU / hour; manufactured in 2015]

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	40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.3	PM	$E = 4.1 (p^{0.67})$
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.4		General Nuisance Clause
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). **(Major Source Avoidance Limits)**	3.5	HAPs	9.0 tpy (Individual) 24.0 tpy (Total) (Rolling 12-Month Totals)
AA-200 AA-300 AA-400 AA-500	11 Miss. Admin. Code Pt. 2, R.2.2.B(10). **(PSD Avoidance Limits)**	3.6	PM (filterable only)	245.0 tpy (Rolling 12-Month Total)
			PM_{10} / $PM_{2.5}$ (filterable + condensable)	245.0 tpy (Rolling 12-Month Total)
			NO_X	245.0 tpy (Rolling 12-Month Total)
			CO	245.0 tpy (Rolling 12-Month Total)
			VOCs	245.0 tpy (Rolling 12-Month Total)
AA-201	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.7	PM / PM_{10} / $PM_{2.5}$ VOCs HAPs	Always Operate the WESP / RTO When the Wood Chip Rotary Dryer and the Green Hammermills are in Operation
		3.8	HAPs	95% Control Efficiency (RTO), measured as VOCs
AA-203a	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.9	Fuel Source Restriction	Combust Only Uncontaminated Wood Waste
AA-204a	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.10	Dried Wood Chip Throughput	578,708 ODT / Year (Rolling 12-Month Total)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-203b AA-204b	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.11	CO NO_X PM / PM_{10} / $PM_{2.5}$ VOCs HAPs	*Start-Up and Shutdown Requirements*: Bypass Emissions for ≤ 100 Hours *Idle Mode Requirements*: Bypass Emissions for ≤ 500 Hours (Rolling 12-Month Totals)
AA-300	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.12	Wood Pellet Production	771,392 ODT / Year (Rolling 12-Month Total)
AA-301	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.13	VOCs HAPs	Always Operate the RCO When the Primary Hammermills, the Dry Shavings Hammermills, Pellet Mills / Pellet Coolers are in Operation
		3.14	HAPs	95% Control Efficiency (RCO), measured as VOCs
AA-300 AA-400	11 Miss. Admin. Code Pt. 2, R.2.2.B(10).	3.15	PM / PM_{10} / $PM_{2.5}$	Always Operate a Baghouse When a Corresponding Process Unit is in Active Operation
AA-500	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.16	PM	0.6 Pounds / MMBTU per Hour Heat Input
	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Combustion Engines 40 CFR 60.4200(a)(2), Subpart IIII	3.17	NMHC + NO_X CO PM (filterable)	Applicability
	40 CFR 60.4207(b), Subpart IIII 40 CFR 80.510(b), Subpart I	3.18	Diesel Fuel Requirement	15 ppm Maximum Sulfur Content; and 40 Minimum Cetane Index or 35% Maximum Aromatic Content
	40 CFR 60.4211(f)(1)-(3), Subpart IIII	3.19	Hours of Operation	100 Hours / Calendar Year for Maintenance and Testing 50 Hours / Calendar Year for Non-Emergency Situations
	40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6590(c)(1), Subpart ZZZZ	3.20	HAPs	General Applicability

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-501	40 CFR 60.4205(c), 60.4206, and 60.4211(c), Subpart IIII	3.21	NMHC + NO_X PM (filterable)	Purchase Engine Certified to Emission Standards
AA-502	40 CFR 60.4205(b), 60.4202(a)(2), 60.4206, and 60.4211(c), Subpart IIII	3.22	NMHC + NO_X CO PM (filterable) Opacity	

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 from any manufacturing, industrial, commercial, or waste disposal process, which exceeds forty percent (40%) opacity subject to the following exceptions:

(a) Start-up 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) start-ups per stack in any twenty-four (24) hour period.

(b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (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 (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 or emissions 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), 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:

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

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 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.)

3.5 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the emission of each individual hazardous air pollutant (HAP) to no more than 9.0 tons per year (tpy) based on a rolling 12-month total and all HAPs in total to no more than 24.0 tpy based on a rolling 12-month total.

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

3.6 For Emission Points AA-200 (Wood Drying Operations), AA-300 (Wood Pellet Operations), AA-400 (Finished Pellet Operations) and AA-500 (Emergency Engines), the permittee shall respectively limit the total emission of 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), nitrogen oxides (NO_X), 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 total.

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

3.7 For Emission Point AA-201 (WESP – RTO Control System), the permittee shall operate the wet electrostatic precipitator – regenerative thermal oxidizer (WESP – RTO) at all times when the Green Hammermills (Emission Point AA-203) and the Wood Chip Rotary Dryer (Emission Point AA-204a) are in operation. If either air pollution control device malfunctions or becomes non-operational, the permittee shall cease operation of the Green Hammermills and the Wood Chip Rotary Dryer until both control devices are fully operational.

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

3.8 For Emission Point AA-201 (WESP – RTO Control System), the permittee shall operate the regenerative thermal oxidizer (RTO) in such a manner as to achieve (at a minimum) ninety-five percent (95%) control efficiency of hazardous air pollutants (HAPs) emissions, measured as volatile organic compounds (VOCs), across the RTO.

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

3.9 For Emission Point AA-203a (Wood-Fired Furnace), 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).)

3.10 For Emission Point AA-204a (Wood Chip Rotary Dryer), the permittee shall limit the throughput of green wood chips dried to no more than 578,708 oven-dried tons (ODT) per year based on a rolling 12-month total. An "*oven-dried ton*" equates to a ton of wood at zero percent (0%) moisture.

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

3.11 For Emission Points AA-203a (Wood-Fired Furnace) and AA-204a (Wood Chip Rotary Dryer), the permittee shall always direct emissions from the rotary dryer and the furnace to the WESP – RTO (Emission Point AA-201), except during periods of start-up, shutdown, or idle mode (as applicable) as outlined below:

(a) During periods of furnace start-up and shutdown, the permittee may vent the emissions from the furnace to the Furnace Bypass Stack (Emission Point AA-203b) for no more than fifty (50) hours based on a rolling 12-month total.

Once 50 hours are attained, the permittee shall either direct furnace emissions to the 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 based on a rolling 12-month total.

Once 500 hours are attained, the permittee shall either direct furnace emissions to the Rotary Dryer (if fully operational) or cease all operations (including periods of idle mode) from the furnace. For the purpose of this permit, "*idle mode*" is defined as the operation of the furnace at a heat input rate not to exceed five (5) million BTU (MMBTU) per hour.

(c) During periods of rotary dryer shutdown, the permittee may vent the emissions from the rotary dryer to the Rotary Dryer Bypass Stack (Emission Points AA-204b) for no more than fifty (50) hours based on a rolling 12-month total.

Once 50 hours are attained, the permittee shall either direct the Rotary Dryer emissions to the WESP – RTO (if fully operational) or cease all operations (including periods of shutdown) from the rotary dryer.

Use of the Furnace Bypass Stack or 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 26 of Section 1.

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

3.12 For Emission Point AA-300 (Wood Pellet Operations), until such time that the initial startup and operation of the RCO Control System has been completed, the permittee shall limit the monthly average production of wood pellets to no more than 40,000 oven-dried tons (ODT) per month, averaged over each consecutive four-month rolling period, and no more than 45,000 ODT/month for any given month. Following initial startup of the RCO Control System meeting the requirements of Permit Conditions 3.13 and 3.14, the permittee shall limit the total production of wood pellets to no more than 771, 392 oven-dried tons (ODT) per year based on a rolling 12-month total. An "oven-dried ton" equates to a ton of wood at zero percent (0%) moisture.

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

3.13 For Emission Point AA-301 (RCO Control System), the permittee shall operate the regenerative catalytic oxidizer (RCO) at all times when the Primary Hammermills (Emission Point AA-303), the Dry Shavings Hammermills (Emission Point AA-307), and the Pellet Mills / Pellet Coolers (Emission Point AA-308) are in operation. If the RCO malfunctions or becomes non-operational, the permittee shall cease operation of all noted process units until the RCO is fully operational.

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

3.14 For Emission Point AA-301 (RCO Control System), the permittee shall operate the RCO in such a manner as to achieve (at a minimum) ninety-five percent (95%) control efficiency of hazardous air pollutants (HAPs) emissions, measured as volatile organic compounds (VOCs), across the RCO.

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

3.15 For Emission Points AA-300 (Wood Pellet Operations) and AA-400 (Finished Pellet Operations), the permittee shall operate each baghouse at all times when a corresponding process unit is in active operation.

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

3.16 For Emission Point AA-500 (Emergency Engines), the emission of ash and/or particulate matter (PM) from each engine shall not exceed 0.6 pounds per million BTU (MMBTU) per hour heat input.

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

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

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

3.18 For Emission Point AA-500 (Emergency Engines), the permittee shall only use diesel fuel in each engine that meets the following requirements (on a per-gallon basis):

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

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

(Ref.: 40 CFR 60.4207(b), Subpart IIII and 40 CFR 80.510(b), Subpart I)

3.19 For Emission Point AA-500 (Emergency Engines), any operation of the engine for any purpose other than emergency operation, maintenance and testing, and operation in non-emergency situations as allowed in paragraph (c) is prohibited. If an engine is not operated in accordance with Parts (a) through (c) of this condition, the engine will not be considered an emergency engine under Subpart IIII and shall then meet all applicable requirements under Subpart IIII for non-emergency engines:

(a) There is no time limit on the use of an engine in emergency situations.

(b) The permittee may operate an engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of one hundred (100) hours per calendar year. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, and local standards require maintenance and testing of the engine beyond 100 hours per calendar year.

(c) The permittee may operate an engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The

50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f)(1) – (3), Subpart IIII)

3.20 For Emission Point AA-500 (Emergency Engines), the permittee is subject to and shall comply with applicable requirements found in 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

As the engines are considered "*new*" and subject to 40 CFR Part 60 – Subpart IIII, the permittee shall demonstrate compliance with Subpart ZZZZ by complying with the applicable requirements of Subpart IIII. No further requirements apply under Subpart ZZZZ.

(Ref.: 40 CFR 63.6590(c)(1), Subpart ZZZZ)

3.21 For Emission Point AA-501 (Emergency Pump Engine), the permittee shall purchase a pump engine that complies with following emission standards:

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

(b) Particulate Matter (PM): 0.20 grams per kilowatt-hour (0.15 grams per horsepower-hour).

The engine shall be installed and configured according to the manufacturer's emission-related specifications. Additionally, the permittee shall operate the engine in such a manner as to achieve the noted emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4205(c), 60.4206, and 60.4211(c), Subpart IIII)

3.22 For Emission Point AA-502 (Emergency Generator Engine), the permittee shall purchase a generator engine that complies with following emission standards:

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

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

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

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

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

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

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

The engine shall be installed and configured according to the manufacturer's emission-related specifications. Additionally, the permittee shall operate the engine in such a manner as to achieve the noted emission standards over the entire life of the engine.

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

SECTION 4
WORK PRACTICE STANDARDS

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

4.1 For Emission Point AA-500 (Emergency Engines), the permittee shall adhere to the following work practices:

(a) Operate and maintain each engine and control device (if any) according to the manufacturer's emission-related written instructions;

(b) Change only those emission-related settings that are permitted by the manufacturer;

(c) Meet the requirements of 40 CFR Parts 89, 94, and/or 1068 (as applicable); and

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

(Ref.: 40 CFR 60.4211(a) and (g), Subpart IIII)

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. 2.2.B(11).	5.1	Recordkeeping	Maintain Records for a Minimum of Five (5) Years
		5.2	PM / PM_{10} / $PM_{2.5}$	Develop and Implement a Dust Management Plan
		5.3	HAPs	Calculate Emissions (Monthly and Rolling 12-Month Total)
AA-200 AA-300 AA-400 AA-500	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.4	PM / PM_{10} / $PM_{2.5}$ NO_X CO VOCs	Calculate the Total Emission of Applicable Pollutants (Monthly and Rolling 12-Month Totals)
AA-201 AA-301	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.5	Secondary Voltage Combustion Chamber Temperature	Install, Calibrate, Monitor, Operate, and Inspect Continuous Monitoring/ Recording System for Operating Parameters
		5.6		Air Pollution Control Device Operational Specifications
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	5.7	PM (filterable only) PM_{10} / $PM_{2.5}$ (filterable + condensable) CO HAPs NO_X VOCs	Conduct Initial Performance Testing
		5.8		Conduct Subsequent Performance Testing
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.9	PM / PM_{10} / $PM_{2.5}$ VOCs CO NO_X HAPs	Establish Site-Specific Emission Factors
		5.10	VOCs HAPs	Establish a Minimum Combustion Chamber Temperature for the RTO and RCO

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-201 AA-301	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.11	Combustion Chamber Temperature	Continuously Monitor the Combustion Chamber Temperature for the RTO and the RCO (3-Hour Block Average)
		5.12	Opacity	Conduct Weekly Visible Emission Observations / Evaluations
AA-201	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.13	PM / PM_{10} / $PM_{2.5}$	Establish Secondary Voltage Range for the WESP
		5.14	Secondary Voltage	Continuously Monitor the Secondary Voltage for the WESP (3-Hour Block Average)
AA-203b AA-204b	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.15	Hours of Duration	Monitor and Record Date, Time, and Duration of Start-Up and Shutdown Periods Calculate Total Duration of All Start-Up and Shutdown Periods (Rolling 12-Month Total)
AA-203b	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.16	Hours of Duration	Monitor and Record Date, Time, and Duration of Idle Mode Periods Calculate Total Duration of All Idle Mode Periods (Rolling 12-Month Total)
AA-204a	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.17	Dried Wood Chip Throughput	Monitor the Throughput of Wood Chips Dried (Monthly and Rolling 12-Month Total)
AA-300 AA-400	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.18	PM / PM_{10} / $PM_{2.5}$	Conduct an Inspection on Each Baghouse Weekly
		5.19	Opacity	Evaluate the Pressure Drop for Each Baghouse Daily
AA-300	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.20	Wood Pellet Production	Monitor Total Production (Monthly and Rolling 12-Month Total)
AA-301	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.21	VOCs HAPs	Conduct Testing Every 16 Months to Determine Apparent Media Density and Percent Saturation of Catalytic Media in the RCO
AA-500	40 CFR 60.4209(a), Subpart IIII 11 Miss Admin. Code Pt. 2, R. 2.2.B(11).	5.22	Hours of Operation	Maintain Monthly Records of Hours of Operation

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. 2.2.B(11).)

5.2 For Emission Point AA-000 (Facility-Wide), the permittee shall maintain a copy of the "*Dust Management Plan*" (DMP) onsite. The DMP shall detail 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 Emission Point AA-000 (Facility-Wide), the permittee shall calculate and record the emission of each individual hazardous air pollutant (HAP) and all HAPs in total both on a monthly basis and on a rolling 12-month total basis.

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

5.4 For Emission Points AA-200 (Wood Drying Operations), AA-300 (Wood Pellet Operations), AA-400 (Finished Pellet Operations), and AA-500 (Emergency Engines), the permittee shall calculate and record the total respective emission of particulate matter (PM), particulate matter less than 10 microns (µm) in diameter (PM_{10}), particulate matter less than 2.5 µm in diameter ($PM_{2.5}$), nitrogen oxides (NO_X), carbon monoxide (CO), and volatile organic compounds (VOCs) in tons both on a monthly basis and rolling 12-month total basis in accordance with the following specifications:

(a) Beginning on the date of initial start-up of the regenerative catalytic oxidizer (RCO) and ending on the date in which the emission factors required by Condition 5.9 are approved, the permittee shall calculate emissions from the WESP – RTO Control System (Emission Point AA-201) and the RCO Control System (Emission Point AA-301) using the applicable emission factors presented in the Permit to Construct application for this permitted project.

(b) Upon approval of the site-specific emission factors, the permittee shall calculate and record emissions from the WESP – RTO Control System (Emission Point AA-201) and the RCO Control System (Emission Point AA-301) 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 Condition 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 application to determine actual emissions on a monthly basis and rolling 12-month basis.

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

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

5.5 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO 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 below in accordance with the manufacturer's recommendations:

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

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

(c) Regenerative Catalytic Oxidizer (RCO) – Combustion chamber temperature (in degrees Fahrenheit).

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

5.6 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO 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 5.10 and 5.13 are established.

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

5.7 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO Control System), the permittee shall conduct initial performance testing on the regenerative thermal oxidizer (RTO) and the regenerative catalytic oxidizer (RCO) no later than one hundred eighty (180) days after the initial start-up of the RCO 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 MDEQ prior to the testing event.

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

(c) Initial performance testing shall be conducted while the average wood chip throughput and/or the average wood pellet production is at no less than ninety percent (90%) of the maximum permitted equipment production capacity (in oven-dried tons per hour). The actual production rate will be determined individually for each unit during the performance test.

If the permittee has not achieved 90% of the maximum permitted equipment production capacity 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 capacity achieved 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 a respective monthly average production rate (in oven-dried tons per hour) 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 hourly design capacity).

(d) *For the RTO and RCO*: The permittee shall demonstrate compliance with the minimum hazardous air pollutant (HAP) control efficiencies specified in Conditions 3.8 and 3.14 [measured as volatile organic compounds (VOCs)] by measuring the VOC concentration at both the inlet and outlet of each control device.

(e) *For the RTO*: 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 (NOx), carbon monoxide (CO), methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, hydrogen chloride (HCl), and phenol. Moreover, the testing for NO_X and CO shall be performed during the same test runs.

(f) *For the RTO*: The permittee shall monitor and record hourly throughput data on the green wood chips processed in the Green Hammermills (Emission Point AA-202) and wood chips dried by the Wood Chip Rotary Dryer (Emission Point AA-204a) during a performance test.

(g) *For the RCO*: The permittee shall evaluate (at the exhaust point) the emission of PM (filterable only), PM_{10} (filterable + condensable), $PM_{2.5}$ (filterable + condensable), methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, hydrogen chloride (HCl), and phenol.

(h) *For the RCO*: 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).)

5.8 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO Control System), unless otherwise required herein, the permittee shall conduct subsequent

performance testing on the exhaust of the regenerative thermal oxidizer (RTO) and the regenerative catalytic oxidizer (RCO) to evaluate the emission of PM (filterable only), PM_{10} (filterable + condensable), $PM_{2.5}$ (filterable + condensable), NO_X, CO, VOCs, methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, hydrogen chloride (HCl), and phenol no later than twenty-five (25) months after the previously completed performance test.

The testing for NO_X and CO shall be performed during the same test runs. Moreover, all testing shall be conducted in accordance with the specifications outlined in Condition 5.7(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 (ODT) in accordance with Condition 5.9. 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.

If the emission factors derived from performance testing under this condition are less than or equal to the already approved site-specific emission factors, the permittee may request that subsequent performance testing be completed no later than thirty-six (36) months after the previously completed performance test.

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

5.9 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO Control System), upon completing a performance test as required by Condition 5.7 or 5.8, the permittee shall utilize both the test results and applicable throughput data collected during the testing event to determine site-specific emission factors for PM, PM_{10}, $PM_{2.5}$, NO_X, CO, VOCs, methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, hydrogen chloride (HCl), and phenol in pounds per oven-dried tons. The permittee shall establish these emission factors in accordance with the following specifications:

(a) 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} = the site-specific emission factor for VOCs, pounds per ODT;

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

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

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

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

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

(b) For the WESP – RTO control system, all site-specific emission factors shall be based on the pounds of pollutant per combined ODT of dried wood chips from the Wood Chip Rotary Dryer (Emission Point AA-204a) and green wood chips processed in the Green Hammermills (Emission Point AA-202).

(c) For the RCO control system, all site-specific emission factors shall be based on the pounds of pollutant per ODT of wood pellets produced.

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

5.10 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO Control System), during the initial performance testing, the permittee shall establish a minimum combustion chamber temperature for the RTO and the RCO (in degrees Fahrenheit) to demonstrate continuous compliance with the control efficiency requirements in Conditions 3.8 and 3.14.

The minimum combustion chamber temperature shall be the average temperature measured over the span of the test runs. The minimum combustion chamber temperature may be modified based on subsequent performance tests demonstrating compliance with the minimum VOC control efficiency.

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

5.11 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO Control System), the permittee shall continuously monitor and record the combustion chamber temperature for the RTO and the RCO (in degrees Fahrenheit) based on a 3-hour block average.

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

5.12 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO Control System), the permittee shall have a certified VEE reader perform and record a weekly visible emission observation in accordance with EPA Test Method 22 on the exhaust of each control system during daylight hours and during representative operating conditions.

If visible emissions are detected during an observation period, the permittee shall then immediately perform and record a visible emission evaluation (VEE) in accordance with EPA Test Method 9. In the event that a VEE is required but cannot be conducted, the permittee shall record a written explanation as to why it was not possible to perform the VEE immediately and shall conduct the VEE as soon as practicable.

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

5.13 For Emission Point AA-201 (WESP – RTO Control System), during the initial performance testing, the permittee shall establish a secondary voltage range (in volts) on the wet electrostatic precipitator (WESP) to maximize the control of particulate matter emissions (i.e. PM, PM_{10}, and $PM_{2.5}$).

The minimum secondary voltage may be modified based on subsequent performance tests resulting in emission factors for PM, PM_{10}, and $PM_{2.5}$ at or below the factors established and approved following the initial performance test.

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

5.14 For Emission Point AA-201 (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. 2.2.B(11).)

5.15 For Emission Points AA-203b (Furnace Bypass Stack) and AA-204b (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/or the dryer that resulted in emissions being diverted to the corresponding bypass stacks. Additionally, the permittee shall record the total respective duration of start-up and shutdown periods for the furnace and the dryer in hours per year based on a rolling 12-month total.

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

5.16 For Emission Points AA-203b (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 total.

During any period that the furnace operates in idle mode, the permittee shall monitor the volume of wood waste fed into the furnace and calculate the hourly heat input rate based on a 3-hour block average.

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

5.17 For Emission Point AA-204a (Wood Chip Rotary Dryer), the permittee shall monitor and record the throughput of dried wood chips from the dryer in oven-dried tons (ODT) both on a monthly basis and a rolling 12-month total basis.

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

5.18 For Emission Points AA-300 (Pellet Operations) and AA-400 (Finished Pellet Operations), the permittee shall conduct a weekly inspection of each baghouse. Maintenance shall be performed as necessary to maintain proper operation of each baghouse at all times.

The records from each inspection and any maintenance performed shall be kept in log form and made available to the MDEQ upon request or inspection. 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(11).)

5.19 For Emission Points AA-300 (Wood Pellet Operations) and AA-400 (Finished Pellet Operations), the permittee shall monitor and record the differential pressure drop across each baghouse daily (in inches of water). If a monitored pressure drop is outside the manufacturer's recommended range for the baghouse, the permittee shall conduct and record any corrective measures taken to return the baghouse to the recommended pressure drop range.

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

5.20 For Emission Point AA-300 (Wood Pellet Operations), the permittee shall monitor and record the total production of wood pellets in ODT both on a monthly basis and a rolling 12-month total basis. The four-month average production rate (in ODT/month) shall be calculated until such time the RCO Control system is installed and operating.

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

5.21 For Emission Point AA-301 (RCO Control System), in accordance with the manufacturer's recommendations, the permittee shall monitor the effective life of the catalytic media in the regenerative catalytic oxidizer (RCO) by determining the apparent density (in grams per cubic centimeter) and percent saturation no later than sixteen (16) months after the initial start-up. Thereafter, the permittee shall perform subsequent apparent density testing on the catalytic media in each RCO no later than 16 months after the previously completed test.

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

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

(Ref.: 40 CFR 60.4209(a), Subpart IIII and 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. 2.2.B(11).	6.7	Submit a Semi-Annual Monitoring Report
AA-201 AA-301	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.8	Submit Site-Specific Emission Factors for Review and Approval
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.9	Submit Performance Testing Protocol Submit 10-Day Notification of Performance Testing Event
	11 Miss. Admin. Code Pt.2, R. 2.6.B(6). 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.10	Submit Performance Test Results
AA-301	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.11	Submit Notification on Initial Start-Up
		6.12	Submit the Apparent Density Testing Results no later than 30 days following the testing event.
AA-500	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.13	Submit Annual Monitoring Report on Hours of Operation. Include with SMR in Condition 6.7.

6.1 Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a Responsible Official (RO) that affirms, based on information and

belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

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

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

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

6.3 For Emission Point AA-000 (Facility-Wide), the permittee shall notify the MDEQ in writing 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 certified semi-annual monitoring report (SMR) postmarked no later than January 31st and July 31st of each calendar year for the preceding six-month period. The SMR shall contain the following information (at a minimum):

(a) The total emission of each individual hazardous air pollutant (HAP) and all combined HAPs in tons based on both a monthly basis and a rolling 12-month total basis;

(b) The total respective emission of PM, PM_{10}, $PM_{2.5}$, NO_X, CO, and VOCs from all process equipment listed under Wood Drying Operations (Emission Point AA-200), Wood Pellet Operations (Emission Point AA-300), Finished Pellet Operations (Emission Point AA-400), and Emergency Engines (Emission Point AA-500) in tons based on both a monthly basis and a rolling 12-month total basis;

(c) The dried wood chips throughput from the Wood Chip Rotary Dryer (Emission Point AA-204a) in oven-dried tons (ODT) both on a monthly basis and a rolling 12-month total basis;

(d) The wood pellet throughput from the Wood Pellet Operations (Emission Point AA-300) in oven-dried tons (ODT) both on a monthly basis and a rolling 12-month total basis;

(e) The total duration of all furnace start-up and shutdown periods in which the furnace exhaust was diverted to the Furnace Bypass Stack (Emission Point AA-203b) both on a monthly basis and a rolling 12-month total basis;

(f) The total duration of all furnace idle mode periods in which the furnace exhaust was diverted to the Furnace Bypass Stack (Emission Point AA-203b) both on a monthly basis and a rolling 12-month total basis;

(g) A summary of any revision(s) made to the "*Dust Management Plan*"; and

(h) 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 minimum temperature or secondary voltage established during the performance test, the date, the beginning and ending times, the cause(s) for each excursion; and any corrective action taken as result of the excursion.

(2) *CMS 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. 2.2.B(11).)

6.8 For Emission Points AA-201 (WESP – RTO) and AA-301 (RCO), the permittee shall submit the initial site-specific emission factors required by Condition 5.9 for review and approval by the MDEQ no later than ninety (90) days after completing the initial performance test required by Condition 5.7.

Thereafter, if an approved site-specific emission factor(s) must be modified as a result of subsequent testing required by Condition 5.8, the permittee shall submit a written request with supporting data to the MDEQ for review and approval no later than 90 days after completing the most recent performance test.

With exception of the site-specific emission factors approved initially, which shall be applied from the initial start-up until otherwise specified, any modification of a site-specific emission factor shall become effective on the month corresponding with the MDEQ's approval. The MDEQ retains the right to modify a site-specific emission factor(s) based on additional performance testing.

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

6.9 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO Control System), the permittee shall submit a written performance test protocol for the testing required by Conditions 5.7 and 5.8 that details the procedures and test methods to be implemented during the actual testing event no later than thirty (30) days prior to the intended testing date.

The permittee shall notify the MDEQ in writing at least ten (10) days prior to the intended testing date so that a representative from the MDEQ may be afforded the opportunity to observe the stack testing.

If deemed necessary by the MDEQ, a conference may be required prior to the intended testing date to discuss the proposed test methods and procedures outlined in the performance testing protocol.

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

6.10 For Emission Points AA-201 (WESP – RTO Control System) and AA-301 (RCO 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) The average respective combustion chamber temperature (in degrees Fahrenheit) of the regenerative thermal oxidizer (RTO) and the regenerative catalytic oxidizer (RCO) during east test run;

(b) The secondary voltage range (in volts) of the wet electrostatic precipitator (WESP);

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

(d) The feedstock ratio of softwood and hardwood used during a performance test (as applicable);

(e) A table summarizing the current and past performance test results for each pollutant tested, [noting the average pollutant emission rate and the average applicable throughput]; and

(f) Oxygen (O_2) concentration data.

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

6.11 For Emission Points AA-301 (RCO Control System), the permittee shall submit a notification to the MDEQ that details the initial start-up of the regenerative catalytic oxidizer (RCO) no later than fifteen (15) days after the actual date.

For the purpose of this permit, "*initial start-up*" shall be defined as the period in which the RCO is capable of continuous operation in order to control volatile organic compound (VOC) emissions as permitted herein.

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

6.12 For Emission Points AA-301 (RCO Control System), the permittee shall submit the results of each apparent density test required by Condition 5.21 no later than thirty (30) days after completing the testing event.

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

6.13 For Emission Point AA-500 (Emergency Engines), the permittee shall submit a summary within the semi-annual monitoring report (SMR) postmarked by January 31st that details the hours of operation for each engine during the preceding calendar year. The report shall include how many hours are spent for emergency operation, what classified the operation as an emergency, how many hours are spent for non-emergency operation, and the reason for the non-emergency operation.

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