

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT**

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Quitman Pellets, LLC
252 Hickory Street
Quitman, Clarke County, Mississippi

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and 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.

Permit Issued: May 16, 2022

Effective Date: As Specified Herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Becky Simonson

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: April 30, 2027

Permit No.: 0440-00063

Modified: July 3, 2024

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SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit non-compliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(a).)

1.2 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 this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. 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. 6.3.A.(6)(c).)

1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.

(a) This permit shall be reopened and revised under any of the following circumstances:

(1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of three (3) or more years. Such a reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.

(2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(3) The Permit Board or the EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

(4) The Administrator or the Permit Board determines that the permit must be

revised or revoked to assure compliance with the applicable requirements.

- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Re-openings shall not be initiated before a notice of such intent is provided to the Title V source by the Mississippi Department of Environmental Quality (MDEQ) at least thirty (30) days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

- 1.5 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 permittee or, for information 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. 6.3.A.(6)(e).)

- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(d).)

- 1.7 The provisions of this permit are severable. If any provision of this permit or the application of any provision of this 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. 6.3.A.(5).)

- 1.8 The permittee shall pay to the MDEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order, which shall be issued in accordance with the procedure outlined in Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – “Air Emissions Operating Permit Regulations for Purposes of Title V of the Federal Clean Air Act”.

- (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the

applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g. air emission factors); or other approaches such as engineering calculations (e.g. estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A.(2).)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A.(2).)

- (c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.(2).)

- (d) The fee shall be due September 1 of each year. By July 1 of each year, the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the MDEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

- (e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

- 1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(8).)

- 1.10 Any document required by this permit to be submitted to the MDEQ shall contain a certification by a responsible official that states 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. 6.2.E.)

- 1.11 The permittee shall allow the MDEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to perform the following:

- (a) Enter upon the permittee's premises where a Title V source is located, emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) As authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C.(2).)

- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

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

- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

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

- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F.(1).)

- 1.15 Nothing in this permit shall alter or affect the following:
- (a) The provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) The ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F.(2).)

- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V Operating Permit (TVOP). If the permittee submits a timely and complete application, the failure to have a TVOP is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply (if subsequent to the completeness determination) the permittee fails to submit by the deadline specified in writing by the MDEQ any additional information identified as being needed to process the application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C.(2)., R. 6.4.B., and R. 6.2.A.(1)(c).)

- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

- (a) The changes are not modifications under any provision of Title I of the Act;
- (b) The changes do not exceed the emissions allowable under this permit;
- (c) The permittee provides the Administrator and the Department with written notification in advance of the proposed changes [at least seven (7) days, or such other timeframe as provided in other regulations for emergencies] and the notification includes the following:
 - (1) A brief description of the change(s);
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.
- (d) The permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F.(1).)

- 1.19 Should the Executive Director of the MDEQ declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Mississippi Administrative Code, Title 11, Part 2, Chapter 3 – “Regulations for the Prevention of Air Pollution Emergency Episodes” – for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

- 1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Mississippi Administrative Code, Title 11, Part 2, Chapter 2 – “Permit Regulations for the Construction and/or Operation of Air Emissions Equipment” – and may require modification of this permit in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – “Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act”.

“Modification” is defined as [a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) Routine maintenance, repair, and replacement;
- (b) Use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) Use of an alternative fuel or raw material by a stationary source which:
 - (1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I (or 40 CFR 51.166); or
 - (2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I (or 40 CFR 51.166).
- (e) An increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I (or 40 CFR 51.166); or
- (f) Any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C.(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally-approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B.(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvi-cultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up

operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or an Emergency Air Pollution Episode Alert imposed by the Executive Director of the MDEQ and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within five hundred (500) yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within fifty (50) yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

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

1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:

- (a) Except as otherwise specified herein, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in Part (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to

minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- (4) The permittee submitted notice of the emergency to the MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, start-ups, and shutdowns.

- (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
 - (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other non-compliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than twenty-four (24) hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or

caused a general nuisance to the public, the source provided notification to the Department.

- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
 - (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups and shutdowns are defined by an applicable rule, regulation, or permit.
 - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B.(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during start-up or shutdown, see the upset requirements above.

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

- 1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M as adopted by reference in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

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

- 1.27 Regarding compliance testing (if applicable):

- (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 POINTS & POLLUTION CONTROL DEVICES

EMISSION POINT	DESCRIPTION
AA-000	Facility-Wide [Quitman Pellets, LLC]
AA-201	Green Wood Hammermill [emissions are released to the atmosphere]
AA-202	Green Wood Hammermill [emissions are released to the atmosphere]
AA-203	90 MMBTU / Hour Wood-Fired Burner [emissions are routed to the Primary Control System] ¹
AA-204	Wood Chip Rotary Dryer [emissions are routed to a multiclone and then the Primary Control System] ¹
AA-205	Dry Wood Storage Silo [emissions are released to the atmosphere]
AA-206	Dry Fuel Storage Silo [emissions are released to the atmosphere]
AA-207	Dry Fuel Hammermill [dried wood from the Wood Chip Rotary Dryer is milled / stored to fuel the Wood Dust Burner; emissions are routed to a baghouse (BGH-1)]
AA-208	No. 1 Dry Wood Hammermill [emissions are routed to a baghouse (BGH-2) and then the Primary Control System] ²
AA-209	No. 2 Dry Wood Hammermill [emissions are routed to a baghouse (BGH-3) and then the Primary Control System] ²
AA-210	No. 1 Pellet Mill System [consists of five (5) pellet mills and a pellet cooler; combined emissions are routed to a baghouse (BGH-4); the steam extraction exhaust is routed to the Primary Control System] ²
AA-211	No. 2 Pellet Mill System [consists of five (5) pellet mills and a pellet cooler; combined emissions are routed to a baghouse (BGH-5)]
AA-212	Two (2) Pellet Handling and Storage Operations [emissions are routed to the atmosphere]
AA-213	Primary Control System [consists of one (1) wet electrostatic precipitator (WESP) and one (1) regenerative thermal oxidizer (RTO) equipped with a 10 MMBTU / hour natural gas-fired burner]

¹ Emissions are released to the atmosphere prior to the installation of the Primary Control System (Emission Point AA-213)

² Emissions are routed to the Wood-fired Burner (Emission Point AA-203) prior to the installation of the Primary Control System (Emission Point AA-213)

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. FACILITY-WIDE EMISSION LIMITATIONS & STANDARDS

3.A.1 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 that exceeds forty (40) percent opacity subject to the following exceptions:

- (a) Start-up operations may produce emissions, which exceed 40% opacity 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 operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty (60) percent 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.A.2 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 equivalent to that provided in Condition 3.A.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.A.3 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.

- (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne.
- (b) 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 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission 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.)

B. EMISSION POINT SPECIFIC EMISSION LIMITATIONS & STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.1	PM (filterable)	E = 4.1 (p ^{0.67})
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued December 9, 2010 <i>(Major Source Avoidance Limits)</i>	3.B.2	HAPs	9.0 tpy (Individual) 24.90 tpy (Total) (Rolling 12-Month Totals)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued December 9, 2010 <i>(PSD Avoidance Limits)</i>	3.B.3	NO _x	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), as established in Permit to Construct issued June 6, 2014 <i>(PSD Avoidance Limit)</i>	3.B.3	VOCs	249.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued June 6, 2014 and modified February 25, 2021 <i>(PSD Avoidance Limits)</i>		PM (filterable)	249.0 tpy (Rolling 12-Month Total)
			PM ₁₀ / PM _{2.5} (filterable + condensable)	249.0 tpy (Rolling 12-Month Totals)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued February 25, 2021, and modified September 23, 2022	3.B.4	PM / PM ₁₀ / PM _{2.5} VOCs HAPs	Emissions Control Requirement
AA-201 AA-202	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued September 23, 2022	3.B.5	Green Wood Throughput	600,000.0 Short-Tons / Year (Rolling 12-Month Total)
AA-203	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued September 23, 2022	3.B.6	Fuel Source Restriction	Only Combust Uncontaminated Wood Waste and Natural Gas
AA-203 AA-204 AA-207 through AA-211 AA-213	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) 40 CFR 64.2(a); CAM	3.B.7	PM / PM ₁₀ / PM _{2.5} VOCs	General Applicability

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-204	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued September 23, 2022	3.B.8	Dried Wood Throughput	300,000.0 ODT / Year (Rolling 12-Month Total)
AA-210 AA-211	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued February 25, 2021 and modified September 23, 2022	3.B.9	Wood Pellet Production	300,000.0 ODT / Year (Rolling 12-Month Total)

3.B.1 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.B.2 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 combined to no more than 24.90 tpy based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued December 9, 2010 and modified February 25, 2021 – Major Source Avoidance Limits)

3.B.3 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total respective emission of particulate matter (PM; filterable), particulate matter less than 10 microns (µm) in diameter (PM₁₀; filterable and condensable), particulate matter less than 2.5 µm in diameter (PM_{2.5}; filterable and condensable), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs) from all applicable sources to no more than 249.0 tpy based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued December 9, 2010; modified on June 6, 2014 and February 25, 2021 – PSD Avoidance Limits)

- 3.B.4 For Emission Point AA-000 (Facility-Wide), the permittee shall at all times direct the emissions generated by each applicable process unit to the corresponding control device(s) (as applicable).

Additionally, the permittee shall at all times operate the control device(s) associated with each process unit during active operation to minimize the emission of PM, VOCs, and/or HAPs. In the event that a control device malfunctions or becomes non-operational, the permittee shall cease activity from the corresponding applicable process unit(s) until the device returns to full operation.

Prior to completion of construction of the Primary Control System (Emission Point AA-213), the permittee shall route the emissions from the Dry Wood Hammermills (Emission Points AA-208 and AA-209) and the steam extraction emissions from the No.1 Pellet Mill System (Emission Point AA-210) to the Wood-fired Burner (Emission Point AA-203).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued February 25, 2021 and modified September 23, 2022)

- 3.B.5 For Emission Points AA-201 and AA-202 (Green Hammermills), the permittee shall limit the total throughput of green wood processed to no more than 600,000.0 short-tons per year based on a rolling 12-month total.

Prior to completion of construction of the Primary Control System (Emission Point AA-213), the permittee may process green wood that is 100% softwood.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued September 23, 2022)

- 3.B.6 For Emission Point AA-203 (Wood-fired Burner), the permittee shall only combust uncontaminated wood waste or natural gas as a fuel source for 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)., as established in Permit to Construct issued February 25, 2021)

- 3.B.7 For Emission Points AA-203, AA-204, AA-207, AA-208, AA-209, AA-210, AA-211, and AA-213, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 64 – Compliance Assurance Monitoring (CAM).

(Ref.: 40 CFR 64.2(a); Compliance Assurance Monitoring)

- 3.B.8 For Emission Points AA-204 (Wood Chip Dryer), the permittee shall limit the total throughput of green wood dried to no more than 300,000.0 oven-dried tons (ODT) per year based on a rolling 12-month total.

Prior to completion of construction of the Primary Control System (Emission Point AA-213), the permittee shall limit the total throughput of green wood dried to no more than 170,000.0 oven-dried tons (ODT) per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued September 23, 2022)

- 3.B.9 For Emission Points AA-210 and AA-211 (Pellet Mill / Cooler Systems), the permittee shall limit the total production of wood pellets from both systems to no more than 300,000.0 oven-dried tons (ODT) per year based on a rolling 12-month total.

Prior to completion of construction of the Primary Control System (Emission Point AA-213), the permittee shall limit the total production of wood pellets from both systems to no more than 170,000.0 short-tons per year based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued February 25, 2021 and modified September 23, 2022)

C. INSIGNIFICANT AND TRIVIAL ACTIVITY EMISSION LIMITATIONS & STANDARDS

Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs. / MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO ₂	4.8 lbs. / MMBTU

3.C.1 The maximum permissible emission of ash and/or particulate matter (PM) from a fossil fuel burning installation of less than ten (10) million BTU (MMBTU) per hour heat input shall not exceed 0.6 pounds per MMBTU per hour heat input.

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

3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per MMBTU heat input.

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

D. WORK PRACTICE STANDARDS

THIS SECTION WAS INTENTIONALLY LEFT BLANK BECAUSE NO WORK PRACTICE STANDARDS APPLY TO THIS PERMIT ACTION.

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions (including emission limitations, standards, or work practices) by January 31 of each year for the preceding calendar year. If the permit was reissued or modified during the course of the preceding calendar year, the compliance certification shall address each version of the permit. Each compliance certification shall include the following:
- (a) The identification of each term or condition of the permit that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) Such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), and (d).)

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:

- (a) The date, place as defined in the permit, and time of sampling or measurements;
- (b) The date(s) analyses were performed;
- (c) The company or entity that performed the analyses;
- (d) The analytical techniques or methods used;
- (e) The results of such analyses; and
- (f) The operating conditions existing at the time of sampling or measurement.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information 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 for continuous monitoring instrumentation, and copies of all reports required by the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 of each year for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.2.E.

For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semi-annual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e., April 30, July 31, October 31, and January 31), and any required annual reports shall be submitted by January 31 following each calendar year.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

(Ref.: 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5); Subpart A)

- 5.A.5 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. The report shall be made within five (5) working days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)

- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the MDEQ and the EPA.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

- 5.A.8 Unless otherwise specified in Section 4, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding Permit to Construct and/or Operate upon permit issuance.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. SPECIFIC MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.1	PM / PM ₁₀ / PM _{2.5}	Implement and Maintain a Dust Management Plan
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.2	PM / PM ₁₀ / PM _{2.5} NO _x CO VOCs HAPs	Calculate the Total Emission of Each Pollutant (Monthly and Rolling 12-Month Period)
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.3	PM / PM ₁₀ / PM _{2.5} VOCs HAPs	Perform an Inspection on Each Control Device Monthly Maintain Documentation on Periods of Non-Operation for Control Devices
AA-201 AA-202	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.4	Green Wood Processed	Monitor Total Throughput (Monthly and Rolling 12-Month Total)
AA-201 AA-202 AA-205 AA-206 AA-213	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.5	Opacity	Conduct a Weekly Visible Emission Observation / Evaluation
AA-201 AA-202 AA-207 AA-210 AA-211 AA-213	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.6	PM / PM ₁₀ / PM _{2.5} NO _x CO	Conduct Routine Performance Testing
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.7	VOCs HAPs	Establish Site-Specific Emission Factors
AA-203 AA-204 AA-208	40 CFR 64.3(a), (b), and 64.6(c); CAM	5.B.8	Secondary Voltage	Continuously Monitor the Secondary Voltage on the WESP (3-Hour Block Average)
AA-209 AA-213	40 CFR 64.3(a), (b), and 64.6(c); CAM	5.B.9	Combustion Chamber Temperature	Continuously Monitor the Combustion Chamber Temperature for the RTO (3-Hour Block Average)
AA-203 AA-204 AA-207 through AA-211 AA-213	40 CFR 64.7(b) and (c); CAM	5.B.10	Operation & Maintenance	Operation and Maintenance Requirements for Monitoring System(s)
	40 CFR 64.7(d); CAM	5.B.11	Corrective Action	Corrective Action Response to an Excursion/ Exceedance of a CAM Indicator
	40 CFR 64.8, CAM	5.B.12	QIP	Develop a Quality Improvement Plan (QIP) (Upon Request)
	40 CFR 64.9(b), CAM	5.B.13	CAM Records	Record and Maintain CAM Records (As Specified)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-204	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.14	Wood Chips Dried	Monitor Total Throughput (Monthly and Rolling 12-Month Total)
AA-207 AA-210 AA-211	40 CFR 64.3(a), (b), and 64.6(c); CAM	5.B.15	Differential Pressure Drop	Record Pressure Drop Across Each Baghouse Daily
AA-210 AA-211	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.16	Wood Pellet Production	Monitor the Total Production (Monthly and Rolling 12-Month Total)

5.B.1 For Emission Point AA-000 (Facility-Wide), the permittee shall implement and maintain an up-to-date “Dust Management Plan” that details the procedures for operating and maintaining applicable emission sources to minimize the emission of fugitive and non-captured particulate matter (PM, PM₁₀, and PM_{2.5}).

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

5.B.2 For Point AA-000 (Facility-Wide), the permittee shall calculate and record the total emission of PM (filterable), PM₁₀ (filterable and condensable), PM_{2.5} (filterable and condensable), NO_x, CO, VOCs, each individual HAP, and all HAPs combined in tons from all sources that can reasonably emit the pollutant(s) on both a monthly and on a rolling 12-month total basis in accordance with the following specifications:

- (a) Prior to the initial start-up of the Primary Control System (Emission Point AA-213), the permittee shall utilize the current and up-to-date emission factors and collected production data to calculate emissions from the applicable sources.
- (b) Beginning on the date of the initial start-up of the Primary Control System (Emission Point AA-213) and ending on the date in which up-to-date emission factors are determined (as required by Condition 5.B.7), the permittee shall calculate pollutant emissions from the Green Wood Hammermills (Emission Points AA-201 and AA-202), the Dry Fuel Hammermill (Emission Point AA-207), the Pellet Mill Systems (Emission Points AA-210 and AA-211), and the Primary Control System (Emission Point AA-213) by using the applicable throughput data and the applicable emission factors presented in the most up-to-date application for the specified project.
- (c) Upon the submittal of up-to-date emission factors (and unless otherwise required by the MDEQ), the permittee shall calculate and record the emissions from Green Wood Hammermills (Emission Points AA-201 and AA-202), the Dry Fuel Hammermill (Emission Point AA-207), the Pellet Mill Systems (Emission Points AA-210 and AA-211), and the Primary Control System (Emission Point AA-213) by utilizing archived parametric monitoring data, applicable throughput data, and the established site-specific emission factors.

Additionally, the permittee shall revise and update pollutant emissions calculated in accordance with paragraph (a) of this condition to reflect the up-to-date site specific emission factors.

- (d) For all sources not otherwise specified, the permittee shall either assume actual emissions are equivalent to potential emissions or utilize actual data (e.g. throughput or fuel usage) in conjunction with the emission factors specified in the most up-to-date application for the specified project to determine compliance with the emission limitations specified in Conditions 3.B.2 and 3.B.3.
- (e) Unless otherwise specified herein, the permittee shall maintain documentation that detail any reference data utilized to validate calculated emissions (operational data, applicable emission factors, engineering judgement determinations, performance test results, etc.).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

- 5.B.3 For Emission Point AA-000 (Facility-Wide), the permittee shall demonstrate compliance with Condition 3.B.4 by performing an inspection that evaluates the performance capability of each control device on a monthly basis.

If a problem is noted during an inspection of a control device, the permittee shall perform the necessary maintenance to ensure operation as originally designed. Additionally, the permittee shall maintain on-site (to the best extent practicable) sufficient components as is necessary to repair a control device.

The permittee shall maintain documentation that details the date / time each inspection is performed, any noted problem that is experienced, and any maintenance (either corrective or preventative) performed to return a control device to operation as originally designed. Additionally, the permittee shall monitor and record each period of time (including the date and duration) in which a control device is non-operational on a monthly basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

- 5.B.4 For Emission Points AA-201 and AA-202, the permittee shall demonstrate compliance with the throughput limitation specified in Condition 3.B.5 by monitoring and recording the total throughput of green wood processed in short tons on both a monthly and rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

- 5.B.5 For Emission Points AA-201, AA-202, AA-205, AA-206, and AA-213, the permittee shall perform and record a weekly visible emission observation in accordance with EPA Test Method 22 on the exhaust of each source during daylight hours and during

representative operating conditions. Each observation shall be performed for a minimum of six (6) consecutive minutes.

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.

The permittee shall maintain all documentation and information specified by EPA Test Method 22 and/or EPA Test Method 9, any corrective actions taken to prevent or minimize emissions as a result of an evaluation, and the date / time when each observation / evaluation was conducted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.6 For Emission Points AA-201 (Green Hammermill), AA-202 (Green Hammermill), AA-207 (Dry Fuel Hammermill), AA-210 (No.1 Pellet Mill System), AA-211 (No. 2 Pellet Mill System), and AA-213 (WESP-RTO System), the permittee shall conduct routine performance testing on the exhaust of each source in accordance with the following requirements:

(a) For Emission Points AA-201, AA-202, AA-207, AA-210, AA-211, and AA-213: The permittee shall conduct the performance testing for VOCs, methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, and phenol no later than twenty-four (24) months after the previously completed performance test;

The permittee may request (in accordance with Condition 5.C.5) that the frequency for subsequent testing be reduced to once every five (5) years [not to exceed sixty (60) months after the previously completed performance test].

(b) For Emission Points AA-207, AA-210, AA-211, and AA-213: The permittee shall conduct the performance testing for PM (filterable), PM₁₀ (filterable), PM_{2.5} (filterable), and condensable PM no later than sixty (60) months after the previously completed performance test;

(c) For Emission Point AA-213: The permittee shall conduct the performance testing for NO_x, CO and hydrogen chloride no later than sixty (60) months after the previously completed performance test.

(d) All performance testing shall be conducted accordance with 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 prior to the testing event.

- (e) The permittee shall conduct a minimum of three (3) separate test runs for a performance stack test that each last for at least one (1) hour.
- (f) The permittee shall monitor and record the following hourly throughput rates during a performance test: green wood processed through the green hammermills (in short-tons per hour); wood chips dried in the dryer (in ODT per hour); dry wood chips processed through the dry fuel hammermills (in ODT per hour); and wood pellets produced in the pellet mills (in short-tons per hour).

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

5.B.7 For Emission Points AA-201, AA-202, AA-207, AA-210, AA-211, and AA-213, the permittee shall utilize both the test results and applicable throughput data collected during a performance test completed in accordance with Conditions 5.B.6 to determine site-specific emission factors for PM, PM₁₀, PM_{2.5}, NO_x, CO, VOCs, methanol, acetaldehyde, formaldehyde, acrolein, propionaldehyde, hydrogen chloride, and phenol in pounds per oven-dried ton (lbs. / ODT). The permittee shall establish these emission factors in accordance with the following specifications:

- (a) For each source, the permittee shall establish a site-specific VOC emission factor 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. / hour 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. / hour;
- $\bar{M}_{Formaldehyde}$ is the average mass flow rate of formaldehyde emissions from applicable performance testing in lbs. / hour;
- $\bar{M}_{Acetaldehyde}$ is the average mass flow rate of acetaldehyde emissions from applicable performance testing in lbs. / hour; 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 / hour.

- (b) For Emission Points AA-201 and AA-202 (Green Hammermills): The site-specific emission factors shall be based on the pounds of pollutant per short-ton of green wood processed at a nominal moisture content of fifty (50.0) percent.

- (c) *For Emission Point AA-207 (Dry Fuel Hammermill):* The site-specific emission factors shall be based on the pounds of pollutant per ODT of dried wood chips processed at a nominal moisture content of zero (0.0) percent.
- (d) *For Emission Points AA-210 and AA-211 (Pellet Mill Systems):* The site-specific emission factors shall be based on the pounds of pollutant per short-ton of wood pellets produced at a nominal moisture content of five (5.0) percent.
- (e) *For Emission Point AA-213 (Primary Control System):* The site-specific emission factors shall be based on the pounds of pollutant per ODT at a nominal moisture content of zero (0.0) percent.

If the converted results exceed any of the site-specific emission factors that have been submitted to the MDEQ, the permittee **shall** submit the new emission factors in accordance with Condition 5.C.4. However, if the converted results are lower than the already established site-specific emission factors, the permittee **may** submit the new emission factors in accordance with Condition 5.C.4.

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

- 5.B.8 For Emission Points AA-203, AA-204, AA-208, AA-209, and AA-213, the permittee shall continuously monitor and record the secondary voltage (in volts) for the WESP based on a 3-hour block average in accordance with the CAM Plan found in Appendix B.

(Ref.: 40 CFR 64.3(a), (b), and 64.6(c); Compliance Assurance Monitoring)

- 5.B.9 For Emission Points AA-203, AA-204, AA-208, AA-209, and AA-213, the permittee shall continuously monitor and record the combustion chamber temperature for the RTO (in degrees Fahrenheit) based on a 3-hour block average in accordance with the CAM Plan found in Appendix B.

(Ref.: 40 CFR 64.3(a), (b), and 64.6(c); Compliance Assurance Monitoring)

- 5.B.10 For Emission Points AA-203, AA-204, AA-207, AA-208, AA-209, AA-210, AA-211, and AA-213, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan found in Appendix B:

- (a) *Proper Maintenance:* The permittee shall maintain the monitoring, including (but not limited to) maintaining necessary parts for routine repairs of the monitoring equipment at all times.
- (b) *Continued Operation:* Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities [including calibration checks and required zero and span adjustments (as applicable)], the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at

all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used [including in data averaging and calculations or in fulfilling a minimum data availability requirement, (as applicable)].

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(Ref.: 40 CFR 64.7(b) and (c); Compliance Assurance Monitoring)

- 5.B.11 For Emission Points AA-203, AA-204, AA-207, AA-208, AA-209, AA-210, AA-211, and AA-213, upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused start-up or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include (but is not limited to) monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(Ref.: 40 CFR 64.7(d); Compliance Assurance Monitoring)

- 5.B.12 For Emission Points AA-203, AA-204, AA-207, AA-208, AA-209, AA-210, AA-211, and AA-213, in addition to the excursion threshold outlined in the CAM Plan, the MDEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) containing the elements specified in 40 CFR 64.8(b).

The QIP shall be developed and implemented within one hundred eighty (180) days of written notification from MDEQ that a QIP is required. The MDEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in

accordance with good air pollution control practices for minimizing emissions. The implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

(Ref.: 40 CFR 64.8; Compliance Assurance Monitoring)

- 5.B.13 For Emission Points AA-203, AA-204, AA-207, AA-208, AA-209, AA-210, AA-211, and AA-213, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.12 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions, as applicable.

As applicable, records of monitoring data and monitoring performance data should include date and time, who performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

(Ref.: 40 CFR 64.9(b); Compliance Assurance Monitoring)

- 5.B.14 For Emission Point AA-204, the permittee shall demonstrate compliance with the throughput limitation specified in Condition 3.B.8 by monitoring and recording the total throughput of wood chips dried in ODT on both a monthly and rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

- 5.B.15 For Emission Points AA-207, AA-210, and AA-211, the permittee shall monitor and record the differential pressure drop (in inches of water) across each baghouse and multiclone once a day in accordance with the CAM Plan found in Appendix B.

(Ref.: 40 CFR 64.3(a), (b), and 64.6(c); Compliance Assurance Monitoring)

- 5.B.16 For Emission Points AA-210 and AA-211, the permittee shall demonstrate compliance with the throughput limitation specified in Condition 3.B.9 by monitoring and recording the production of wood pellets from each system in short tons on both a monthly and rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

C. SPECIFIC REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.1	PM / PM ₁₀ / PM _{2.5} NO _x CO VOCs HAPs	Submit Semi-Annual Report on Emissions and Operational Data
AA-201 AA-202 AA-207 AA-210 AA-211 AA-213	11 Miss. Admin. Code Pt. 2, R. 2.6.B(5).	5.C.2		Submit Performance Testing Protocol Submit 10-Day Notification of Performance Testing Event
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11) and 2.6.B(6).	5.C.3		Submit Performance Testing Results
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.4		Submit the Site-Specific Emission Factors for Review
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.5		Submit a Request to Reduce the Frequency for Subsequent Performance Testing (As Applicable)
AA-203 AA-204 AA-207	40 CFR 64.9(a); CAM	5.C.6	CAM Reporting	Semi-Annual Reporting Requirements
through AA-211 AA-213	40 CFR 64.7(e); CAM	5.C.7	CAM Modification	Promptly Notify the MDEQ of Failure to Achieve Limit/Standard though No Excursion or Exceedance Was Indicated by Approved Monitoring

5.C.1 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a semi-annual monitoring report (SMR) in accordance with Condition 5.A.4 that details the following information:

- (a) The total respective emission of PM (filterable), PM₁₀ (filterable and condensable), PM_{2.5} (filterable and condensable), NO_x, CO, VOCs, each individual HAP, and all combined HAPs from all applicable sources in tons both on a monthly and rolling 12-month total basis;
- (b) The total throughput of green wood processed within the Green Hammermills (Emission Points AA-201 and AA-202) in short-tons on both a monthly and rolling 12-month total basis;
- (c) The total throughput of wood chips dried within the Rotary Dryer (Emission Point AA-204) in oven-dried tons (ODT) on both a monthly and rolling 12-month total basis;
- (d) The total throughput of dried wood chips processed in the Dry Fuel Hammermill (Emission Point AA-207) in ODT on both a monthly and rolling 12-month total basis;

- (e) A summary of any maintenance action(s) performed on each control device and any periods of time (including date and duration) in which a control device was non-operational;
- (f) The throughput of wood pellets produced within each Pellet Mill System (Emission Points AA-210 and AA-211) in short-tons on both a monthly basis and rolling 12-month total basis; and
- (g) A summary of any revision(s) made to the “Dust Management Plan.”

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

- 5.C.2 For Emission Points AA-201, AA-202, AA-207, AA-210, AA-211, and AA-213, the permittee shall submit a written performance test protocol for the testing required by Conditions 5.B.6 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).)

- 5.C.3 For Emission Points AA-201, AA-202, AA-207, AA-210, AA-211, and AA-213, the permittee shall submit the results from any conducted performance test no later than sixty (60) days after completing the actual test. The report (at a minimum) shall include the information specified in Condition 1.27(c) and the following information:

- (a) The average combustion chamber temperature (in degrees Fahrenheit) of the RTO during each test run;
- (b) The average minimum and average maximum secondary voltage (in volts) for the wet electrostatic precipitator (WESP);
- (c) The average minimum and average maximum differential pressure drop (in inches of water) for each baghouse;
- (d) The hourly throughput data for the applicable process unit(s) (i.e. green wood chips processed; wood chips dried; dried wood chips processed; wood pellets produced);
- (e) The feedstock ratio (in weight percent) of softwood and hardwood used during a performance test (as applicable);

- (f) The moisture content of the wood chips dried or the wood pellets produced during a performance test (as applicable);
- (g) 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
- (h) Oxygen (O₂) concentration data.

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

- 5.C.4 For Emission Points AA-201, AA-202, AA-207, AA-210, AA-211, and AA-213, the permittee shall submit site-specific emission factors required by Condition 5.B.7 for review by the MDEQ no later than ninety (90) days after completing the corresponding performance testing event.

If a site-specific emission factor(s) must be modified as a result of a performance test, required by Condition 5.B.6, the permittee shall submit the corresponding supporting data to the MDEQ with the site-specific emission factor(s).

Any modification of a site-specific emission factor shall become effective on the month corresponding with the MDEQ's receipt of the information. The MDEQ retains the right to modify a site-specific emission factor based on additional performance testing.

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

- 5.C.5 For Emission Points AA-201, AA-202, AA-207, AA-210, AA-211, and AA-213, the permittee may request (in writing) for a reduction in the frequency for subsequent performance testing as specified in Condition 5.B.6. The permittee shall submit a request for review and approval by the MDEQ no later than one hundred twenty (120) days prior to any required subsequent testing and shall include (at a minimum) the following information:

- (a) The manufacturer design specifications of the corresponding process unit(s);
- (b) The results from the applicable performance testing previously conducted;
- (c) The operational information required by Condition 5.C.3 for the corresponding performance test; and
- (d) An analysis of the potential pollutant emissions from the combined process units (i.e. Emission Points AA-201, AA-202, AA-207, AA-210, AA-211, and AA-213) utilizing the established site-specific pollutant emission factors (as required by Condition 5.C.4) and the corresponding maximum potential production capacity.

Notwithstanding the approval of any request, the MDEQ retains the right to require additional performance testing.

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

5.C.6 For Emission Points AA-203, AA-204, AA-207, AA-208, AA-209, AA-210, AA-211, and AA-213, the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 with the following information (as applicable):

- (a) Summarized information on the number, duration, and cause [including an unknown cause, if applicable] of excursions or exceedances (as applicable) and the corrective actions taken;
- (b) Summarized information on the number, duration, and cause [including unknown cause (if applicable)] for monitor downtime incidents [other than downtime associated with zero and span or other daily calibration checks (if applicable)];
- (c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.12. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

(Ref.: 40 CFR 64.9(a); Compliance Assurance Monitoring)

5.C.7 For Emission Points AA-203, AA-204, AA-207, AA-208, AA-209, AA-210, AA-211, and AA-213, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes.

Such a modification may include (but is not limited to) reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

(Ref.: 40 CFR 64.7(e); Compliance Assurance Monitoring)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at <http://www.ecfr.gov/> under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported;
 - (b) All products containing a class I substance; and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances;
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
 - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, as well as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:
- (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
 - (b) Any person disposing of halons;
 - (c) Manufacturers of halon blends; or
 - (d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lb/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

COMPLIANCE ASSURANCE MONITORING (CAM) PLANS

Compliance Assurance Monitoring Plan Wet Electrostatic Precipitator (WESP)

I. BACKGROUND

A. Emissions Unit

Description: Heat Source/Dryer Operations including Emissions Units:
AA-203 Burner
AA-204 Dryer
AA-208 Dry Wood Hammermills
AA-209 Dry Wood Hammermills

Facility: CM Biomass - Quitman Pellets, LLC

B. Applicable Regulations, Emission Limit, and Monitoring Requirements

Regulation:

- Air Construction Permit (ACP) No. 0440-00063
 - 11 Miss. Admin. Code Pt 2. Ch. 1. R. 1.3.A (Visible Emission Regulations)
 - 11 Miss. Admin. Code Pt 2. Ch. 1. R. 1.3.B (Visible Emission Regulations)
 - 11 Miss. Admin. Code Pt 2. Ch. 1. R. 1.3.F (Process Emission Standards)

Emission Limits:

- Facility-wide PM (filterable) (Rolling 12-Month Total):
 - 249.0 tpy
- Facility-wide PM₁₀/PM_{2.5} (filterable & condensable) (Rolling 12-Month Total):
 - 249.0 tpy
- Emissions Control Requirement (WESP)
- Visible emissions limit: ≤ 40% opacity
- $E = 4.1(p^{0.67})$ lb PM/hr

Monitoring Requirements:

- WESP Secondary Voltage [ACP No. 0440-00063 §5.14(a)]

C. Control Technology

Wet Electrostatic Precipitator (WESP) - [Emission Point AA-213]

II. MONITORING APPROACH

The key elements of the monitoring approach are presented below:

A. Indicator

Indicator: Secondary Voltage [ACP No. 0440-00063 §5.14(a)]

B. Measurement Approach

The WESP secondary voltage is measured continuously by voltage monitoring system. [ACP No. 0440-00063 §5.18]

C. Indicator Range

The secondary voltage operating range was established during the most recent PM-related performance test. The secondary voltage range encompasses the average minimum and maximum secondary voltage values measured over the span of the total test runs. The secondary voltage range may be modified based on subsequent performance testing. [ACP No. 0440-00063 §5.15]

D. Performance Criteria

Data Representativeness:

The WESP has a dedicated voltage monitoring system integral to the WESP design located at a position consistent with the WESP manufacturer recommendations to ensure representative measurements over the entire operating range.

Verification of Operational Status: N/A

QA/QC Practices and Criteria:

The secondary voltage monitoring system is integral to the WEPS design. The secondary voltage system is installed, calibrated, operated, maintained, and inspected in accordance with the manufacturer's instructions and/or recommendations. [ACP No. 0440-00063 §5.14]

Monitoring Frequency and Data:

The WESP secondary voltage is measured continuously while the process is in operation except during periods of monitor malfunctions, associated repairs, required quality assurance or control activities. [ACP No. 0440-00063 §5.16]
Secondary voltage measurements are sampled and recorded on a one-minute basis; however, the minimum sampling

frequency for purposes of reporting monitor downtime is one secondary voltage reading every 15-minutes.

Collection Procedure: Data will be recorded and stored in the Plant's data historian.

Averaging Period 3-hour block average [ACP No. 0440-00063 §5.16]

III. **JUSTIFICATION**

A. **Background**

The Wet Electrostatic Precipitator (WESP) is installed on the Heat Source/Dryer Operations for the control of PM emissions.

B. **Rationale for Selection of Performance Indicator**

A WESP is designed to operate at a relatively constant voltage. A significant decrease in voltage is indicative of a change in operating conditions that could lead to an increase in PM emissions. Low voltage can indicate electrical shorts or poor contacts that require maintenance or repair of electrical components.

C. **Rationale for Selection of Indicator Level**

The Plant operates the WESP in accordance with manufacturer recommendations and the secondary voltage operating range is established during the most recent performance test.

A Quality Improvement Plan (QIP) threshold is not required as part of ACP No. 0440-00063. However, a semi-annual monitoring report (SMR) is required to be submitted summarizing each occurrence where the secondary voltage is outside the established operating range or monitoring system is not operational.

Compliance Assurance Monitoring Plan Regenerative Thermal Oxidizer (RTO)

I. BACKGROUND

A. Emissions Unit

Description: Heat Source/Dryer Operations including Emissions Units:
AA-203 Burner
AA-204 Dryer
AA-208 Dry Wood Hammermills
AA-209 Dry Wood Hammermills

Facility: CM Biomass - Quitman Pellets, LLC

B. Applicable Regulations, Emission Limit, and Monitoring Requirements

Regulation:

- Air Construction Permit (ACP) No. 0440-00063
 - 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10) (Major Source/PSD Avoidance Limits)

Emission Limits:

- Facility-wide HAPs (Rolling 12-Month Total):
 - 9.0 tpy (Individual)
 - 24.90 tpy (Total)
- Facility-wide VOCs (Rolling 12-Month Total):
 - 249.0 tpy

Monitoring Requirements:

- Emissions Control Requirement (RTO)
- Combustion Chamber Temperature [ACP No. 0440-00063 §5.14(b)]

C. Control Technology

Regenerative Thermal Oxidizer (RTO) - [Emission Point AA-213]

II. MONITORING APPROACH

The key elements of the monitoring approach are presented below:

A. Indicator

Indicator: Combustion Chamber Temperature [ACP No. 0440-00063 §5.14(b)]

B. Measurement Approach

The RTO combustion chamber is measured continuously by a temperature monitoring system. [ACP No. 0440-00063 §5.18]

C. Indicator Range

The minimum RTO combustion chamber temperature (°F) is established during the most recent VOC-related performance test. The combustion chamber temperature shall be the average of all temperature measurements over the span of the total test runs. The minimum combustion chamber temperature may be modified based on subsequent performance testing. [ACP No. 0440-00063 §5.17]

D. Performance Criteria

Data Representativeness:

The RTO has a dedicated temperature thermocouple integral to the RTO design located at a position consistent with RTO manufacturer recommendations to ensure representative measurements over the entire operating range.

Verification of Operational Status: N/A

QA/QC Practices and Criteria:

The combustion chamber temperature monitoring system is integral to the RTO design. The temperature monitoring system will be installed, calibrated, operated, maintained, and inspected in accordance with the manufacturer's instructions and/or recommendations. [ACP No. 0440-00063 §5.14]

Monitoring Frequency and Data:

The RTO combustion chamber temperature is measured continuously while the process is in operation except during periods of monitor malfunctions, associated repairs, required quality assurance or control activities. [ACP No. 0440-00063 §5.18] Temperature measurements are sampled and recorded on a one-minute basis; however, the minimum sampling frequency for purposes of reporting monitor downtime is one temperature reading every 15-minutes.

Collection Procedure:

Data will be recorded and stored in the Plant's data historian.

Averaging Period

3-hour block average [ACP No. 0440-00063 §5.18]

III. JUSTIFICATION

A. Background

The Regenerative Thermal Oxidizer (RTO) is installed on the Heat Source/Dryer Operations for the control of VOCs and HAPs emissions.

B. Rationale for Selection of Performance Indicator

The RTO combustion chamber temperature was selected because it is indicative of the VOC and HAP destruction occurring within the RTO and is a widely accepted method of monitoring. If the chamber temperature decreases significantly, then complete combustion may not occur, reducing the destruction efficiency.

C. Rationale for Selection of Indicator Level

The Plant operates the RTO in accordance with manufacturer recommendations and the minimum combustion temperature is established during the most recent performance test.

A Quality Improvement Plan (QIP) threshold is not required as part of ACP No. 0440-00063. However, a semi-annual monitoring report (SMR) is required to be submitted summarizing each occurrence where the combustion chamber temperature is outside the established operating range or monitoring system is not operational.

Compliance Assurance Monitoring Plan Baghouses

I. BACKGROUND

A. Emissions Unit

Description:

Facility Baghouses:

AA-207 Dry Fuel Hammermill Baghouse
AA-210 No.1 Pellet Mill System Baghouse
AA-211 No.2 Pellet Mill System Baghouse

Facility:

Small Pellet Mills Baghouse
MRE Quitman, LLC – Quitman, MS

B. Applicable Regulations, Emission Limit, and Monitoring Requirements

Regulation:

- 11 Miss. Admin. Code Pt 2. Ch. 1. R. 1.3.A (Visible Emission Regulations)
- 11 Miss. Admin. Code Pt 2. Ch. 1. R. 1.3.F (Process Emission Standards)
- 11 Miss. Admin. Code Pt 2. Ch. 1. R. 1.3 C (Fugitive Dust)

Emission Limits:

- Visible emissions limit: 40% opacity
- Process weight rule limit: 30.51 lb/hr

Monitoring Requirements: N/A

C. Control Technology

Baghouse

II. MONITORING APPROACH

The key elements of the monitoring approach are presented below:

A. Indicator

Indicator: Daily differential pressure (dp) gauge readings.

B. Measurement Approach

Once per day a person familiar with the process shall read the dp gauge across the filters in the baghouse and record the reading.

C. Indicator Range

An excursion is defined as a dp drop measurement reading that is above the range set for the baghouse by the manufacturer, which equates to 4.0 inches water column (WC). Excursions trigger an inspection of the baghouse and corrective action within 24 hours.

D. Performance Criteria

Data Representativeness: Readings are taken of the dp gauge while the small pellet mills are operating.

Verification of Operational Status: N/A

QA/QC Practices and Criteria: The technician is familiar with the process operations.

Monitoring Frequency and Data: Dp gauge readings will be recorded once per day.

Collection Procedure: Record the dp gauge readings at the Plant Office.

III. JUSTIFICATION

A. Background

Baghouse for particulate matter control.

B. Rationale for Selection of Performance Indicator

Daily dp gauge readings were selected as the indicator of control device performance. Dp readings were selected as the performance indicator because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating optimally, the dp reading will be no greater than 4.0 WC. A reading greater than the set range indicates reduced performance of the baghouse.

C. Rationale for Selection of Indicator Level

The facility operates the baghouse in accordance with manufacturer recommendations. In addition, historic performance testing affirms that the daily dp readings provide reasonable assurance that the baghouse is operating properly.

The selected Quality Improvement Plan (QIP) threshold is 18 excursions in a semi-annual reporting period. If the QIP threshold is exceeded in a semi-annual reporting period, a QIP will be developed and implemented.