# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

# THIS CERTIFIES THAT

Mississippi Power Company Watson Electric Generating Facility Interstate I-10 and Lorraine Road Gulfport, MS (Harrison 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: DEC 2 9 2016

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: November 30, 2021 Permit No.: 1020-00055

# **TABLE OF CONTENTS**

| SECTION 1. | GENERAL CONDITIONS                                 | 3  |
|------------|--|----|
| SECTION 2. | EMISSION POINTS & POLLUTION CONTROL DEVICES        | 13 |
| SECTION 3. | EMISSION LIMITATIONS & STANDARDS                   | 15 |
| SECTION 4. | COMPLIANCE SCHEDULE                                | 25 |
| SECTION 5. | MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS | 26 |
| SECTION 6. | ALTERNATIVE OPERATING SCENARIOS                    | 31 |
| SECTION 7. | TITLE VI REQUIREMENTS                              | 32 |
| SECTION 8. | ACID RAIN (TITLE IV) REQUIREMENTS                  | 34 |
| SECTION 9. | CROSS STATE AIR POLLUTION RULE                     | 35 |
|            |  |    |

APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

APPENDIX B: PHASE II ACID RAIN PERMIT AND APPLICATION

APPENDIX C: PHASE II NO<sub>X</sub> AVERAGING PLAN

#### 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 The following applies to permit reopenings:
  - (a) This permit shall be reopened and revised under any of the following circumstances:
    - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
    - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
    - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
    - (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

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

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

1.5 The permittee shall furnish to the 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 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)
- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)

- 1.8 The permittee shall pay to the 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.)

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

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

- 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.)
- 1.11 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).)
```

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

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

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

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

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

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

1.15 Nothing in this permit shall alter or affect the following:

- (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
- (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
- (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

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

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

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

1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V 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).)

- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
  - (a) the changes are not modifications under any provision of Title I of the Act;
  - (b) the changes do not exceed the emissions allowable under this permit;
  - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other 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).)

1.19 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."
- 1.21 Any change in ownership or operational control must be approved by the Permit Board.

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

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

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

- 1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, 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.)

1.24 Except as otherwise specified herein, the permittee shall be subject to the following

provision with respect to emergencies.

- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include 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.)

- 1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups and shutdowns:
  - (a) Upsets (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.LL.)

- (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
  - (i) an upset occurred and that the source can identify the cause(s) of the upset;
  - (ii) the source was at the time being properly operated;
  - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
  - (iv) that within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and:
  - (v) that as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.II. & R. 1.2.DD.)
  - (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.

- (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).
- (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

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

1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in 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

| Emission Point | Description   |
|----------------|---|
| AA-003         | 1,119.2 MMBtu/hr Natural Gas-Fired Combustion Engineering Utility Boiler (Ref.: Unit 3)   |
| AA-004         | 2,760 MMBtu/hr Natural Gas-Fired Riley Stoker Corporation Utility Boiler, which is equipped with an internal fuel staged low NO <sub>x</sub> burners and an over-fire air delivery system (Ref.: Unit 4)  |
| AA-005         | 5,544 MMBtu/hr Natural Gas-Fired Foster Wheeler Reheat Utility Boiler, which is equipped with an internal fuel staged low NO <sub>x</sub> burners and an over-fire air delivery system (Ref.: Unit 5)   |
| AA-099         | 632.7 MMBtu/hr Natural Gas-Fired Pratt and Whitney Simple Cycle Combustion Turbine - Model # FT419DF, which was constructed prior to October 3, 1977, with no modifications or reconstruction since that date (Ref.: Combustion Turbine A)                              |
| AA-008         | 2,000 gallon Waste Oil Storage Tank (Ref. No.: WEGP01)  |
| AA-009         | 4,500 gallon No. 1 and No. 2 Oil Storage Tanks (Ref. No.: WEGP02)   |
| AA-012         | 8,000 gallon Unit 4 Turbine Oil Storage Tank (Ref. No.: WEGP05)   |
| AA-018         | 10,000 gallon Truck Shed #2 Fuel Oil Storage Tank (Ref. No.: WEGP10)  |
| AA-020         | 2,800 gallon Unit 1 Main Turbine Oil Tank (Ref. No.: WEGP12)  |
| AA-021         | 2,800 gallon Unit 2 Main Turbine Oil Tank (Ref. No.: WEGP13)  |
| AA-022         | 3,590 gallon Unit 3 Main Turbine Oil Tank (Ref. No.: WEGP14)  |
| AA-023         | 6,050 gallon Unit 4 Main Turbine Oil Tank (Ref. No.: WEGP15)  |
| AA-024         | 1,253 gallon Unit 4 Bowser (Turbine Oil) Storage Tank (Ref. No.: WEGP16)  |
| AA-026         | 7,450 gallon Unit 5 Main Turbine Oil Tank (Ref. No.: WEGP18)  |
| AA-027         | 1,020 gallon Unit 5-A BFP Oil Reservoir (Ref. No.: WEGP19)  |
| AA-028         | 1,020 gallon Unit 5-B BFP Oil Reservoir (Ref. No.: WEGP20)  |
| AA-033         | 116kW (156 HP) Emergency Unit 1 and Unit 2 <i>Diesel-Fired</i> Compression Ignition (CI), 4-Stroke Generator with < 10 liters displacement per cylinder, which was manufactured before April 1, 2006, and commenced construction prior to July 11, 2005 (Ref No.: RC01) |
| AA-034         | 172 kW (231 HP) Emergency <i>Diesel-Fired</i> CI, 4-Stroke Generator Fire Pump with < 10 liters displacement per cylinder, which was manufactured before April 1, 2006, and commenced construction prior to July 11, 2005 (Ref No.:RC02)                                |

# Page 14 of 41 Permit No. 1020-00055

| Emission Point | Description  |
|----------------|--|
| AA-035         | 153.6 kW (206 HP) Emergency Telephone System <i>Propane-Fired</i> Spark Ignition (SI), 4-Stroke Generator with < 10 liters displacement per cylinder, which was manufactured and commenced construction (date ordered) before June 12, 2006 (Ref No.:RC03) |
| AA-036         | 510.8 kW (685 HP) Emergency Combustion Turbine Black Start Up <i>Diesel-Fired</i> CI, 4-Stroke Generator with < 10 liters displacement per cylinder, which was manufactured and commenced construction after June 12, 2006 (Ref No.:RC04)                  |
| AA-037         | 300 kW (448 HP) Emergency Unit 3 and Unit 4 Black Start Up <i>Diesel-Fired</i> CI, 4-Stroke Generator with < 10 liters displacement per cylinder, which was manufactured and commenced construction after June 12, 2006 (Ref No.:RC05)                     |
| AA-038         | 300 kW (448 HP) Emergency Unit 5 Black Start Up <i>Diesel-Fired</i> CI, 4-Stroke Generator with < 10 liters displacement per cylinder, which was manufactured and commenced construction after June 12, 2006 (Ref No.:RC06)                                |
| AA-039         | 3,000 gallon Unleaded Gasoline Tank (Ref No.: WEGP21)  |
| AA-040         | 6,500 gallon Unit 3 Turbine Oil Storage Tank (Ref No.:WEGP22)  |

#### 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.: 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. Emission Point Specific Emission Limitations & Standards

| Emission<br>Point(s) | Applicable Requirement  | Condition<br>Number(s) | Pollutant/<br>Parameter | Limit/Standard                                 |
|----------------------|---|------------------------|-------------------------|--|
| AA-003               | 11 Miss. Admin. Code Pt. 2,<br>R.1.3.D(1)(b).   | 3.B.1                  | PM                      | $E = 0.8808 * I^{-0.1667}$ , or 0.273 lb/MMBTU |
|                      | 11 Miss. Admin. Code Pt. 2,<br>R.1.4.A(1).  | 3.B.2                  | $SO_2$                  | 4.8 lb/MMBTU                                   |
| AA-004               | 11 Miss. Admin. Code Pt. 2,<br>R.1.3.D(1)(b).   | 3.B.1                  | PM                      | $E = 0.8808 * I^{-0.1667}$ , or 0.239 lb/MMBTU |
|                      | 11 Miss. Admin. Code Pt. 2,<br>R.1.4.A(1).  | 3.B.2                  | SO <sub>2</sub>         | 4.8 lb/MMBTU                                   |
|                      | Prevention of Significant<br>Deterioration (PSD) Permit to<br>Construct (PTC) issued<br>September 26, 2007. | 3.B.3                  | СО                      | 0.149 lb/MMBTU, not to exceed 1,648 tons/yr    |

# Page 16 of 41 Permit No. 1020-00055

| Emission<br>Point(s)                      | Applicable Requirement   | Condition<br>Number(s) | Pollutant/<br>Parameter       | Limit/Standard  |
|---|--|------------------------|-------------------------------|---|
| AA-005                                    | 11 Miss. Admin. Code Pt. 2,<br>R.1.3.D(1)(b).  | 3.B.1                  | PM                            | $E = 0.8808 * I^{-0.1667}$ , or 0.212 lb/MMBTU  |
|   | 11 Miss. Admin. Code Pt. 2,<br>R.1.4.A(1).   | 3.B.2                  | $SO_2$                        | 4.8 lb/MMBTU  |
|   | PSD PTC issued September 26, 2007.   | 3.B.3                  | СО                            | 0.149 lb/MMBTU, not to exceed 3,325 tons/yr   |
| AA-099                                    | 11 Miss. Admin. Code Pt. 2,<br>R.1.3.D(1)(b).  | 3.B.1                  | PM                            | $E = 0.8808 * I^{-0.1667}$ , or 0.301 lb/MMBTU  |
|   | 11 Miss. Admin. Code Pt. 2,<br>R.1.4.A(1).   | 3.B.2                  | SO <sub>2</sub>               | 4.8 lb/MMBTU  |
| AA-003,<br>AA-004,<br>AA-005, &<br>AA-099 | Cross State Air Pollution Rule<br>(CSAPR) 40 CFR Part 97<br>Subpart BBBBB – TR NO <sub>X</sub><br>Ozone Season Trading Program   | 3.B.4                  | NO <sub>X</sub>               | CSAPR Requirements (See Section 9.0)  |
| AA-099                                    | 40 CFR Part 63, NESHAP,<br>Subpart YYYY – Standards for<br>Stationary Combustion Turbines<br>40 CFR §63.6090(b)(4)   | 3.B.5                  | HAPs                          | Although subject to the standard, existing units are exempt from the requirements of this standard and the General Provisions (40 CFR 63, Subpart A). |
| AA-033,<br>AA-034, &<br>AA-035            | 40 CFR Part 63, NESHAP,<br>Subpart ZZZZ – Standards for<br>Stationary Reciprocating<br>Internal Combustion Engines<br>(RICE)<br>40 CFR 63.6580, 6585(a) and<br>(b), 6590(a)(1)(ii) | 3.B.6                  | HAPs                          | Applicability   |
| AA-033,<br>AA-034, &<br>AA-035            | 40 CFR Part 63, NESHAP,<br>Subpart ZZZZ, 40 CFR<br>63.6602, 6625(e), (f), and (h),<br>and Table 6(9)   | 3.B.7                  | HAPs<br>Hour Meter            | Operation & Maintenance (O&M)<br>Requirements   |
| AA-033,<br>AA-034, &<br>AA-035            | 40 CFR Part 63, NESHAP,<br>Subpart ZZZZ, 40 CFR 40 CFR<br>63.6640(f)(1), (2)(i), and (3) and<br>63.6605(a) and (b)   | 3.B.8                  | HAPs<br>Hours of<br>Operation | Emergency RICE Requirements   |
| AA-033,<br>AA-034, &<br>AA-035            | 40 CFR Part 63, NESHAP,<br>Subpart ZZZZ, 40 CFR<br>63.6602, 63.6625(i) and (j), and<br>Table 2c of Subpart ZZZZ  | 3.B.9                  | HAPs                          | O&M Requirements  |

### Page 17 of 41 Permit No. 1020-00055

| Emission<br>Point(s)           | Applicable Requirement   | Condition<br>Number(s) | Pollutant/<br>Parameter         | Limit/Standard  |
|--------------------------------|--|------------------------|---------------------------------|---|
| AA-033,<br>AA-034, &<br>AA-035 | 40 CFR Part 63, NESHAP,<br>Subpart ZZZZ, 40 CFR<br>63.6602, 63.6625(i) and (j), and<br>Table 2c of Subpart ZZZZ                        | 3.B.10                 | HAPs<br>Hour Meter              | O&M Requirements  |
| AA-036,<br>AA-037, &<br>AA-038 | 40 CFR Part 63, NESHAP,<br>Subpart ZZZZ, 40 CFR<br>63.6580, 63.6585(a) and (b),<br>63.6590(a)(2)(i) and (ii),<br>(b)(1)(i), and (c)(6) | 3.B.11                 | N/A                             | As a new RICE located at a major HAP source, the permittee must meet the Subpart ZZZZ requirements by meeting the requirements of 40 CFR 60, Subpart IIII.                          |
| AA-036,<br>AA-037, &<br>AA-038 | 40 CFR Part 60, NSPS, Subpart<br>IIII, 40 CFR 60.4200(a)(2)(i)   | 3.B.12                 | N/A                             | Applicability   |
| AA-036,<br>AA-037, &<br>AA-038 | 40 CFR Part 60, NSPS, Subpart IIII, 40 CFR 60.4202(a)(2), 60.4205(b), 60.4206, 89.112(a), and 89.113(a)                                | 3.B.13                 | PM, NO <sub>X</sub> , &<br>NMHC | Certify engines in accordance with standards for new nonroad CI ICE in 40 CFR 89.112 and 40 CFR 89.113  |
| AA-036,<br>AA-037, &<br>AA-038 | 40 CFR Part 60, NSPS, Subpart<br>IIII, 40 CFR 60.4207(b) and<br>80.510(b)(1)(i) and (2)  | 3.B.14                 | Fuel<br>Restrictions            | Sulfur content - 15 ppm maximum for nonroad diesel fuel; and Cetane index or aromatic content; (1) Minimum cetane index of 40; or (2) Maximum aromatic content of 35 volume percent |
| AA-036,<br>AA-037, &<br>AA-038 | 40 CFR Part 60, NSPS, Subpart<br>IIII, 40 CFR 60.4209(a)   | 3.B.15                 | Hour Meter                      | Install a non-resettable hour meter prior to startup of the engine.   |
| AA-036,<br>AA-037, &<br>AA-038 | 40 CFR Part 60, NSPS, Subpart<br>IIII, 40 CFR 60.4211(a)(1-3)  | 3.B.16                 | PM, NO <sub>X</sub> , & NMHC    | O&M Requirements  |
| AA-036,<br>AA-037, &<br>AA-038 | 40 CFR Part 60, NSPS, Subpart<br>IIII, 40 CFR 60.4211(f)(1-3)  | 3.B.17                 | Hours of<br>Operation           | Emergency CI ICE Limitations  |
| Facility-<br>Wide              | 40 CFR Part 51, Subpart BB, 40<br>CFR 51.1203(e)   | 3.B.18                 | SO <sub>2</sub>                 | 1,988 tons/yr   |

- 3.B.1 For Emission Points AA-003, AA-004, AA-005, and AA-099, the maximum permissible emission of ash and/or PM 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.: 11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(b).)
- 3.B.2 Emission Points AA-003, AA-004, AA-005, and AA-099, 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.: 11 Miss. Admin. Code Pt. 2, R.1.4.A(1).)

3.B.3 For Emission Point AA-004, the permittee shall be limited to the emissions limitations and restrictions established in a federally-enforceable Prevention of Significant Deterioration (PSD) Permit to Construct (PTC) issued on September 26, 2007. Carbon Monoxide (CO) emissions from this emission point are limited to 0.149 lb/MMBTU, not to exceed 1,648 tons per year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A. The permittee shall operate and maintain the boiler such that the best available control for CO is combustion control utilizing best combustion practices to maximize boiler combustion efficiency.

For Emission Point AA-005, the permittee shall be limited to the emissions limitations and restrictions established in a federally-enforceable PSD PTC issued on September 26, 2007. CO emissions from the emission point are limited to 0.149 lb/MMBTU, not to exceed 3,325 tons per year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A. The permittee shall operate and maintain the boiler such that the best available control for CO is combustion control utilizing best combustion practices to maximize boiler combustion efficiency.

(Ref.: PSD PTC issued September 26, 2007)

- 3.B.4 For Emission Points AA-003, AA-004, AA-005, and AA-099, the permittee is subject to the applicable requirements of the Cross State Air Pollution Rule (CSAPR) as set forth in 40 CFR Part 97, Subpart BBBBB Transport Rule (TR) NO<sub>X</sub> Ozone Season Trading Program. The permittee must ensure that the subject units have allocations equal to or greater than the emissions during the ozone season period (May 1 September 30). See Section 9.0 for additional requirements. (Ref.: 40 CFR 97, Subpart BBBBB)
- 3.B.5 Emission Point AA-099 is subject to 40 CFR Part 63, Subpart YYYY National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines; however, this unit is an existing stationary combustion turbine as defined in the standard and is not required to meet any other requirements of the standard or the General Provisions, 40 CFR Part 63, Subpart A. (Ref.: 40 CFR §63.6090(b)(4))
- 3.B.6 Emission Points AA-033, AA-034, and AA-035 are subject to and shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE). For purposes of this subpart, Emission Points AA-033 and AA-034 are considered existing emergency CI units at a major HAP source, and Emission Point AA-035 is considered an existing emergency SI engine with a site rating <500 HP at a major source. (Ref.: 40 CFR 63.6580, 6585(a) and (b), 6590(a)(1)(ii))
- 3.B.7 For Emission Points AA-033, AA-034, and AA-035, the permittee shall operate and

maintain the RICE according to the manufacturer's emission-related operation and maintenance instructions, or the permittee shall develop and follow a maintenance plan which is consistent with good air pollution control practices for minimizing emissions. The permittee shall install and maintain a non-resettable hour meter. The permittee shall also minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. (Ref.: 40 CFR 63, 6625(e), (f), and (h), and Table 6(9))

- 3.B.8 For Emission Points AA-033, AA-034, and AA-035, the permittee shall operate the emergency stationary RICE according to the requirements below. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If the permittee does not operate the engines according to these requirements, the engine will not be considered an emergency engine under Subpart ZZZZ and must 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 any combination of the purposes specified as follows for a maximum of 100 hours per calendar year provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
  - (c) The emergency engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b). 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.

The permitee shall, at all times, be in compliance with the applicable requirements of Subpart ZZZZ and shall operate and maintain the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination

of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.6640(f)(1), (2)(i), and (3) and 63.6605(a) and (b))

- 3.B.9 For Emission Points AA-033, AA-034 and AA-035, the permittee shall comply with the following requirements:
  - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first or perform an oil analysis at the same frequency in order to extend the oil change requirement. If the permittee chooses to use the oil analysis in an effort to extend the oil/filter change requirement, the results of the analysis must verify the oil still meets the limits contained in (1)-(3) below. If any of these limits are exceeded, the oil must be changed within two business days of receiving the results of the analysis. If the engine is not in operation when the results are received, the oil must be changed within two business days or before commencing operation, whichever is later. The oil analysis program must be included in the engines maintenance plan.
    - (1) Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from the Total Acid Number when new.
    - (2) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new.
    - (3) Percent water content (by volume) is greater than 0.5.
  - (b) Inspect air cleaner (CI engines) or spark plugs (SI engine) every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practices according to the schedule in (a)-(c) above, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk has abated.

(Ref.: 40 CFR 63.6602, 63.6625(i) and (j), and Table 2c of Subpart ZZZZ)

3.B.10 For Emission Points AA-033, AA-034, and AA-035, the permittee shall comply with the following requirements:

- (a) Operate and maintain the engines according to the manufacturer's emission-related operation and maintenance instructions, or the permittee shall develop and follow a maintenance plan which is consistent with good air pollution control practices for minimizing emissions.
- (b) The permittee shall install and maintain a non-resettable hour meter on each engine.
- (c) The permittee shall also minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(Ref.: 40 CFR 63.6625(e)(2), (f), and (h); 63.6640(a); and Tables 2c and 6 of Subpart ZZZZ)

- 3.B.11 Emission Points AA-036, AA-037, and AA-038 are subject to 40 CFR 63, Subpart ZZZZ NESHAP for Stationary RICE. For purposes of this subpart, Emission Points AA-037 and AA-038 are considered new emergency stationary RICE with a site rating <500 HP located at a major HAP source, and per 63.6590(c)(6), the engines will meet the requirements of Subpart ZZZZ by complying with the requirements of 40 CFR 60, Subpart IIII New Source Performance Standards (NSPS) for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). Emission Point AA-036 is considered a new emergency stationary RICE with a site rating >500 HP located at a major HAP source and per 63.6590(b)(1)(i) the engine does not have to meet the requirements of Subpart ZZZZ. (Ref.: 40 CFR 63.6580, 63.6585(a) and (b), 63.6590(a)(2)(i) and (ii), (b)(1)(i), and (c)(6))
- 3.B.12 Emission Points AA-036, AA-037, and AA-038 are subject to and shall comply with all applicable requirements of 40 CFR 60, Subpart IIII NSPS for Stationary CI ICE. (Ref.: 40 CFR 60.4200(a)(2)(i))
- 3.B.13 For Emission Points AA-036, AA-037, and AA-038, the permittee shall comply with the emissions standards for new nonroad CI engines in accordance with the following:
  - (a) Emission Point AA-036 must be certified to meet Tier 3 standards for 450-560 kW engines from 40 CFR 89.112.
  - (b) Emission Points AA-037 and AA-038 must be certified to meet the Tier 3 standards for 225-450 kW engines from 40 CFR 89.112.

Each engine should be certified to meet the following exhaust opacity limits:

- (c) 20% during the acceleration mode;
- (d) 15% during the lugging mode; and
- (e) 50% during the peaks in either the acceleration or lugging modes.

The permittee shall operate and maintain each engine such that it achieves the emission standards over the entire life of the engines.

(Ref.: 40 CFR 60.4202(a)(2), 60.4205(b), 60.4206, 89.112(a), and 89.113(a))

- 3.B.14 For Emission Points AA-036, AA-037, and AA-038, the permittee shall use diesel fuel that meets the following requirements:
  - (a) Sulfur content 15 ppm maximum for nonroad diesel fuel; and
  - (b) Cetane index or aromatic content;
    - (1) Minimum cetane index of 40; or
    - (2) Maximum aromatic content of 35 volume percent

(Ref.: 40 CFR 60.4207(b) and 80.510(b)(1)(i) and (2))

- 3.B.15 For Emission Points AA-036, AA-037, and AA-038, the permittee shall install a non-resettable hour meter prior to startup of the engine. (Ref.: 40 CFR 60.4209(a))
- 3.B.16 For Emission Points AA-036, AA-037, and AA-038, the permittee shall operate and maintain the engines according to the manufacturer's emission-related written instructions, change only those emission-related settings that are permitted by the manufacturer, and meet the requirements above. (Ref.: 40 CFR 60.4211(a)(1-3))
- 3.B.17 For Emission Points AA-036, AA-037, and AA-038, the permittee shall operate each emergency engine according to (a) through (c) below. In order for the engine to be considered an emergency stationary engine under Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year as described below is prohibited. If the permittee does not comply with these requirements for any engine, the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines.
  - (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
  - (b) The permittee may operate an emergency engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee shall 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 ICE beyond 100 hours per calendar

year.

(c) Emergency engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (b). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless all the conditions in 60.4211(f)(3(i)(A) through (E) are met.

(Ref.: 40 CFR 60.4211(f)(1-3))

3.B.18 The permittee, on a facility-wide basis, shall not exceed 1,988 tons per year of SO<sub>2</sub> emissions on any 12-month rolling total period beginning in calendar year 2017 and thereafter. This limitation has been placed on the permittee to satisfy the SO<sub>2</sub> Data Requirements Rule (DRR). (Ref.: SO<sub>2</sub> DDR and 40 CFR 51, Subpart BB (§51.1203(e)))

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

| Applicable Requirement                      | Condition<br>Number(s) | Pollutant/<br>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 <sub>2</sub>         | 4.8 lbs/MMBTU       |
| 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).    | 3.C.2                  | $SO_2$                  | $E = 4.1(p)^{0.67}$ |

- 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).)
- 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

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

## Page 24 of 41 Permit No. 1020-00055

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

#### 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, within sixty (60) days after the end of 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<br>Point(s)  | Applicable Requirement   | Condition<br>Number | Pollutant/<br>Parameter<br>Monitored                | Monitoring/Recordkeeping<br>Requirement   |
|---|--|---------------------|---|---|
| AA-004 &<br>AA-005  | PSD Permit to Construct (PTC) issued September 26, 2007. 11 Miss. Admin. Code Pt. 2, R.6.3.A(3). | 5.B.1               | PM and CO   | Stack testing in accordance with<br>EPA Ref. Methods 1-5 and 10,<br>respectively    |
| AA-003, AA-<br>004, AA-005,<br>& AA-099<br>and AA-033<br>through AA-<br>038 | 11 Miss. Admin. Code Pt. 2,<br>R.6.3.A(3).   | 5.B.2               | Fuel Usage  | Monitor quantity and quality of fuels combusted                                     |
| AA-003, AA-<br>004, & AA-<br>005  | 40 CFR Part 72-78 (CEMS and fuel monitoring in accordance with Part 75)                          | 5.B.3               | Fuel Flow, NO <sub>x</sub> ,<br>and CO <sub>2</sub> | Monitor fuel flow, NO <sub>X</sub> , and CO <sub>2</sub> in accordance with Part 75 |
| AA-033, AA-<br>034, & AA-<br>035  | 40 CFR 63.6655(a), (d), and (e)  | 5.B.4               | HAPs  | O&M Recordkeeping Requirements  |
| AA-033, AA-<br>034, & AA-<br>035  | 40 CFR 63.6655(f)  | 5.B.5               | Hour Meter  | Hours of Operation Requirements   |
| AA-033, AA-<br>034, & AA-<br>035  | 40 CFR 63.6655(a), (d), and (e)  | 5.B.6               | HAPs  | Recordkeeping Requirements  |
| AA-036, AA-<br>037, & AA-<br>038  | 40 CFR 60.4211(c)  | 5.B.7               | PM, NO <sub>x</sub> , &<br>NMHC                     | Use of certified engines installed according to manufacturer's specifications.      |
| AA-036, AA-<br>037, & AA-<br>038  | 40 CFR 60.4214(b)  | 5.B.8               | Hours of<br>Operation                               | Hours of Operation Requirements   |
| Facility-Wide   | 40 CFR 51.1203(e)  | 5.B.9               | SO <sub>2</sub>                                     | Determine emissions on a monthly and 12-month rolling basis.                        |

5.B.1 For Emission Points AA-004 and AA-005, the permittee shall demonstrate compliance

with the PM and CO emission limits by performing a stack test biennially using EPA Reference Methods 1-5 and 10, respectively, or approved equivalents. Stack testing shall be performed under normal operating conditions and while operating at or near capacity. Stacks tests shall continue to be conducted biennially by December 31<sup>st</sup> of the respective year (e.g., December 31, 2016; 2018; 2020; 2022, etc.).

The permittee shall submit a pre-test protocol to be approved by the Mississippi Department of Environmental Quality (MDEQ) within thirty (30) days of stack test performance. The permittee must also notify the MDEQ within thirty (30) days prior to the scheduled test date(s) so that an observer may be scheduled to witness the test(s). The results of the performance testing shall be submitted to the MDEQ within sixty (60) days of the stack test event. (Ref.: PSD Permit to Construct (PTC) issued September 26, 2007 and 11 Miss. Admin. Code Pt. 2, R.6.3.A(3).)

- 5.B.2 For Emission Points AA-003, AA-004, AA-005 and AA-099 and AA-033 through AA-038, the permittee shall keep monthly records of all fuels burned. These records shall consist of fuel type, quantity, the sulfur content (% by weight), and the heating value. (Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3).)
- 5.B.3 For Emission Points AA-003, AA-004, and AA-005, the permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (e.g., CEMS) for the purpose of measuring fuel flow, NO<sub>X</sub> emissions, and carbon dioxide (CO<sub>2</sub>) emissions, unless complying with another standard or requirement meets the requirements of this standard. The permittee shall monitor, test, and maintain records of the emissions and/or parameters identified above in accordance with 40 CFR Part 75. The permittee shall maintain all measurements, data, reports, testing, and other information required in 40 CFR Part 75.54 for each affected unit. The permittee complies with the SO<sub>2</sub> requirements by using the optional Fuel Monitoring procedures in accordance with Appendix D of Part 75. The permittee shall utilize Part 75 data for NO<sub>X</sub> emissions reporting by monitoring the parameters and maintaining the CEMS in accordance with 40 CFR Part 75. The annual Relative Accuracy Test Audit (RATA) shall be conducted and submitted in accordance with the requirements of 40 CFR Part 75. (Ref.: 40 CFR Parts 72-78)
- 5.B.4 For Emission Points AA-033, AA-034, and AA-035, the permittee shall keep the following records:
  - (a) A copy of each report submitted to comply with Subpart ZZZZ;
  - (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment);
  - (c) Records of maintenance conducted on the engines in order to demonstrate the engines are being operated and maintained according to the manufacturer's emission related operation and maintenance instructions or the permittee's own maintenance plan;

(d) Records of all required maintenance performed. If using an oil analysis program, records of the results for each required parameter of the oil analysis.

(40 CFR 63.6655(a), (d), and (e))

- 5.B.5 For Emission Points AA-033, AA-034, and AA-035, the permittee shall keep records of the hours of operation for each engine that is recorded through the non-resettable hour meters. These records must indicate how many hours are spent for emergency operation and how many hours are spent for non-emergency operation. For each instance of emergency operation, the records should include the date, start time, end time, and an explanation as to what classified the engine's operation as emergency operation. The records should also identify the time spent operating for the specific purposes identified in Condition 3.B.8(b) and (c). (Ref.: 40 CFR 63.6655(f))
- 5.B.6 For Emission Points AA-033, AA-034, and AA-035, the permittee shall keep the records required in Conditions 5.B.4 and 5.B.5 in a form suitable and readily available for expeditious review. These records shall be kept in hard copy or electronic form for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report or record. (Ref.: 40 CFR 63.6660 and 63.10(b)(1))
- 5.B.7 For Emission Points AA-036, AA-037, and AA-038, the permittee shall demonstrate compliance by using engines certified to meet the applicable emission standards in section 3.B. The engines must be installed and configured according to the manufacturer's emission-related specifications. (Ref.: 40 CFR 60.4211(c))
- 5.B.8 For Emission Points AA-036, AA-037, and AA-038 the permittee shall keep records of the operation of each engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time and reason when any engine is operated. (40 CFR 60.4214(b))
- 5.B.9 The permittee, on a facility-wide basis, shall calculate SO<sub>2</sub> emissions on a monthly and 12-month rolling total basis beginning in calendar year 2017 and thereafter. This limitation has been placed on the permittee to satisfy the SO<sub>2</sub> Data Requirements Rule (DRR). The permittee shall use data from SO<sub>2</sub> CEMS, performance testing, fuel usage, or emission factors, to calculate the monthly emissions. (Ref.: SO<sub>2</sub> DRR and 40 CFR 51, Subpart BB (§51.1203(e)))

## C. <u>Specific Reporting Requirements</u>

5.C.1 For Emission Points AA-004 and AA-005, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to obtain approval for test methods and procedures. Also, the permittee shall notify MDEQ in writing at least thirty (30) 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 in conjunction with the initial compliance test(s), the permittee may request that the resubmittal of testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.

- 5.C.2 For Emission Points AA-003, AA-004, and AA-005, the permittee shall submit test report(s) within sixty (60) days of completion of the stack test (e.g., Performance Test, RATA, etc.).
- 5.C.3 For Emission Points AA-003, AA-004, AA-005 and AA-099 and AA-033 through AA-038, the permittee shall submit a fuel usage report containing a summary of the information required in Permit Condition 5.B.2. This report shall be submitted in accordance with Condition 5.A.4.
- 5.C.4 For Emission Points AA-033, AA-034, and AA-035, the permittee shall report each instance in which the work practices listed in Condition 3.B.9 were not met. Such instances are deviations and should be reported within five (5) business days in accordance with Condition 5.A.5. If the management practices were not performed on the required schedule because it posed an unacceptable risk under Federal, State, or local law at the time of the required scheduled maintenance, the report must include the Federal, State, or local law under which the risk was deemed unacceptable. (Ref.: 40 CFR 63.6640(b) and Footnote 1 to Table 2c)
- 5.C.5 For Emission Points AA-036, AA-037, and AA-038, the permittee shall report each instance in which the limits and work practices listed in Condition 3.B.13 through 3.B.15 were not met. Such instances are deviations and should be reported within five (5) business days in accordance with Condition 5.A.5. (Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3).)
- 5.C.6 The permittee, on a facility-wide basis, shall submit a monthly and 12-month rolling total SO<sub>2</sub> emissions report containing the information in Permit Condition 5.B.9. This report shall be submitted in accordance with Condition 5.A.4. (Ref.: SO<sub>2</sub> DRR and 40 CFR 51, Subpart BB (§51.1203(e)))

# 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.

#### SECTION 8. ACID RAIN

The permittee shall comply with all requirements of the Phase II Acid Rain Permit attached as an Appendix of this permit. All conditions of the Phase II Acid Rain Permit are effective from the <u>Title V Operating Permit Issuance Date</u> through <u>November 30, 2021</u>; however, these conditions may be revised by the MDEQ during the permitting period.

For Emission Points AA-003, AA-004, and AA-005, 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 Acid Rain Program requirements include continuous emissions monitoring for SO<sub>2</sub> and nitrogen oxides (NO<sub>X</sub>) in accordance with Part 75. The permittee complies with the NO<sub>X</sub> requirements by operating a continuous emissions monitoring system (CEMS) for NO<sub>X</sub> and CO<sub>2</sub>, and complying with the NO<sub>X</sub> Averaging Plan (Appendix C). The permittee complies with SO<sub>2</sub> requirements by using the optional fuel monitoring procedures in accordance with Appendix D of Part 75.

For Emission Points AA-003, AA-004, and AA-005, the permittee shall comply with and is limited to the applicable requirements of the Phase II Acid Rain Permit (see Appendix B) and the NO<sub>X</sub> Averaging Plan (see Appendix C). (Ref.: Acid Rain Regulations, 40 CFR Part 72-78)

### SECTION 9. CROSS STATE AIR POLLUTION RULE

9.1 Description of Transport Rule (TR) Monitoring Provisions

The TR subject units and the unit-specific monitoring provisions at this source are identified in the following Tables. These units are subject to the requirements for the TR NOx Ozone Season Trading Program.

| Unit ID: Emission Points AA-003, AA-004, AA-005, and AA-099 |  |   |   |   |  |  |
|---|--|---|---|---|--|--|
| Parameter   | Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO2 monitoring) and 40 CFR part 75, subpart H (for NOX monitoring) | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D | Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E | Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19 | EPA-approved<br>alternative<br>monitoring<br>system<br>requirements<br>pursuant to 40<br>CFR part 75,<br>subpart E |  |
| NO <sub>X</sub>   | X  |   |   |   |  |  |
| Heat Input  |  | X   |   |   |  |  |

- 9.2 The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.530 through 97.535. The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
- 9.3 The permittee must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <a href="http://www.epa.gov/airmarkets/emissions/monitoringplans.html">http://www.epa.gov/airmarkets/emissions/monitoringplans.html</a>.
- 9.4 The permittee that wants to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.535. The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <a href="http://www.epa.gov/airmarkets/emissions/petitions.html">http://www.epa.gov/airmarkets/emissions/petitions.html</a>.
- 9.5 The permittee that wants to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.530 through 97.534 must submit to the

Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.535. The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA website at http://www.epa.gov/airmarkets/emissions/petitions.html.

- 9.6 The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.530 through 97.534, and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.
- 9.7 TR NOx Ozone Season Trading Program Requirements (40 CFR 97.506)
  - (a) Designated representative requirements The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.
  - (b) Emissions monitoring, reporting, and recordkeeping requirements.
    - (1) The permittee, and the designated representative, of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), (notifications concerning monitoring), 97.533 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
    - (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO<sub>X</sub> Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO<sub>X</sub> Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
  - (c) NO<sub>X</sub> emissions requirements.
    - (1) TR NO<sub>X</sub> Ozone Season emissions limitation.

- (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Ozone Season units at the source.
- (ii) If total NO<sub>X</sub> emissions during a control period in a given year from the TR NO<sub>X</sub> Ozone Season units at a TR NO<sub>X</sub> Ozone Season source are in excess of the TR NO<sub>X</sub> Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
  - (A) The owners and operators of the source and each TR NO<sub>X</sub> Ozone Season unit at the source shall hold the TR NO<sub>X</sub> Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
  - (B) The owners and operators of the source and each TR NO<sub>X</sub> Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.
- (2) TR NO<sub>X</sub> Ozone Season assurance provisions.
  - (i) If total NO<sub>X</sub> emissions during a control period in a given year from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state (and Indian country within the borders of such state) exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>X</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>X</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—
    - (A) The quotient of the amount by which the common designated representative's share of such NO<sub>X</sub> emissions exceeds the common

designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state (and Indian country within the borders of such state) for such control period, by which each common designated representative's share of such NOX emissions exceeds the respective common designated representative's assurance level; and

- (B) The amount by which total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state and Indian country within the borders of such state) for such control period exceed the state assurance level.
- (ii) The permittee shall hold the TR NO<sub>X</sub> Ozone Season allowances required under paragraph 93.7 (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii) Total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state (and Indian country within the borders of such state) during a control period in a given year exceed the state assurance level if such total NO<sub>X</sub> emissions exceed the sum, for such control period, of the State NO<sub>X</sub> Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
- (iv) It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state (and Indian country within the borders of such state) during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>X</sub> emissions from the TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state (and Indian country within the borders of such state) during a control period exceeds the common designated representative's assurance level.
- (v) To the extent the permittee fails to hold TR NO<sub>X</sub> Ozone Season allowances for a control period in a given year in accordance with paragraphs 9.7(c)(2)(i) through (iii) above,
  - (A) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B) Each TR  $NO_X$  Ozone Season allowance that the permittee fails to hold for such control period in accordance with paragraphs 9.7(c)(2)(i) through (iii) above and each day of such control period

shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

- (3) Compliance periods.
  - (i) A TR NO<sub>X</sub> Ozone Season unit shall be subject to the requirements under paragraph 9.7(c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
  - (ii) A TR NO<sub>X</sub> Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i) A TR NO<sub>X</sub> Ozone Season allowance held for compliance with the requirements under paragraph 9.7(c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season allowance that was allocated for such control period or a control period in a prior year.
  - (ii) A TR NO<sub>X</sub> Ozone Season allowance held for compliance with the requirements under paragraphs 9.7(c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO<sub>X</sub> Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB.
- (6) Limited authorization. A TR NO<sub>X</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>X</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i) Such authorization shall only be used in accordance with the TR NO<sub>X</sub> Ozone Season Trading Program; and
  - (ii) Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator

determines is necessary or appropriate to implement any provision of the Clean Air Act.

- (7) Property right. A TR NO<sub>X</sub> Ozone Season allowance does not constitute a property right.
- (d) Title V permit revision requirements.
  - (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>X</sub> Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.
  - (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using once permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
- (e) Additional recordkeeping and reporting requirements.
  - (1) Unless otherwise provided, the permittee of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
    - (i) The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO<sub>X</sub> Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.
    - (ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.

- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>X</sub> Ozone Season Trading Program.
- (2) The designated representative of a TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall make all submissions required under the TR NO<sub>X</sub> Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

#### (f) Liability.

- (1) Any provision of the TR NO<sub>X</sub> Ozone Season Trading Program that applies to a TR NO<sub>X</sub> Ozone Season source or the designated representative of a TR NO<sub>X</sub> Ozone Season source shall also apply to the permittee of such source and of the TR NO<sub>X</sub> Ozone Season units at the source.
- (2) Any provision of the TR NO<sub>X</sub> Ozone Season Trading Program that applies to a TR NO<sub>X</sub> Ozone Season unit or the designated representative of a TR NO<sub>X</sub> Ozone Season unit shall also apply to the permittee of such unit.
- (g) Effect on other authorities No provision of the TR NO<sub>X</sub> Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the permittee, and the designated representative, of a TR NO<sub>X</sub> Ozone Season source or TR NO<sub>X</sub> Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.
- (h) Effect on units in Indian country. Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regards to any source or unit, in Indian country within the borders of the state.

### **APPENDIX A**

#### **List of Abbreviations Used In this Permit**

11 Miss. Admin. Code Pt. 2, Ch. 1. Air Emission Regulations for the Prevention, Abatement, and

Control of Air Contaminants

11 Miss. Admin. Code Pt. 2, Ch. 2. Permit Regulations for the Construction and/or Operation of Air

**Emissions Equipment** 

11 Miss. Admin. Code Pt. 2, Ch. 3. Regulations for the Prevention of Air Pollution Emergency

**Episodes** 

11 Miss. Admin. Code Pt. 2, Ch. 4. Ambient Air Quality Standards

11 Miss. Admin. Code Pt. 2, Ch. 5. Regulations for the Prevention of Significant Deterioration of Air

Ouality

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

## **APPENDIX B**

### PHASE II ACID RAIN PERMIT AND APPLICATION

#### PHASE II ACID RAIN PERMIT

Issued to: Mississippi Power Company, Watson Electric Generating Plant

Operated by: Mississippi Power Company

ORIS code: 2049

Effective: Title V Operating Permit Issuance Date to November 30, 2021

#### **Summary of Previous Actions:**

This page will be replaced to document new actions each time a new action is taken by the MDEQ. These are the permitting actions that have been undertaken:

| 1) Draft permit for public and EPA comment.   | December 30, 1997 |
|---|-------------------|
| 2) Permit finalized and issued.   | November 6, 1998  |
| 3) Permit revised to include the draft nitrogen oxides averaging plan for Units 4 and 5; issued for public comment.   | December 29, 1998 |
| 4) Draft renewal Title V Permit (incorporating Acid Rain Permit) for public and EPA review.   | August 28, 2009   |
| 5) Permit finalized and issued.   | October 16, 2009  |
| 6) Draft renewal Title V Permit, including the elimination of coal as a fuel and the removal of Emission Points AA-001 and AA-002 and other ancillary equipment, for public and EPA review. | November 10, 2016 |
|   |                   |

#### **Present Action:**

| 7) Permit finalized and issued. |      |
|---------------------------------|------|
|                                 |      |
|                                 |      |
| Signature                       | Date |
| Harry M. Wilson, III, PE, Chief |      |

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

#### PHASE II ACID RAIN PERMIT

Issued to: Mississippi Power Company, Watson Electric Generating Plant

Operated by: Mississippi Power Company

ORIS code: 2049

Effective: <u>Title V Operating Permit Issuance Date</u> to <u>November 30, 2021</u>

#### **ACID RAIN PERMIT CONTENTS:**

1) Statement of Basis.

2) SO<sub>2</sub> allowances allocated under this permit and NOx 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:

|        |                                  | 2016   | 2017-2021  |
|--------|----------------------------------|--------|--|
| AA-003 | SO <sub>2</sub> allowances,      | 273    | 1,988 tpy (Facility-wide limit based on SO2 DRR) |
| AA-004 | under Tables 2,<br>3, or 4 of 40 | 7,537  |  |
| AA-005 | CFR Part 73.                     | 15,442 |  |

#### NO<sub>X</sub> limit

Pursuant to 40 CFR 76.11, the Mississippi Department of Environmental Quality approves a  $NO_X$  emissions averaging plan, effective from calendar year 2016 thereafter, unless otherwise revised. Under the plan, this unit's  $NO_X$  emissions shall not exceed the annual average alternative contemporaneous emission limitation expressed in the submitted plan.

Under the plan, the actual Btu-weighted annual average  $NO_X$  emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average  $NO_X$  emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11 (d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Alabama Department of Environmental Management, the Jefferson County, Alabama Bureau of Environmental Health, the Florida Department of Environmental Protection, and the Georgia Department of Natural Resources Environmental Protection Division have also approved this plan.

In addition to the described  $NO_X$  compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a  $NO_X$  compliance plan and requirements covering excess emissions.

#### 3) COMMENTS, NOTES, AND JUSTIFICATIONS:

Emission Points AA-003, AA-004, and AA-005 are natural gas fired only units.

## 5) PHASE II PERMIT APPLICATION AND NO<sub>X</sub> COMPLIANCE AND AVERAGING PLAN:

Attached in Appendix B and C.

<sup>\*</sup> 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).

### **ACID RAIN PERMIT APPLICATION**

# **APPENDIX C**

### PHASE II NO<sub>X</sub> AVERAGING PLAN