

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

**TO OPERATE AIR EMISSIONS EQUIPMENT**

**THIS CERTIFIES THAT**

Entergy Mississippi, Inc. - Baxter Wilson Plant  
770 Kemp Bottom Road  
Highway 61 South  
Vicksburg, Mississippi  
Warren 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.

Permit Issued: JUN 26 2012

Effective Date: As specified herein.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

  
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**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Expires: MAY 31 2017

Permit No.: 2780-00027

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**APPENDIX B PHASE II ACID RAIN 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.: APC-S-6, Section III.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.: APC-S-6, Section III.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.: APC-S-6, Section III.A.6.c.)
- 1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.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.: APC-S-6, Section III.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.: APC-S-6, Section III.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 APC-S-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.: APC-S-6, Section VI.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.: APC-S-6, Section VI.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.: APC-S-6, Section VI.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.: APC-S-6, Section VI.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.: APC-S-6, Section VI.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.: APC-S-6, Section III.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.: APC-S-6, Section II.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 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.: APC-S-6, Section III.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.: APC-S-1, Section 3.9(a))
- 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.: APC-S-1, Section 3.9(b))
- 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.: APC-S-6, Section III.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.: APC-S-6, Section III.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.: APC-S-6, Section III.H.)
- 1.16 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.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.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.: APC-S-6, Section IV.F.)
- 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 Regulation APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: APC-S-3)

- 1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations APC-S-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.: APC-S-6, Section IV.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.: APC-S-6, Section III.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 ordinance. 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.: APC-S-1, Section 3.7)
- 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.: APC-S-6, Section III.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 APC-S-1, Section 2.37)
- (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 APC-S-1, Sections 2.34 & 2.29)
- (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.: APC-S-1, Section 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 APC-S-1, Section 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**

Emission Point	Description
AA-001	4,790 MMBtu/hr, natural gas, no. 2 fuel oil, and no. 6 fuel oil fired generating unit boiler (Facility Reference No. C1, Unit #1).
AA-002	Three (3) boilers with a common stack.  (a) 6,680 MMBtu/hr, natural gas, no. 2 fuel oil, and no. 6 fuel oil fired generating unit boiler (Facility Reference No. C2, Unit #2 (formerly AA-002));  (b) 180 MMBtu/hr, natural gas and no. 2 fuel oil fired startup auxiliary boiler (Facility Reference No. C2, Auxiliary Boiler #3 (formerly AB-002)); and  (c) 180 MMBtu/hr, natural gas and no. 2 fuel oil fired auxiliary boiler (Facility Reference No. C2, Auxiliary Boiler #4 (formerly AC-002)).
AA-003	Two (2) boilers with a common stack.  (a) 140 MMBtu/hr, natural gas and no. 2 fuel oil fired auxiliary boiler (Facility Reference No. C3, Unit #1 Auxiliary Boiler (formerly AA-003)); and  (b) 15 MMBtu/hr, natural gas and no. 2 fuel oil fired heating boiler (Facility Reference No. C3, Unit #1 Heating Boiler (formerly AB-003)).
AA-004	209 MMBtu/hr, natural gas and no. 2 fuel oil fired boiler (Facility Reference No. C4, Unit #2 Auxiliary Boiler).
AA-005	250 hp diesel-fired compression ignition emergency stationary internal combustion engine (Facility Reference No. C8, Unit #1).
AA-006	250 hp diesel-fired compression ignition emergency stationary internal combustion engine (Facility Reference No. C9, Unit #2).
AA-007	208 hp diesel-fired compression ignition fire pump stationary internal combustion engine (Facility Reference No. 010, Fire Pump Engine).

### 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, 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.: APC-S-1, Section 3.1)
- 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.: APC-S-1, Section 3.2)
- 3.A.3 No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. (Ref.: APC-S-6, Section III.A.4.(a))
- 3.A.4 Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator and the DEQ. (Ref.: APC-S-6, Section III.A.1.(b))

**B. Emission Point Specific Emission Limitations & Standards**

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001, AA-002(a), AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004	Mississippi Air Regulations APC-S-1, Section 3.4(a)(2)	3.B.1	PM/PM <sub>10</sub>	$E = 0.8808 * \Gamma^{0.1667}$
	Mississippi Air Regulations APC-S-1, Section 4.1(a)	3.B.2	SO <sub>2</sub>	4.8 lbs/MMBtu/hr
	Title V Operating Permit issued on [Issuance Date]	3.B.3	Fuels	Natural gas, No. 2 fuel oil, and No. 6 fuel oil for AA-001 and AA-002(a). Natural gas and No. 2 fuel oil only for all others.
AA-001, AA-002(a)	Acid Rain Regulation, 40 CFR Parts 72-78	3.B.4	SO <sub>2</sub>	Acid Rain Permit and Regulation Requirements
	Clean Air Interstate Rule (CAIR), 40 CFR Part 96	3.B.5	NO <sub>x</sub> , SO <sub>2</sub>	CAIR Allowances and Requirements
	40 CFR 63, Subpart UUUUU, NESHAP for Coal and Oil-fired EGUs (§63.9980).	3.B.13 ( <i>oil or limited use</i> )	PM or metal HAPs, HCl, HF, Work Practices, and Operating Limits	Emission limits provided in Table 2 of Subpart UUUUU, work practices provided in Table 3 (e.g., tune-up), and operating limits in Table 4.
AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004	40 CFR 63, Subpart DDDDD, NESHAP for Major Source Industrial, Commercial, and Institutional Boilers and Process Heaters (§63.7480, §63.7485, §63.7490, §63.7491, and §63.7495).	3.B.6, 3.B.7 ( <i>gas or limited use</i> )	Work Practices	Work practices provided in Table 3 of Subpart DDDDD (e.g., annual or biennial tune-up and energy assessment).
		3.B.6, 3.B.7 ( <i>oil</i> )	HCl, Hg, CO, PM, Work Practices, and Operating Limits	Emission limits provided in Table 2 of Subpart DDDDD, work practices provided in Table 3 (e.g., annual or biennial tune-up and energy assessment), and operating limits in Table 4.
AA-005, AA-006, and AA-007	Mississippi Air Regulations APC-S-1, Section 3.4 (a)(1)	3.B.8	PM/PM <sub>10</sub>	0.6 lb/MMBtu
AA-005, AA-006, and AA-007	Mississippi Air Regulations APC-S-1, Section 4.1(a)	3.B.2	SO <sub>2</sub>	4.8 lb/MMBtu/hr
AA-005, AA-006, and AA-007	40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE (§63.6580, §63.6585, §63.6590, §63.6595, §63.6602, and Table 2c)	3.B.9, 3.B.10, 3.B.11, 3.B.12	Operating Limits and Work Practices	Operating Limitations and Operating and Maintenance Requirements

3.B.1 For Emission Points AA-001, AA-002 (a), AA-002 (b), AA-002 (c), AA-003(a), AA-003 (b) and AA-004, the maximum permissible emission of ash and/or particulate matter when

burning fossil fuels 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.: APC-S-1, Section 3.4(a) (2))

- 3.B.2 For Emission Points AA-001, AA-002(a), AA-002(b), AA-002 (c), AA-003 (a), AA-003 (b), AA-004, AA-005, AA-006 and AA-007, the maximum discharge of sulfur oxides (SO<sub>2</sub>) 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 or as otherwise specified herein.  
(Ref.: APC-S-1, Section 4.1(a))
- 3.B.3 For Emission Points AA-001 and AA-002(a), the permittee is allowed to burn natural gas, No. 2 fuel oil, or No. 6 fuel oil. For Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004, the permittee is allowed to burn natural gas and No. 2 fuel oil only.
- 3.B.4 For Emission Points AA-001 and AA-002(a), the permittee is subject to and shall comply with all applicable requirements of the Acid Rain Program Regulations as specified in 40 CFR Parts 72-78. The permittee shall comply with the Acid Rain Permit incorporated in this Title V Operating Permit as Appendix B. (Ref.: Acid Rain Regulations, 40 CFR Part 72-78)
- 3.B.5 For Emission Points AA-001 and AA-002(a), the permittee is subject to the requirements of the Clean Air Interstate Rule (CAIR) as set forth in 40 CFR Part 96, including the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR SO<sub>2</sub> Annual Trading Program, and the CAIR NO<sub>x</sub> Ozone Season Trading Program.

EPA issued CAIR on May 12, 2005, and in 2008, the US Court of Appeals for the DC Circuit remanded CAIR to the Agency, leaving existing CAIR programs in place while directing EPA to replace them with a new rule consistent with the Clean Air Act. The Cross-State Air Pollution Rule (CSAPR) was then proposed on July 6, 2010, and finalized on July 6, 2011. The CSAPR was to reduce interstate transport of fine particulate matter and ozone by reducing power plant emissions. Sources covered by the CSAPR annual SO<sub>2</sub> and NO<sub>x</sub> programs were to comply by using their allowances to cover 2012 annual emissions in March 2013, and sources covered by the NO<sub>x</sub> ozone season program were to comply on November 30, 2012, by surrendering allowances sufficient to cover their ozone season NO<sub>x</sub> emissions.

For Emission Points AA-001 and AA-002(a), the permittee was subject to the requirements of CSAPR as set forth in 40 CFR Part 97; however, the United States Court of Appeals for the D.C. Circuit issued its ruling to stay the CSAPR pending judicial review. While this

decision will delay implementation of the CSAPR, it will also leave the CAIR in place while the Court considers the merits of the challenges to the CSAPR. All the requirements in CAIR, the CAIR Federal Implementation Plans (FIPs) and EPA-approved CAIR State Implementation Plans (SIPs), are federally enforceable and all sources that are covered by the three (3) CAIR trading programs - the ozone-season NO<sub>x</sub> trading program, the annual NO<sub>x</sub> trading program, and the annual SO<sub>2</sub> trading program - must continue to comply with the requirements of those programs. On this basis, Emission Points AA-001 and AA-002(a) are subject to CAIR as set forth in 40 CFR 96, which are set forth to control and monitor NO<sub>x</sub>, SO<sub>2</sub>, and NO<sub>x</sub> Ozone Season emissions.

- 3.B.6 For Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004, the permittee is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for *Major Source* Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT), 40 CFR Part 63, Subpart DDDDD. This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004 are considered existing sources and must comply with all applicable requirements of Subpart DDDDD by the compliance dates established in the final reconsidered rule (expected to be published in May 2012). Existing sources must comply within three (3) years after publication of the final rule, unless further delayed by EPA.

Emission Points AA-001 and AA-002(a) are not subject to Subpart DDDDD, since they are electric utility steam generating units (EGUs). (Ref.: 40 CFR 63, Subpart DDDDD)

- 3.B.7 For Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004, the permittee must meet the applicable emission limits, work practice standards, and operating limits in 40 CFR 63, Subpart DDDDD. The emission limits are provided in Table 2 of Subpart DDDDD, the work practices are provided in Table 3 (e.g., annual or biennial tune-up and energy assessment), and the operating limits are provided in Table 4. At all times, the permittee must operate and maintain the affected source(s), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Compliance will be based on, but is not limited to, monitoring results, operation and maintenance procedures, and maintenance records and inspections. (Ref.: 40 CFR 63, Subpart DDDDD)
- 3.B.8 For Emission Point AA-005, AA-006 and AA-007, the maximum permissible emission of ash and/or particulate matter when burning fossil fuels shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: APC-S-1, Section 3.4 (a)(1))
- 3.B.9 For Emission Points AA-005, AA-006 and AA-007, the permittee is subject to and shall comply with the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ. Emission Point AA-005, AA-006, and AA-007 are *existing* compression ignition (CI) emergency stationary RICE with a site rating less than 500 brake horsepower. (Ref.: 40 CFR 63, Subpart ZZZZ (§63.6580, §63.6585,

§63.6590, §63.6595, and §63.6602 and Table 2c)

- 3.B.10 For Emission Points AA-005, AA-006 and AA-007, the permittee shall comply with the applicable emission limitations, work practice standards, and operating limitations in Subpart ZZZZ at all times. The permittee shall at all times operate and maintain the affected sources, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspections. (Ref.: 40 CFR 63, Subpart ZZZZ (§63.6605))
- 3.B.11 For Emission Points AA-005, AA-006 and AA-007, existing emergency stationary RICE less than or equal to 500 brake horsepower located at a major source of HAP emissions, the permittee shall operate the emergency stationary RICE according to the requirements below. By not operating the engine according to these requirements, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
- (a) The permittee may operate 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 100 hours per year.
  - (b) The permittee may operate emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that the permittee may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level.
  - (c) The permittee may not operate the RICE for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations.

There is no time limit on the use of emergency stationary RICE in emergency situations. (Ref.: 40 CFR 63, Subpart ZZZZ (§63.6640(f)(1))

3.B.12 For Emission Points AA-005, AA-006 and AA-007, the permittee must comply with the requirements of Subpart ZZZZ beginning on May 3, 2013, and must comply with the following requirements, except during periods of startup:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

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 shall apply. The permittee may choose to utilize an oil analysis program to extend the specified oil change requirement above. (Ref.: 40 CFR 63, Subpart ZZZZ (Table 2c))

3.B.13 For Emission Points AA-001 and AA-002(a), the permittee is subject to and shall comply with all applicable requirements of the NESHAP for Coal and Oil-fired Electric Utility Steam Generating Units (EGUs), 40 CFR Part 63, Subpart UUUUU. This subpart establishes national emission limits, work practice standards, and operating limits for hazardous air pollutants (HAP) emitted from EGUs. . The emission limits are provided in Table 2 of Subpart UUUUU, the work practices are provided in Table 3 (e.g., tune-up), and the operating limits are provided in Table 4.

Emission Points AA-001 and AA-002(a) are considered existing sources and must comply with the regulatory requirements by April 16, 2015, unless further delayed by EPA. At all times, the permittee must 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. Compliance will be based on, but is not limited to, monitoring results, operation and maintenance procedures, and maintenance records, and inspections. (Ref.: 40 CFR 63, Subpart UUUUU)

**C. Insignificant and Trivial Activity Emission Limitations & Standards**

Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
APC-S-1, Section 3.4(a)(1)	3.C.1	PM/PM <sub>10</sub>	0.6 lbs/MMBTU, or as otherwise limited by facility modification restrictions

Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
APC-S-1, Section 4.1(a)	3.C.2	SO <sub>2</sub>	4.8 lbs/MMBTU, or as otherwise limited by facility modification restrictions
APC-S-1, Section 3.6(a)	3.C.3	PM/PM <sub>10</sub>	$E=4.1(p)^{-0.667}$ , or as otherwise limited by facility modification restrictions

- 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.: APC-S-1, Section 3.4(a)(1))
- 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.: APC-S-1, Section 4.1(a))
- 3.C.3 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship:

$$E=4.1(p)^{-0.667}$$

Where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. If the process weight input rate (p) changes, the emissions rate (E) will change accordingly. (Ref.: APC-S-1, Section 3.6(a))

## 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.: APC-S-6, Section III.C.5.a.,c.,&d.)
- 4.3 For Emission Points AA-005, AA-006, and AA-007, the permittee is subject to and shall comply with the applicable requirements of 40 CFR Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE). The permittee shall comply with the requirements of Subpart ZZZZ as specified in Section 3 and Section 5 of this permit no later than May 3, 2013.
- 4.4 For Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004, the permittee is subject to and shall comply with all applicable requirements of the NESHAP for Major Source Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. The permittee shall comply with the requirements of Subpart DDDDD by the compliance dates established in the final reconsidered rule (expected to be published in May 2012). The emissions points are considered existing sources and must comply within three (3) years after publication of the final rule, unless further delayed by EPA
- 4.5 For Emission Points AA-001 and AA-002(a), the permittee is subject to the requirements of the Clean Air Interstate Rule (CAIR) as set forth in 40 CFR Part 96. The permittee was subject to the requirements of the Cross-State Air Pollution Rule (CSAPR) as set forth in 40 CFR Part 97; however, the United States Court of Appeals for the D.C. Circuit issued its ruling to stay CSAPR pending judicial review. While this decision will delay implementation of CSAPR, it will also leave CAIR in place while the Court considers the merits of the challenges to CSAPR. All the requirements in CAIR, the CAIR Federal Implementation Plans (FIPs) and EPA-approved CAIR State Implementation Plans (SIPs), are federally

enforceable and all sources that are covered by the three (3) CAIR trading programs - the ozone-season NO<sub>x</sub> trading program, the annual NO<sub>x</sub> trading program, and the annual SO<sub>2</sub> trading program - must continue to comply with the requirements of those programs.

- 4.6 For Emission Points AA-001 and AA-002(a), the permittee is subject to and shall comply with all applicable requirements of the NESHAP for Coal and Oil-fired Electric Utility Steam Generating Units (EGUs), 40 CFR Part 63, Subpart UUUUU by April 16, 2015, unless further delayed by EPA.



## 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.
- 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.: APC-S-6, Section III.A.3.b.(1)(a)-(f))
- 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.: APC-S-6, Section III.A.3.b.(2))
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by September 1 and March 1 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 APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.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.: APC-S-6, Section III.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	Applicable Requirement
AA-001, AA-002(a), AA-002(b), AA-002(c), AA-003(a), AA-003(b), AA-004, AA-005, AA-006, and AA-007	Fuel Usage	Fuel Quantity and Quality Monitoring and Recordkeeping	5.B.1	Mississippi Air Regulation APC-S-6, Section III.A.3(a)(2)
AA-001, AA-002(a)	Opacity	Continuous Opacity Monitoring (COM) installed and operated to comply with the Acid Rain Program or visual observations of emissions on a weekly basis when operating for more than 24 consecutive hours	5.B.2	Acid Rain Regulations, 40 CFR Part 72-78  Mississippi Air Regulation APC-S-6, Section III.A.3.(a)(2)
AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004	Opacity	Visual observations of emissions on a weekly basis when operating for more than 24 consecutive hours	5.B.3	Mississippi Air Regulation APC-S-6, Section III.A.3(a)(2)
AA-001, AA-002(a)	PM/PM <sub>10</sub> , SO <sub>2</sub> , Sulfuric Acid Mist, and NO <sub>x</sub>	Stack Testing	5.B.4	Mississippi Air Regulation APC-S-6, Section III.A.3.(a)(2)
AA-001, AA-002(a)	SO <sub>2</sub> , O <sub>2</sub> /CO <sub>2</sub> , and Fuel Flow	Monitoring, Recordkeeping, Testing, and Reporting	5.B.5	Acid Rain Regulations, 40 CFR Part 75
AA-001, AA-002(a)	NO <sub>x</sub>	Monitoring, Recordkeeping, Testing, and Reporting	5.B.6	CAIR, 40 CFR Part 96
AA-001, AA-002(a)	PM or metal HAPs, HCl, HF, Work Practices, and Operating Limits	Monitoring, Recordkeeping, Testing, and Reporting	5.B.7	40 CFR 63, Subpart UUUUU
AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004	PM/PM <sub>10</sub> , SO <sub>2</sub> , and NO <sub>x</sub>	Stack Testing	5.B.8	Mississippi Air Regulation APC-S-6 Section III.A.3(a)(2)
AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004	HCl, Hg, CO, PM, Work Practices, and Operating Limits	Monitoring, Recordkeeping, Testing, and Reporting	5.B.9	40 CFR 63, Subpart DDDDD

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-005, AA-006, AA-007	Operating and Maintenance Standards	Monitoring and Recordkeeping Requirements	5.B.10	40 CFR 63, Subpart ZZZZ, §63.6625(e), (f), (h), and (i)
AA-005, AA-006, AA-007	Operating and Maintenance Standards	Monitoring and Recordkeeping Requirements	5.B.11	40 CFR 63, Subpart ZZZZ, §63.6640(f)(1)-(4)
AA-005, AA-006, AA-007	Operating and Maintenance Standards	Monitoring and Recordkeeping Requirements	5.B.12	40 CFR 63, Subpart ZZZZ, §63.6655(e) & (f) and 63.6660 (b) & (c)
AA-005, AA-006, AA-007	Operating and Maintenance Standards	Notification Requirements	5.B.13	40 CFR 63, Subpart ZZZZ, §63.6645(a), (d), (g), and (h)
AA-005, AA-006, AA-007	Operating and Maintenance Standards	Reporting Requirements	5.B.14	40 CFR 63, Subpart ZZZZ, §63.6650(a)-(f)
AA-005, AA-006, AA-007	Operating and Maintenance Standards	Monitoring and Recordkeeping Requirements	5.B.15	40 CFR 63, Subpart ZZZZ, §63.6655(a)-(f)

5.B.1 For Emission Points AA-001, AA-002(a), AA-002(b), AA-002(c), AA-003(a), AA-003(b), AA-004, AA-005, AA-006 and AA-007, the permittee shall keep records of all fuels burned on a daily basis. These records shall consist of fuel type, quantity, and the heating value (Btu/gal or Btu/ft<sup>3</sup>). Additionally, when burning fuel oil, the permittee shall maintain records to document the sulfur content (% by weight) for fuel oil burned on a daily basis or for each lot of shipment received.

These records shall be kept in log form or in a similar manner and maintained in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: Mississippi Air Regulation APC-S-6, Section III.A.3.(a)(2))

5.B.2 For Emission Points AA-001 and AA-002(a), the permittee shall monitor opacity utilizing continuous opacity monitors (COMs), installed and operated to comply with the Acid Rain Program - Title IV (if applicable), to demonstrate compliance with the opacity limitation.

If the COMs is not applicable, the permittee shall perform visual observations on a weekly basis while the emission points are operating for more than 24 consecutive hours and combusting No. 6 or No. 2 fuel oil. If any visible emissions are detected during an observation period of six (6) consecutive minutes, a visible emission evaluation (VEE) shall be performed in accordance with EPA Reference Method 9. If a VEE is performed using EPA Reference Method 9, then the observation period shall consist of a minimum of eighteen (18) consecutive minutes. Further, the permittee shall maintain a record and/or a log documenting all visual observations/tests, the nature and cause of any visible emissions,

any corrective action(s) taken to prevent or minimize the emissions, and the date and time when visible emission observations were conducted. These records and/or log shall be maintained in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: Acid Rain Regulation 40 CFR Part 72-78 and APC-S-6, Section III.A.3.(a)(2))

- 5.B.3 For Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004, the permittee shall perform visual observations on a weekly basis while the emission points are operating for more than 24 consecutive hours and combusting No. 2 fuel oil. If any visible emissions are detected during an observation period of six (6) consecutive minutes, a visible emission evaluation (VEE) shall be performed in accordance with EPA Reference Method 9. If a VEE is performed using EPA Reference Method 9, then the observation period shall consist of a minimum of eighteen (18) consecutive minutes. Further, the permittee shall maintain a record and/or a log documenting all visual observations/tests, the nature and cause of any visible emissions, any corrective action(s) taken to prevent or minimize the emissions, and the date and time when visible emission observations were conducted. These records and/or log shall be maintained in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: APC-S-6, Section III.A.3.(a)(2))
- 5.B.4 For Emission Points AA-001 and AA-002 (a), the permittee shall perform stack testing for Particulate Matter (PM) using EPA Reference Methods 1-5, Sulfuric Acid Mist using EPA Reference Method 8, Sulfur Dioxide (SO<sub>2</sub>) using EPA Test Methods 6C or 19, and Nitrogen Oxides (NO<sub>x</sub>) using EPA Reference Method 7, or other approved methods, within sixty (60) days of burning fuel oil (No.2 or No. 6) for seven (7) consecutive days. This stack testing is to be conducted while the units are burning fuel oil and shall only be required once per five (5) year permitting period. Redundant testing required by the Acid Rain Regulations is not required by this condition.

Applicable test protocols shall be submitted at least thirty (30) days prior to the proposed test date to ensure that all test methods and procedures are acceptable to the MDEQ. Also, the MDEQ 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). The test report shall be submitted no later than sixty (60) days following completion of the performance test(s). (Ref.: Acid Rain Regulations 40 CFR 72-80 and APC-S-6, Section III.A.3.(a)(2))

- 5.B.5 For Emission Points AA-001 and AA-002(a), the permittee shall conduct all monitoring, recording, testing, and reporting of emissions and emissions monitors (e.g., CEMS, COMS) in accordance with 40 CFR Part 75 (e.g., §75.10-67, etc.) for each affected unit. This includes continuous monitoring, calibration, and the annual Relative Accuracy Test Audits (RATA) required under the standard. The permittee shall maintain a file on site of all measurements, data, reports, and other information required by the Acid Rain Regulations in accordance with Condition 5.A.3, and the records shall be made available upon request by

MDEQ personnel.

When a RATA is required, the permittee shall submit a written test protocol at least thirty (30) days prior to the proposed test date(s) to obtain approval for test methods and procedures. Also, the permittee shall notify MDEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test(s). After the first successful submittal of a written test protocol, the permittee may request that the re-submittal of the testing protocol be waived for subsequent testing by certifying in writing at least ten (10) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed. The permittee shall submit test reports within sixty (60) days of completion of RATA. (Ref.: 40 CFR Part 75)

- 5.B.6 For Emission Points AA-001 and AA-002(a), the permittee shall comply with the requirements of the Clean Air Interstate Rule (CAIR) as set forth in 40 CFR Part 96. The permittee was subject to the requirements of the Cross-State Air Pollution Rule (CSAPR) as set forth in 40 CFR Part 97; however, the United States Court of Appeals for the D.C. Circuit issued its ruling to stay CSAPR pending judicial review. While this decision will delay implementation of CSAPR, it will also leave CAIR in place while the Court considers the merits of the challenges to CSAPR. All the requirements in CAIR, the CAIR Federal Implementation Plans (FIPs) and EPA-approved CAIR State Implementation Plans (SIPs), are federally enforceable and all sources that are covered by the three (3) CAIR trading programs - the ozone-season NO<sub>x</sub> trading program, the annual NO<sub>x</sub> trading program, and the annual SO<sub>2</sub> trading program - must continue to comply with the requirements of those programs.

The permittee shall comply with all applicable monitoring, recordkeeping, testing, and reporting requirements of CAIR. The permittee shall maintain files on site of all measurements, monitoring, data, reports, and other information required by CAIR in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: Clean Air Interstate Rule (CAIR), 40 CFR Part 96)

- 5.B.7 Beginning April 16, 2015, for Emission Points AA-001 and AA-002(a), the permittee shall comply with the requirements of the Utility MACT, 40 CFR 63 Subpart UUUUU. This subpart establishes performance testing, operating limits, compliance demonstration methods, and reporting requirements, which are provided in Tables 5 through 8 of Subpart UUUUU. The permittee shall comply with all applicable monitoring, recordkeeping, testing, and reporting requirements of the Subpart.

The permittee shall maintain files on site of all measurements, monitoring, data, reports, and other information required by Subpart UUUUU in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: 40 CFR 63, Subpart UUUUU)

- 5.B.8 For Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004, the permittee shall perform stack testing for Particulate Matter (PM) using EPA Reference Methods 1-5, Sulfuric Acid Mist using EPA Reference Method 8, Sulfur Dioxide (SO<sub>2</sub>) using EPA Test Methods 6C or 19, and Nitrogen Oxides (NO<sub>x</sub>) using EPA Reference Method 7, or other approved methods, within sixty (60) days of burning fuel oil (No.2) for seven (7) consecutive days. This stack testing is to be conducted while the units are burning fuel oil and shall only be required once per five (5) year permitting period.

Applicable test protocols shall be submitted at least thirty (30) days prior to the proposed test date to ensure that all test methods and procedures are acceptable to the MDEQ. Also, the MDEQ 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). The test report shall be submitted no later than sixty (60) days following completion of the performance test(s). (Ref.: APC-S-6, Section III.A.3.(a)(2))

- 5.B.9 Beginning within three (3) years after publication of the final rule, for Emission Points AA-002(b), AA-002(c), AA-003(a), AA-003(b), and AA-004, the permittee shall comply with the requirements of the Boiler MACT, 40 CFR 63 Subpart DDDDD. This subpart establishes performance testing, fuel analysis, operating limits, compliance demonstration methods, and reporting requirements, which are provided in Tables 5 through 9 of Subpart DDDDD. The permittee shall comply with all applicable monitoring, recordkeeping, testing, and reporting requirements of the Subpart.

The permittee shall maintain files on site of all measurements, monitoring, data, reports, and other information required by the Subpart DDDDD in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: 40 CFR 63, Subpart DDDDD)

- 5.B.10 Beginning May 3, 2013, for Emission Points AA-005, AA-006, and AA-007, 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 instruction or must 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 at startup 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.

- (d) The permittee may utilize an oil analysis program in order to extend the specified oil change requirements in Section 3.B. provided the analysis analyzes the parameters identified in 63.6625(i).

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

5.B.11 Beginning May 3, 2013, for Emission Points AA-005, AA-006, and AA-007, the permittee shall operate the engine according to the following:

- (a) Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited.
- (b) There is no operating limit on the use of the engine during an emergency situation.
- (c) The engine may be operated for the purpose of maintenance checks and readiness testing in accordance with vendor, manufacturer, State or Federal recommendations. Such testing is limited to 100 hours per year.
- (d) The engine may be operated up to 50 hours per year in non-emergency situations; however, those 50 hours count towards the 100 hour limit in (c) above. The 50 hours per year for non-emergency operation can not be used to cover the power usage provisions outlined in 63.6640(f)(4).

(Ref.: 40 CFR 63.6640(f)(1)-(4))

5.B.12 Beginning May 3, 2013, for Emission Points AA-005, AA-006, and AA-007, the permittee shall maintain the following records and keep each readily accessible for at least five (5) years after the date of each occurrence:

- (a) All maintenance records that demonstrate the engine was operated and maintained in accordance with the written maintenance plan identified above; and
- (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.13 For Emission Points AA-005, AA-006, and AA-007, the permittee shall prepare and submit the following notifications:

- (a) All applicable notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h);
- (b) Notification specified in §63.9(b)(2), if start up of the stationary RICE with a site rating of equal to or less than 500 brake horsepower located at a major HAP source is before the effective date of Subpart ZZZZ (required by July 16, 2008).

(Ref.: 40 CFR 63.6645(a), (d), (g), and (h))

- 5.B.14 Beginning May 3, 2013, for Emission Point AA-005, AA-006 and AA-007, the permittee shall submit semiannual and annual compliance reports in accordance with the applicable requirements in §63.6650 and Table 7 of Subpart ZZZZ. The permittee shall submit the semiannual reports in accordance with Condition 5.A.4. The compliance reports must contain the following general information:
- (a) Company name and address.
  - (b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
  - (c) Date of report and beginning and ending dates of the reporting period.
  - (d) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during the malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.
  - (e) If there were no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period.

For each deviation from an emission or operating limitation, the compliance report must contain the above general information and the following information:

- (a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period; and
- (b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

The permittee shall report all deviations in accordance with Permit Condition 5.A.5. (Ref.: 40 CFR 63.6650(a)-(f))

- 5.B.15 For Emission Points AA-005, AA-006 and AA-007, the permittee shall maintain records of all required maintenance performed. The permittee also must 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. If the engines are used for demand response operation, the permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. These records shall be maintained in log form

and shall be made available upon request by MDEQ personnel. A summarized report of this monitoring shall be maintained in accordance with Condition 5.A.3 and submitted in accordance with Condition 5.A.4 (Ref.: 40 CFR 63.6655(a)-(f))

## **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 <http://ecfr.gpoaccess.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, 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.

**SECTION 8. ACID RAIN (TITLE IV) REQUIREMENTS**

The permittee shall comply with all requirements of the Phase II Acid Rain Permit attached as Appendix B of this permit. All conditions of the Phase II Acid Rain Permit are effective from JUN 26 2012 through MAY 31 2017; however, these conditions may be revised by the MDEQ during the permitted period.

# **APPENDIX A**

## **LIST OF ABBREVIATIONS USED IN THIS PERMIT**

# APPENDIX A

## List of Abbreviations Used In this Permit

APC-S-1	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
APC-S-2	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
APC-S-3	Regulations for the Prevention of Air Pollution Emergency Episodes
APC-S-4	Ambient Air Quality Standards
APC-S-5	Regulations for the Prevention of Significant Deterioration of Air Quality
APC-S-6	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
APC-S-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
NMVOG	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 Fm 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

# **APPENDIX B**

## **PHASE II ACID RAIN PERMIT**



## PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi, Inc. – Baxter Wilson Plant  
Operated by: Entergy Mississippi, Inc.  
ORIS code: 2050  
Effective: Permit Issuance Date: JUN 26 2012  
Permit Expiration Date: MAY 31 2017

### Summary of Previous Actions:

This page will be replaced to document new actions each time a new action is taken by the MDEQ. This is the initial permitting action being undertaken:

- |  |                   |
|--|-------------------|
| 1) Draft permit for public and EPA comment.                | May 30, 1997      |
| 2) Permit finalized and issued.                            | October 24, 1997  |
| 3) Permit finalized and re-issued.                         | September 7, 2004 |
| 4) Permit modified.  | July 18, 2005     |
| 5) Draft Title V Permit renewal for public and EPA review. | April 29, 2012    |

### Present Action:

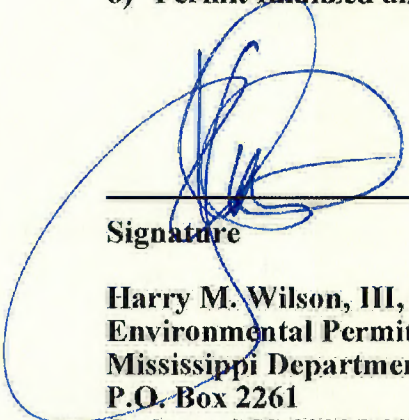
- 6) Permit finalized and re-issued.

JUN 26 2012

Signature

JUN 26 2012

Date

  
Harry M. Wilson, III, PE, Chief  
Environmental Permits Division  
Mississippi Department of Environmental Quality  
P.O. Box 2261  
Jackson, MS 39225-2261  
Telephone: (601) 961-5171 Fax: (601) 961-5742

**ACID RAIN PERMIT CONTENTS:**

- 1) **Statement of Basis.**
- 2) **SO<sub>2</sub> allowances allocated under this permit and NO<sub>x</sub> requirements for each affected unit.**
- 3) **Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.**
- 4) **The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.**

**1) Statement of Basis:**

Statutory and Regulatory Authorities: In accordance with the Mississippi Air and Water Pollution Control Law, specifically Miss. Code Ann. §§ 49-17-1 through 49-17-43, and any subsequent amendments, and Titles IV and V of the Clean Air Act, the Mississippi Department of Environmental Quality issues this permit pursuant to the State of Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act, Regulation APC-S-6, and the State of Mississippi Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act, Regulation APC-S-7.

**2) SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for each Affected Unit:**

		2012	2013	2014	2015	2016	2017
<b>AA-001, Unit 1</b>	SO <sub>2</sub> allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	321	321	321	321	321	321
	NO <sub>x</sub> limit	N/A					

		2012	2013	2014	2015	2016	2017
<b>AA-002, Unit 2</b>	SO <sub>2</sub> allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	3570	3570	3570	3570	3570	3570
	NO <sub>x</sub> limit	N/A					

Note: The number of allowances allocated to Phase II affected units by U.S. EPA may change per revisions to 40 CFR Part 73, Tables 2, 3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (See 40 CFR 72.84).

**3) Comments, Notes, and Justifications:**

All affected units are natural gas, #2 fuel oil, and # 6 fuel oil-fired units; therefore, the affected units are not subject to the NO<sub>x</sub> requirements outlined in 40 CFR Part 76.

**4) Phase II Permit Application and NO<sub>x</sub> Compliance & Averaging Plan:**

On File or Attached.