# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

# THIS CERTIFIES THAT

Kingsford Manufacturing Company 2387 Highway 72 East Glen, Mississippi Alcorn, County

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.

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: NOV 3 0 2018

Permit No.: 0060-00051

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# APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

#### SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance 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 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).)
- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)
- 1.6 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).)
- 1.7 The permittee shall pay to the DEQ 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 Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.)

- (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).) 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).)
- (c) 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 DEQ 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.)
- (d) 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.)

- 1.8 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).)
- 1.9 Any document required by this permit to be submitted to the DEQ 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.)
- 1.10 The permittee shall allow the DEQ, 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 or emissionsrelated 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).)
- 1.11 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).)
- 1.12 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).)
- 1.13 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).)

- 1.14 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).)
- 1.15 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.)
- 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 permit. If the permittee submits a timely and complete application, the failure to have a Title V permit 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 DEQ 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).)
- 1.17 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 time frame as provided in other regulations for emergencies) and the notification includes:
    - (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).)
- 1.18 Should the Executive Director of the Mississippi Department of Environmental Quality 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 11 Miss. Admin. Code Pt. 2, Ch. 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.)
- Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 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". 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 51.166; 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 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 Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source."
- 1.20 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).)
- 1.21 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).)
- 1.22 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, silvicultural 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 Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.
  - (a) Open burning without a forced-draft air system must not occur within 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 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.)

- 1.23 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 noncompliance 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 (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 DEQ within 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.)

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, shutdowns and maintenance.
  - (a) Upsets (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.KK.)
    - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
      - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
      - (ii) the source was at the time being properly operated;
      - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
      - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
      - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
    - (2) In any enforcement proceeding, the permittee 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.
  - (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.HH. & R. 1.2.CC.)
    - (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
      - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;

- (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
- (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
- (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.

#### (c) Maintenance.

- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:
  - (i) the permittee can identify the need for the maintenance;
  - (ii) the source was at the time being properly operated;
  - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
  - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
  - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.

- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)
- 1.25 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 Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities

# SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

<b>Emission Point</b>	Description						
Charring Process							
AA-000	The Char Manufacturing Process						
AA-001A	Wood Receipt, including a partially enclosed truck dump area and a concrete pad for unloading walking–floor trailers (KMC Ref.: RE-1A)						
AA-001B	Wood Storage, including wood management and transfer by bulldozer to a drag chain system feeding a covered belt conveyor transfer system (KMC Ref.: RE-1B)						
AA-002	After Combustion Chamber (ACC) Thermal Oxidizer (KMC Ref.: RE-2), controlling PM/PM <sub>10</sub> , CO, and VOC emissions from the following processes:						
	(1) The Rotary Wood Dryer equipped with four cyclones in parallel (KMC Ref.: RE-2-C-02). A portion of the ACC exhaust gas provides heat for the Rotary Wood Dryer.						
	(2) The Charcoal Retort Furnace equipped with four cyclones in parallel (KMC Ref.: RE-2-C-01).						
	The Charcoal Retort Furnace has two 1.0 MMBTU/hr and two 3.0 MMBTU/hr auxiliary low- $NO_x$ burners, and the ACC has two 50 MMBTU/hr auxiliary low- $NO_x$ burners. Emissions from the auxiliary burners vent through the ACC. The low- $NO_x$ burners were determined to be BACT.						
AA-003	Char Truck Loadout (KMC Ref.: RE-3)						
AA-005	Natural Gas-Fired Boiler (Heat Input Capacity: 1.26 MMBTU/hr)						
	Plant-Wide / Miscellaneous						
AD-001	Plant-Wide Fugitive Emissions from Roadways (KMC Ref.: RW)						
AD-002	Emergency Generator Engine. Diesel-fired; Rated Capacity: 100 hp, manufactured March 18, 2006						
AD-003	Fire Water Pump Engine (located outside). Diesel-fired; Rated Capacity: 110 hp, manufactured May 2007						
AD-004	Fire Water Pump Engine (located inside). Diesel-fired; Rated Capacity: 360 hp, manufactured April 2007						
AD-005	Fire Water Pump Engine (located inside). Diesel-fired; Rated Capacity: 360 hp, manufactured April 2007						

<b>Emission Point</b>	Description
AD-006	Gasoline Storage Tank, Capacity: 300 gallons (monthly throughput < 10,000 gallons; subject to 40 CFR 63, Supart CCCCCC)

#### SECTION 3. EMISSION LIMITATIONS & STANDARDS

### A. <u>Facility-Wide Emission Limitations & Standards</u>

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
  - (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
  - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 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 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, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 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.)

# B. <u>Emission Point Specific Emission Limitations & Standards</u>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard					
	Charring Process								
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.1	PM (filterable only)	E=4.1p <sup>0.67</sup>					
AA-000	PSD Construction Permit issued September 9, 2005	3.B.2	Control Device	Operate the control device at all times when emission unit is operating					
AA-001A AA-001B	PSD Construction Permit issued September 9, 2005	3.B.3	Wet Wood Receipt	600,000 tons/yr (12-month rolling average)					
AA-002	PSD Construction Permit issued September 9, 2005	3.B.4	PM (filterable only)	BACT: 2.02 lb/ton of dry wood (3-hr rolling average)					
			PM <sub>10</sub> (filterable only)	BACT: 1.62 lb/ton of dry wood (3-hr rolling average)					
			$SO_2$	BACT: 0.72 lb/ton of dry wood (3-hr rolling average)					
			NO <sub>x</sub>	BACT: 3.10 lb/ton of dry wood (3-hr rolling average)					
			СО	0.24 lb/ton of dry wood (3-hr rolling average)					
			VOC	0.24 lb/ton of dry wood (3-hr rolling average)					
AA-002	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.5	PM (filterable only)	E=0.8808*I <sup>-0.1667</sup> (applies to emissions from auxiliary burners only)					
AA-002	11 Miss. Admin. Code Pt. 2, R. 1.4.B(1).	3.B.6	$SO_2$	≤ 500 ppmv					
AA-002	PSD Construction Permit	3.B.7	Opacity	40% (6-minute average)					
	issued September 9, 2005	3.B.8	Dry Wood Throughput	33.6 tons/hr (daily average) and 210,000 tons/yr (12-month rolling average)					

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Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
		3.B.9	ACC Temperature	BACT: > 1,400°F (3-hr rolling average)
		3.B.10	Fuel Restriction	BACT: Natural gas or distillate fuel oil containing no more than 0.1% sulfur by weight in auxiliary burners
AA-003	PSD Construction Permit issued September 9, 2005 and modified October 6, 2008	3.B.20	PM/PM <sub>10</sub> Control Requirement	BACT: Operate a telescoping chute and seal system or a fabric filter system.
AA-005	PSD Construction Permit issued September 9, 2005	3.B.11	Operating Restriction	Boiler shall be < 10 MMBTU/hr
	and modified May 30, 2012		Fuel Restriction	BACT: Natural gas only
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.12	PM (filterable only)	≤ 0.6 lb/MMBTU heat input
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.13	$SO_2$	≤ 4.8 lb/MMBTU heat input
		Plant-Wide	Miscellaneous	
AD-002 AD-003 AD-004 AD-005	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.12	PM (filterable only)	≤ 0.6 lb/MMBTU heat input
AD-002	40 CFR 63, Subpart ZZZZ (63.6590(a)(1)(iii) and 63.6603(a))	3.B.14 and 3.B.15	НАР	Change oil and filter every 500 hours of operation or annually; inspect air cleaner every 1,000 hours of operation or annually; and inspect all hoses and belts every 500 hours of operation or annually.
	40 CFR 63, Subpart ZZZZ (§63.6640(f)	3.B.19	Non- emergency operation	Limit non-emergency engine operation to 100 hours per year.

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AD-003 AD-004 AD-005	40 CFR 63, Subpart ZZZZ (63.6585, 63.6590(a)(2)(iii), and 63.6590(c))	3.B.14 and 3.B.16	НАР	MACT applicability requiring compliance with NSPS Subpart IIII
	40 CFR 60, Subpart IIII, (60.4200(a)(2)(ii), 60.4205(c), 60.4206, and 60.4211(a))	3.B.17	NMHC+NO <sub>x</sub> , CO, and PM (filterable only)	Comply with emission standards in Table 4 over the life of the engine
	40 CFR 60, Subpart IIII (60.4207(b) and §80.510(b))	3.B.18	Fuel Requirement	Maximum diesel sulfur content of 15ppm  Minimum cetane index of 40, or maximum aromatic content of 35 volume percent.
	40 CFR 60, Subpart IIII (60.4211(f))	3.B.19	Non- emergency operation	Limit non-emergency engine operation to 100 hours per year.
AD-006	40 CFR 63, Subpart CCCCCC (63.11111(b) and (i))	3.B.21	Gasoline Throughput	10,000 gallons per month

3.B.1 The permittee shall not cause, permit, or allow the emission of particulate matter in total quantities in any one 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 each emission unit with a pollution control device, the permittee shall operate the control device at all times when the emission unit is operating unless otherwise specified in this permit.

(Ref.: PSD Construction Permit issued September 9, 2005)

3.B.3 For Emission Point AA-001A/B, the permittee shall limit the wood receipt and storage to 600,000 tons of wet wood per year on a 12-month rolling basis.

(Ref.: PSD Construction Permit issued September 9, 2005)

- 3.B.4 For Emission Point AA-002, the permittee shall comply with the emission limits established in the PSD Construction Permit issued September 9, 2005. These limits are specifically stated in Table 3.B above.
- 3.B.5 For Emission Point AA-002, the maximum permissible emission of ash and/or particulate matter from the ACC auxiliary burners shall not exceed an emission rate as determined by the relationship  $E = 0.8808*I^{0.1667}$ , where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.

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

3.B.6 For Emission Point AA-002, the permittee shall not cause or permit the emission of gas containing sulfur oxides (measured as sulfur dioxide) in excess of 500 ppm (volume) from any process equipment constructed after January 25, 1972.

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

3.B.7 For Emission Point AA-002, the permittee shall limit the opacity to no more than 40% based on a 6-minute average. See Conditions 3.A.1 and 3.A.2 for additional requirements and exceptions.

(Ref.: PSD Construction Permit issued September 9, 2005)

3.B.8 For Emission Point AA-002, the permittee shall limit the amount of dry wood exiting the Rotary Wood Dryer and entering the Charcoal Retort Furnace to 33.6 tons per hour on a daily basis and 210,000 tons per year on a 12-month rolling basis.

(Ref.: PSD Construction Permit issued September 9, 2005)

3.B.9 For Emission Point AA-002, the permittee shall maintain the ACC combustion chamber operating temperature above 1,400°F on a 3-hour rolling average during normal operations, not to include periods of startup, shutdown, or malfunction. Normal operations are defined as any time char is being produced.

(Ref.: PSD Construction Permit issued September 9, 2005)

3.B.10 For Emission Point AA-002, the permittee shall only combust natural gas or distillate

fuel oil containing no more than 0.1% sulfur by weight in the auxiliary burners.

(Ref.: PSD Construction Permit issued September 9, 2005)

3.B.11 Emission Point AA-005 shall have a design capacity of less than 10 MMBTU/hr and shall burn only natural gas.

(Ref.: PSD Construction Permit issued September 9, 2005; modified May 30, 2012)

3.B.12 For Emission Points AA-005, AD-002, AD-003, AD-004, and AD-005, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

3.B.13 For Emission Point AA-005, the 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 million BTU heat input.

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

3.B.14 For Emission Points AD-002, AD-003, AD-004, and AD-005, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (i.e., the "RICE MACT"), 40 CFR Part 63, Subpart ZZZZ. AD-002 is an existing, emergency RICE located at an area source. AD-003, AD-004, and AD-005 are new, emergency RICE located at an area source.

The permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Ref.: 40 CFR 63.6590(a)(1)(iii) and (a)(2)(iii), Subpart ZZZZ)

- 3.B.15 For Emission Point AD-002, the permittee must comply with the following requirements except during periods of startup:
  - (1) Change oil and filter every 500 hours of operation or annually, whichever comes first, or utilize the oil analysis program under 63.6625(i) to extend the oil change requirement;

- (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(Ref.: 40 CFR 63.6603(a) and Table 2d of Subpart ZZZZ)

3.B.16 For Emission Points AD-003, AD-004, and AD-005, permittee is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Emission Points AD-003, AD-004 and AD-005 are new stationary RICE located at an area source of hazard air pollutant (HAP) emissions. Therefore, compliance with Subpart ZZZZ is achieved by meeting all applicable requirements of the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII. No further requirements apply for such engines under NESHAP Subpart ZZZZ.

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

3.B.17 For Emission Points AD-003, AD-004, and AD-005, the permittee is subject to and shall comply with the applicable requirements of the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (CI ICE) (40 CFR Part 60, Subpart IIII) and shall comply with the General Provisions (40 CFR Part 60, Subpart A) as required in Table 8 to NSPS Subpart IIII. For these fire pump engines, the permittee shall comply with the emission standards in Table 4 to NSPS Subpart IIII for all pollutants. The permittee must operate and maintain these engines according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer over the entire life of the engine. In addition, the permittee may only change those settings that are permitted by the manufacturer.

(Ref.: 40 CFR 60.4200(a)(2)(ii), 60.4205(c), 60.4206, and 60.4211(a), Subpart IIII)

- 3.B.18 For Emission Points AD-003, AD-004, and AD-005, the permittee shall use diesel fuel that meets the following requirements.
  - (a) Maximum sulfur content of 15ppm.
  - (b) Minimum cetane index of 40 or maximum aromatic content of 35 volume percent.

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

- 3.B.19 For Emission Points AD-002, AD-003, AD-004, and AD-005, the permittee shall operate the emergency stationary RICE according to the following requirements. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per calendar year is prohibited. If the engine(s) is not operated according to these requirements, the engine(s) will not be considered an emergency engine(s) under this subpart and shall meet all requirements for non-emergency engines.
  - (a) There is no time limit on the use of emergency stationary RICE in emergency situations.
  - (b) The permittee may operate the emergency stationary RICE 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 associated with the engine. Maintenance checks and readiness testing of such units is limited to a maximum of 100 hours per calendar year. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
  - (c) The permittee may operate the emergency stationary RICE up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year for maintenance and testing. The 50 hours per 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 63.6640(f), Subpart ZZZZ and 40 CFR 60.4211(f), Subpart IIII))

3.B.20 For Emission Point AA-003, the permittee shall use a telescoping chute and seal system and/or a fabric filter system to control PM/PM<sub>10</sub> emissions. Either system may be used without prior approval from DEQ.

(Ref.: PSD Construction Permit issued September 9, 2005; modified October 6, 2008)

3.B.21 For Emission Point AD-006, permittee shall limit gasoline throughput to 10,000 gallons per month.

(Ref.: 40 CFR 63.11111(b) and (i), Subpart CCCCCC)

### C. <u>Insignificant and Trivial Activity Emission Limitations & Standards</u>

Applicable Requirement	Condition Number(s)	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 from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

3.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 million BTU heat input.

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

#### D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-000	PSD Construction Permit issued September 9, 2005	3.D.1	SSM Plan	Develop and implement a written startup, shutdown, and malfunction plan, especially as it pertains to the ACC
AD-001	PSD Construction Permit issued September 9, 2005 and modified October 6, 2008	3.D.2	Fugitive PM from Roads	BACT: Pave all roadways and use good work practices
AD-006	40 CFR 63, Subpart CCCCCC (63.11115(a))	3.D.3	Minimize Emissions	Operate and maintain source in a manner consistent with safety and good air pollution control practices.
	40 CFR 63, Subpart CCCCCC (63.11116(a))	3.D.4	Vapor Releases	Gasoline must be handled in a manner to minimize extended vapor releases.

3.D.1 The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSM Plan) that describes procedures for operating and maintaining the emission units and pollution control devices during periods of startup, shutdown, and malfunction, especially as it pertains to operation of the ACC (Emission Point AA-002) and those units for which heat is supplied by the ACC. The SSM Plan may be a separate document or may be part of the facility's standard operating procedures. Nothing in this condition is intended to limit the applicability of the state regulations contained in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Provisions for Upsets, Startups, and Shutdowns."

(Ref.: PSD Construction Permit issued September 9, 2005)

3.D.2 For Emission Point AD-001, the permittee shall pave all roadways within the plant boundaries, as specified in the initial PSD application, and shall use good work practices, including street sweeping, to minimize fugitive emissions.

(Ref.: PSD Construction Permit issued September 9, 2005; modified October 6, 2008)

3.D.3 For Emission Point AD-006, the permittee shall operate and maintain the gasoline

dispensing facility, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Ref.: 40 CFR 63.11115(a), Subpart CCCCCC)

- 3.D.4 For Emission Point AD-006, the permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - (a) Minimize gasoline spills;
  - (b) Clean up spills as expeditiously as practicable;
  - (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(Ref.: 40 CFR 63.11116(a), Subpart CCCCCC)

#### 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 for the preceding calendar year. 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), & (d).)

# SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. <u>General Monitoring, Recordkeeping and Reporting Requirements</u>
- 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.
- 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. Support 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 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 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)
- 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. Said report shall

- be made within five (5) 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 DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.
- B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number(s)	Applicable Requirement
AA-000	Regular Inspections	Conduct and log regular inspections and maintenance performed at least monthly.	5.B.1	PSD Construction Permit issued September 9, 2005
AA-001A AA-001B	Wet Wood Received	Record the amount of wet wood received daily and calculate monthly and 12-month rolling totals.	5.B.2	PSD Construction Permit issued September 9, 2005
AA-002	PM, PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO, VOC, Opacity	Conduct stack tests every 24 months per EPA-approved Test Methods.	5.B.3	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).
AA-002	Wet and Dry Wood Feed and Moisture Content	Monitor and record wet wood feed to the Rotary Wood Dryer in ton/hr and monitor moisture content of wet wood daily and of dry wood monthly. Calculate dry wood charred daily.	5.B.4	PSD Construction Permit issued September 9, 2005
AA-002	Auxiliary Burner Operation	Record hours operated each month, including the reason for operation, and the amount and type of fuel combusted.	5.B.5	PSD Construction Permit issued September 9, 2005
AA-002	PM/PM <sub>10</sub> , CO, and VOC	Continuously monitor the temperature of the ACC and perform visual observations at least weekly with follow-up EPA Test Method 9 opacity determination if needed.	5.B.6	40 CFR Part 64 (Compliance Assurance Monitoring) and PSD Construction Permit issued September 9, 2005
AA-002	Distillate Fuel Oil Sulfur Content	Monitor sulfur content of each shipment of distillate fuel oil received.	5.B.7	PSD Construction Permit issued September 9, 2005
AA-005	Boiler Operation	Maintain records of the design capacity and	5.B.8	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number(s)	Applicable Requirement
		the amount of fuel combusted monthly.		
AD-002	Monitoring, operating, and maintenance	Operate engine according to manufacturer's emission-related written instructions.  Install non-resettable hour meter.  Minimize idling during start-up.	5.B.9	40 CFR 63, Subpart ZZZZ (63.6625(e), (f), and (h))
	Recordkeeping	Maintain engine operating records.	5.B.10	40 CFR 63, Subpart ZZZZ (63.6655(e) and (f) and 63.6660(b) and (c)
AD-003 AD-004 AD-005	Hours of Operation	Install a non-resettable hour meter prior to startup of the engine.	5.B.11	40 CFR 60, Subpart IIII (60.4209(a)) and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).
	Recordkeeping	Maintain engine operating records.	5.B.12	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).
AD-006	Recordkeeping	Maintain records of monthly throughput and malfunctions	5.B.13	40 CFR 63, Subpart CCCCCC (63.11111(e), and 63.11125(d))

5.B.1 For each emission point, the permittee shall perform regular inspections and maintenance each month or more often as needed to maintain proper operation of the equipment. Equipment, including all pollution control devices, shall be operated and maintained in accordance with the manufacturer's specifications or the plant's standard operating procedures. Records of these inspections and any maintenance shall be kept in log form.

(Ref.: PSD Construction Permit issued September 9, 2005)

5.B.2 For Emission Points AA-001A and AA-001B, the permittee shall record the amount of wet wood received daily in tons and shall calculate the total amount received each month and each consecutive 12-month period.

(Ref.: PSD Construction Permit issued September 9, 2005)

5.B.3 For Emission Point AA-002, the permittee shall perform the following stack testing in accordance with the specified methods below, which are found in 40 CFR Part 60, Appendix A and 40 CFR Part 51, Appendix M. The stack testing shall be conducted no later than August 1, 2009, and subsequent testing shall be conducted within 24 months

of the previous testing thereafter. Should two consecutive stack tests for a pollutant result in emissions of less than 50% of the permitted emission limit specified in Section 3.B of the permit, the permittee may waive the following stack test for that pollutant. If a stack test is waived for a pollutant, the next required stack test for that pollutant shall be within 48 months of the previous stack test. The permittee shall notify the DEQ in writing prior to waiving a stack test under this provision.

Particulate Matter (PM) EPA Test Methods 1-5, or an approved alternative  $PM_{10}$ EPA Test Method 201 or 201A, or an approved alternative Sulfur Dioxide (SO<sub>2</sub>) EPA Test Method 6, or an approved alternative Nitrogen Oxides (NO<sub>x</sub>) EPA Test Method 7, or an approved alternative Carbon Monoxide (CO) EPA Test Method 10, or an approved alternative Volatile Organic Compounds EPA Test Method 18 or 25A, or an approved alternative Opacity **EPA Test Method 9** 

All test methods specified above shall be those versions, or their approved equivalents, which are in effect upon permit issuance. The stack testing shall be performed when the Rotary Wood Dryer and Charcoal Retort Furnace are operating as close to their maximum capacities as operating conditions allow. The permittee shall also monitor and record the throughput of wet wood and compute the throughput of dry wood in tons per hour, as well as the average hourly temperature of the ACC, to determine compliance with the emission and operational limitations.

For purposes of demonstrating compliance with the opacity limit, the permittee shall conduct the opacity observations concurrently with the performance tests.

The permittee shall submit a stack test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. If the initial test protocol is acceptable, subsequent test protocols may be waived if these protocols contain no significant changes. Also, the DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s).

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

- 5.B.4 For Emission Point AA-002, the permittee shall perform the following monitoring and recordkeeping:
  - (a) Monitor the amount of wet wood feed to the Rotary Wood Dryer in tons per hour and sample the wet wood daily to determine the moisture content.

- (b) Sample the dry wood exiting the Rotary Wood Dryer no less than monthly to determine the moisture content.
- (c) Maintain a log of the daily average amount of wet wood feed to the Rotary Wood Dryer in tons per hour, the daily moisture content of this wood, the monthly average moisture content of the dry wood, and the corresponding daily average amount of dry wood in tons per hour. The daily amount of dry wood shall be computed based on the amount of wet wood feed, the daily moisture content of the wet wood, and the monthly average moisture content of the dry wood.
- (d) Record the total amount of dry wood charred in tons per year for each consecutive 12-month period.

(Ref.: PSD Construction Permit issued September 9, 2005)

5.B.5 For Emission Point AA-002, the permittee shall maintain records of the hours that any auxiliary burners were operated during each month, including the reason for operation, and the amount and type of each fuel combusted.

(Ref.: PSD Construction Permit issued September 9, 2005)

5.B.6 For Emission Point AA-002, the permittee shall comply with the monitoring and recordkeeping requirements expressed in the Compliance Assurance Monitoring (CAM) Plan below, as well as any additional requirements of §64.7, §64.8, and §64.9

(Ref.: PSD Construction Permit issued September 9, 2005 and 40 CFR Part 64):

Indicator	ACC Temperature for PM/PM <sub>10</sub> , CO, and VOC	Stack Observations for PM/PM <sub>10</sub> and Opacity
Measurement Approach	ACC combustion temperature measured with a Type K thermocouple	Visual observations followed by opacity determination if necessary
Monitoring Methods and Location	Continuous monitoring (i.e., every second) displayed in control room and two thermocouples located in representative locations of the ACC stack	Visual observations for any visible emissions and opacity determined per EPA Test Method 9
Indicator Range	An on-screen alarm shall be displayed in the control room if the ACC temperature during normal operations is less than 1,500°F (3-hour average).  An exceedance of the permit limit is defined as a 3-hour rolling average temperature less than 1,400°F.	If any visible emissions are observed, the opacity shall be determined immediately. An exceedance of the permit limit is defined as a 6-minute opacity average greater than 40%.
Data Collection Frequency	Data shall be collected every 15 seconds and averaged each hour.	Visual observations for a period of six (6) consecutive minutes shall take place daily for six (6) consecutive weeks. If visible emissions are less than or equal to 20% opacity during these six (6) weeks, visual observations may be reduced to weekly. If any visible emissions of an opacity greater than 20% are observed during the weekly observations, the frequency shall revert to daily for at least six (6) consecutive weeks.
Averaging Period	A 3-hour rolling average shall be determined each hour using the averaged hourly data.	6-minute average
Recordkeeping	The ACC temperature shall be recorded at least every 15 minutes and the average hourly and 3-hour rolling average for all periods when the ACC is operating shall be recorded.	The permittee shall maintain a log of the daily or weekly visual observations, any Method 9 opacity readings, and any corrective action taken.
QA/QC	The thermocouples shall be maintained according to the manufacturer's specifications, which shall be kept on site. Should readings from the two thermocouples differ by more than 100°F, the permittee shall immediately take action to determine the cause and correct this discrepancy and shall keep records of such incidences and the action taken.	The stack observer shall be certified per EPA Test Method 9.

5.B.7 The permittee shall determine the sulfur content of each shipment of distillate fuel oil received at the facility. The sulfur content may be determined based on certification provided by the fuel oil supplier or from a sulfur analysis per an ASTM reference method. This information shall be kept on site in accordance to Condition 5.A.3.

(Ref.: PSD Construction Permit issued September 9, 2005)

5.B.8 For Emission Point AA-005, the permittee shall maintain records of the design capacity in MMBTU/hr and the amount of natural gas combusted each month.

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

- 5.B.9 For Emission Point AD-002, the permittee shall comply with the following monitoring, operating, and maintenance requirements:
  - (a) Operate and maintain the stationary RICE in accordance with the manufacturer's emission-related written instructions or develop a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions;
  - (b) The permittee must install a non-resettable hour meter, if not already installed;
  - (c) During periods of startup, the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(Ref.: 40 CFR 63.6625(e), (f), and (h), Subpart ZZZZ)

- 5.B.10 For Emission Point AD-002, the permittee shall maintain the following records and keep each readily accessible for at least five years after the date of each occurrence:
  - (a) All maintenance records that demonstrated the engine was operated and maintained in accordance with the maintenance plan identified in Condition 5.B.9(a);
  - (b) The hours of operation of the engine recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the event as an emergency, and how many hours are non-emergency operations.

(Ref.: 40 CFR 63.6655(e) and (f) and 63.6660(b) and (c))

5.B.11 For Emission Points AD-003, AD-004, and AD-005, the permittee shall install a non-resettable hour meter prior to startup of the engine.

(Ref.: 40 CFR 60.4209(a), Subpart IIII; 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.12 For Emission Points AD-003, AD-004, and AD-005, the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

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

- 5.B.13 For Emission Point AD-006, the permittee shall keep the following:
  - (a) Records to document the monthly throughput of gasoline.
  - (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or monitoring equipment.
  - (c) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.

(Ref.: 40 CFR 63.11111(e), and 63.11125(d), Subpart CCCCCC)

# C. Specific Reporting Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number(s)	Applicable Requirement
AA-001A AA-001B	Wet Wood Received	Report the total amount of wet wood received for each 12-month period in tons/yr.	5.C.1	PSD Construction Permit issued September 9, 2005
AA-002	Stack Test Reports	Submit stack test reports within 60 days of conducting the stack test.	5.C.2	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).
AA-002	Dry Wood Throughput	Report the daily average and daily maximum amount of dry wood processed in tons/hr for each month.	5.C.3	PSD Construction Permit issued September 9, 2005
	Dry Wood Charred	Report the total amount of dry wood charred in tons/yr for each consecutive 12-month period.		
	ACC Temperature	Report the average and minimum 3-hour ACC temperature for each month.		
	ACC Thermocouples	Report all instances when the two thermocouples are not within 100°F of each other and the corrective action taken.		
	Auxiliary Burner Operation	Report the hours any of the auxiliary burners were operated during each month, including the reason for operation, and the amount of each fuel combusted.		
	Visual Observations	Submit a log of the daily or weekly visual observations, any Method 9 opacity readings, and any corrective action taken.		
AA-002	CAM Reporting	Provide reports according to §64.9(a)	5.C.4	40 CFR 64.9(a)

5.C.1 For Emission Points AA-001A and AA-001B, the permittee shall report the amount of wet wood received in tons per year for each consecutive 12-month period of the semiannual period.

(Ref.: PSD Construction Permit issued September 9, 2005)

5.C.2 For Emission Point AA-002, the permittee shall submit a report of any stack test results within sixty (60) days of conducting the respective stack test.

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

- 5.C.3 For Emission Point AA-002, the permittee shall submit a semiannual report per Condition 5.A.4 of the following information:
  - (a) The daily average and daily maximum amount of dry wood processed in tons per hour for each month and sample calculations for determining the amount of dry wood based on the moisture content of the wet wood feed to the Rotary Wood Dryer;
  - (b) The total amount of dry wood charred in tons per year for each consecutive 12-month period in the semiannual period;
  - (c) The average and minimum 3-hour ACC temperature for each month;
  - (d) All instances when the two thermocouples are not within 100°F of each other and the corrective action taken:
  - (e) The hours that any auxiliary burners were operated during each month, including the reason for operation, and the total amount of each fuel combusted monthly; and
  - (f) A log of the daily or weekly visual observations, any Method 9 opacity readings, and any corrective action taken to comply with the opacity limit.

(Ref.: PSD Construction Permit issued September 9, 2005)

- 5.C.4 For Emission Point AA-002, with regards to the CAM requirements in Condition 5.B.6, the permittee shall submit reports in accordance with Condition 5.A.4 of the following information:
  - (a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken:
  - (b) Summary 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); and

(c) A description of the actions taken to implement a QIP during the reporting period as specified in §64.8. 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 occurring.

(Ref.: 40 CFR Part 64.9(a))

# SECTION 6. ALTERNATIVE OPERATING SCENARIOS

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 <a href="http://ecfr.gpoaccess.gov">http://ecfr.gpoaccess.gov</a> 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, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II 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.

#### 1

#### **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

lbs/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<sub>x</sub> Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM<sub>10</sub> 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<sub>2</sub> Sulfur Dioxide TPY Tons per Year TRS Total Reduced Sulfur

VEE Visible Emissions Evaluation
VHAP Volatile Hazardous Air Pollutant
VOC Volatile Organic Compound